

# Essex County Council

Unique reference: 20031541

## LOCAL IMPACT REPORT

Longfield Solar Farm [PINS Ref: EN010118]

18<sup>th</sup> August 2022

### 1. Terms of Reference

#### *Introduction*

- 1.1 This report is the Local Impact Report (LIR) for Essex County Council (ECC). In preparing this LIR regard has been had to the purpose of LIRs as set out in s60(3) of the Planning Act 2008 (as amended), DCLG's *Guidance for the examination of applications for development consent* and the Planning Inspectorate's Advice Note One, *Local Impact Reports* and the Planning Inspectorate's 'Example Documents'.

#### *Scope*

- 1.2 This LIR relates to the impacts of the proposed development as it affects the administrative area of Essex County Council. Separate but complementary LIRs have been produced by Braintree District Council and Chelmsford City Council on the impacts of the proposed development as it affects their respective administrative areas.
- 1.3 In summary, the Proposed Development includes a number of elements including inter alia:
- Construction, operation, maintenance and decommissioning of ground mounted PV Arrays, solar stations, a Battery Energy Storage System (BESS), Longfield Solar Substation and underground distribution cables.
  - Extension to Bulls Lodge substation and grid connection route.
  - Associated/ancillary infrastructure including primary and secondary access tracks and ancillary buildings such as offices, temporary construction compounds, landscaping, new footpaths/cycleways and habitat creation.
- 1.4 Two access routes are included in the Order limits: Wheelers Hill and Cranham Road, to the west of the Solar Farm site and Generals Lane to the south of Bulls Lodge Substation.

## *Purpose and Structure of the LIR*

- 1.5 The LIR covers topics where ECC has a statutory function or holds particular expertise. ECC defers to Chelmsford City Council and Braintree District Council on all other matters.
- 1.6 The topics the subject of this LIR cover:
- Principle of the development
  - Highways and Transportation
  - Highway Safety – Glint and Glare
  - Public Rights of Way (PROW)
  - Flood Risk, Drainage and Surface Water
  - Minerals and Waste
  - Cultural Heritage - Archaeology
  - Socio-economics -Jobs and skills
  - Community Part-Ownership and Local Benefits
- 1.7 The LIR is structured by first identifying the relevant local policies, secondly identifying the local impacts and lastly addresses the extent to which the development proposals accord with these policies. For each topic area, the key issues are identified on the extent the applicant addresses these issues by reference to the application documentation, including the DCO articles, requirements and obligations, where relevant.
- 1.8 The LIR has sought not to duplicate material covered in the Statement of Common Ground (SoCG).

## **2. Description of the area**

- 2.1 The site is located to the south of the hamlet of Fuller Street, north-east of Chelmsford, north of Boreham and Hatfield Peverel and west of Gamble's Green and Terling. Boreham Road runs north to south to the east of the Order limits.
- 2.2 The site covers 453 hectares covering mainly agricultural fields under arable production (Grades 3a to 3b); small, wooded copses, mature trees and hedges. The northern part of the site consists of undulating and elevated landform comprising part of the River Ter Valley, which rises steeply from the base of the valley to the northward edge of the Order limits.
- 2.3 There are residential properties located adjacent to the Order limit boundaries.
- 2.4 Overhead power lines extend from the south-west of the Order limits to the north-west of Boreham.
- 2.5 The site is traversed by an extensive network of public rights of way, lanes and farm tracks. The Essex Way footpath runs in an east-west direction to the north

of the site as far as Fuller Street, then runs alongside the site boundary southwards then eastwards around Sandy Wood. The National Cycle Network Route 50 passes within 5km of the proposed site access on Waltham Road, running along Terling Hall Road to the east of the Order limits, before running through Terling and joining Braintree Road to run towards Great Leighs to the northwest.

- 2.6 The majority of the site lies within flood zone 1. However, there are areas to the north and south of the Order limits which lie within flood zone 2, including a small section of the site forming part of the Grid Connection Route within flood zones 2 and 3.
- 2.7 The existing Bulls Lodge substation lies within the south-west part of the Order limits to the west of Brick House Farm; north of the A12. Bulls Lodge Quarry lies to the north of the existing Bulls Lodge substation.
- 2.8 Land to the west of the site is allocated in the Chelmsford Local Plan (North-East Chelmsford) as a new Garden Community. The site will create a community of around 10,000 new homes and will include employment opportunities in north-east Chelmsford.
- 2.9 The following highway improvement schemes are due to be completed prior to construction: the Boreham Interchange Improvements, the Radial Distributor Road (RDR) and Phase 1 of the Chelmsford North-East Bypass (CNEB).
- 2.10 The following highway improvements schemes are expected to be completed after or during the construction phase: A12 Chelmsford to A120 Widening Scheme which was submitted to the Planning Inspectorate as a Nationally Significant Project (NSIP) on 12<sup>th</sup> August 2022, CNEB Phase 2 and the Outer Radial Distributor Road (RDR2).

### **3. Planning History**

- 3.1 Bulls Lodge Quarry lies to the north of the existing Bulls Lodge substation and is operated by Hanson Aggregates under planning permissions CHL/1019/87 and CHL/1890/87 for the winning and working of sand and gravel. Planning applications ESS/147/20/CHL and ESS/148/20/CHL have been submitted to vary conditions to the existing planning permissions, with land at Brick Farm proposed to be the last area to be worked; proposed to take place between 2035 and 2039.
- 3.2 Land to the north and east of the Bulls Lodge substation site forms part of Bulls Lodge Quarry, with parts of the Bulls Lodge substation site and small sections of the grid connection route overlapping with the Quarry.
- 3.3 Boreham Recycling Centre is a waste transfer and metal recycling site located south-east of Bulls Lodge Quarry. It is operated by European Metal Recycling.

- 3.4 Bulls Lodge Inert Recycling is an aggregate recycling facility located within Bulls Lodge Quarry and operated by Eurovia.
- 3.5 Other than the above, ECC has no planning records relevant to the application site itself.

#### **4. Development Plan Documents and Local Guidance**

- 4.1 The documents that comprise the development plan are listed below. Other policy documents that should be considered as a material consideration are also identified. The Local Policies of relevance to the topic areas covered in this LIR are listed in Appendix 1.

##### The Development Plan

##### ***Braintree District Council Local Plan***

- 4.2 The Local Plan comprises the Braintree District Local Plan 2013-2033. Section 1 of the Local Plan is the Shared Strategic Plan for North Essex, adopted in February 2021. Section 2 Local Plan covers Policies, Maps and sites for development, housing, employment and regeneration and was adopted July 2022.
- 4.3 Also of relevance is the Hatfield Peveral Neighbourhood Development Plan, 2019.

##### ***Chelmsford City Council Local Plan***

- 4.4 The Chelmsford Local Plan 2013-2033 was adopted in May 2020.
- 4.5 Chelmsford City Council has produced a Solar Farm Development Supplementary Planning Document, November 2021 which provides guidance on preparing and submitting proposals for solar farms and guidance on how planning applications should be considered in the light of national and local requirements.

##### ***Essex Minerals Local Plan July 2014 Essex and Southend-on-Sea Waste Local Plan 2017***

- 4.6 The planning policy framework for minerals and waste within Essex is set out in the adopted Essex Minerals Local Plan (MLP) 2014 and the adopted Essex and Southend-on-Sea Waste Local Plan (WLP) 2017. The MLP is currently undergoing a review. This review has not yet reached Regulation 19 stage and therefore the Minerals and Waste Planning Authority (MWPA) currently places no weight on any proposed amendments to relevant policies.

#### Other relevant Local Policy

- 4.7 In addition to the development plan documents listed above, there are a number of additional policy documents produced which provide local policy on key topics of relevance to this development.

#### ***Local Highway Authority Policies – Development Management Policies February 2011***

- 4.8 Local Highway Development Management policies have been the subject of a full public consultation exercise, together with a Sustainability Appraisal and Strategic Environmental Assessment. They have been approved by ECC cabinet members for Highways and Transportation and for Communities and Planning and as such have been formally adopted as ECC Supplementary Guidance.
- 4.9 Further Local policies documents considered within the Order limits to manage flood risk and surface runoff are:

#### ***The Sustainable Drainage Systems Design Guide for Essex, 2020***

- 4.10 The Design Guide provides information to developers involved in the design and development of SUDS in Essex. It promotes an integrated approach to SUDS and landscape design.

#### ***Essex Preliminary Flood Risk Assessment (PFRA) 2011, Amended 2018***

- 4.11 The Essex PFRA provides a high-level overview of flood risk from surface water, groundwater and ordinary watercourses across the Lead Local Flood Authority (LLFA) study area.

#### ***Braintree and Witham Surface Water Management Plan (SWMP), 2016***

- 4.12 The SWMP outlines the preferred surface water management strategy for Braintree and Witham.

#### ***Mid Essex Strategic Flood Risk Assessment (SFRA) Covering Braintree – 2007***

- 4.13 The SFRA has assessed the flood risk issues at a strategic scale to inform the spatial planning process.

#### ***Chelmsford Surface Water Management Plan (SWMP), 2018***

- 4.14 The SWMP outlines the preferred surface water management strategy for Chelmsford.

***Chelmsford City Strategic Flood Risk Assessment (SFRA), 2018***

- 4.15 The SFRA has assessed the flood risk issues at a strategic scale to inform the spatial planning process.

***Net Zero: Making Essex Carbon Neutral – Essex Climate Action Commission***

- 4.16 The Essex Climate Action Commission has set out recommendations for Essex County Council on tackling the climate change crisis across six core themes, with a trajectory of targets and milestones that need to be met for Essex to become a net zero county by 2050. The six core themes are: Land Use and Green Infrastructure, Energy, the Built Environment, Transport, Waste and Community Engagement.

***Essex Design Guide – Solar Farm Guiding Principles, 2022***

- 4.17 Essex local authorities have produced guidance covering the principles of solar development for developers to use to inform their plans and proposals. This guidance seeks to ensure that the local area and communities benefit as much as possible from solar farm development through high quality solar farm developments that maximise environmental and socio-economic benefits, minimise local environmental impact and provide significant community benefits.

***The Developer's Guide to Infrastructure Contributions, Revised 2020***

- 4.18 Essex County Council has produced a developer's guide to infrastructure contributions which details the scope and range of contributions towards infrastructure which ECC may seek from developers and landowners in order to mitigate the impact and make development acceptable in planning terms.

***Essex Sector Development Strategy***

- 4.19 The strategy has identified five economic sectors with significant growth potential that could be realised in Essex. They cover construction and retrofit, clean energy, advanced manufacturing and engineering, Digi-tech and life sciences.

***Green Skills Infrastructure Review for Essex County Council, March 2022***

- 4.20 A review of green skills and related infrastructure has been undertaken to identify skills gaps and business needs, the capacity of existing providers and growth plans and to identify how existing or improved skills infrastructure can support the Essex Climate Change Commission's ambition to mitigate the effects of climate change.
- 4.21 The proposed Longfield Solar Farm development is listed as a major project which will result in demand for green skills.

## **5. Assessment of Impacts and Adequacy of Response**

5.1 The following sections identify, for each topic heading listed below, the relevant policies, the key issues and impacts raised by the proposed development and the extent to which the applicant has addressed these issues in the application documentation.

- Principle of the development
- Highways and Transportation
- Highway Safety – Glint and Glare
- Public Rights of Way (PROW)
- Flood Risk, Drainage and Surface Water
- Minerals and Waste
- Cultural Heritage - Archaeology
- Socio-Economics -Jobs and skills
- Community Part-Ownership and Local Benefits

## **6. The Principle of the Development**

### Local Policy

- 6.1 Essex is experiencing a significant number of planning applications for solar farms at a range of scales. Within this context guidance has been prepared in collaboration with Essex Local Planning Authorities. The guidance covers a consistent set of minimum requirements of issues that need to be addressed.
- 6.2 These ‘Guiding Principles’ can be referred to by Local Authorities in the preparation of supplementary planning documents and other policy documents; referred to as a material consideration in the determination of planning applications and Nationally Significant Infrastructure Projects (NSIPs).
- 6.3 The guidance seeks to ensure the local area and communities are able to benefit as much as possible from solar farm development through high quality solar farm developments that maximise environmental and socioeconomic benefits, minimise local environmental impact and provide significant community benefits.

### Local Issues

- 6.4 Solar energy is one form of renewable energy generation which offers inexhaustible ‘clean’ fuel source with largely negligible pollution. ECC acknowledges that there is a demand for renewable energy generation and recognises the legal obligation to achieve net zero emissions by 2050.
- 6.5 Further, ECC acknowledges the need for a diverse energy generation mix to support the growing need for clean renewable energy and recognises that

Longfield Solar Farm would play a part in delivering a national need for renewable energy; contributing to the Government's national 2050 target.

- 6.6 ECC is committed to taking action on climate change and established the Essex Climate Action Commission (ECAC) in response to national requirements to reduce carbon emissions. The purpose of the Commission includes reducing the carbon footprint of ECC to make Essex a net zero County by 2050, mitigate the effects of climate change, and to explore how the county can attract investment in natural capital and low carbon growth, including renewable energy.
- 6.7 Through the work of the ECAC and guidance contained in the Essex Design Guide – Solar Farm Guiding Principles, 2022, ECC is supportive in principle of renewable energy schemes, recognising their importance in achieving the UK's target of being self-sufficient in providing its own energy supply, subject to the appropriate management and mitigation of environmental impacts.
- 6.8 As part of ECC's commitment, proposals to increase the amount of renewable energy generated in Essex that will help to reduce carbon emissions from the electricity grid, whilst also mitigating negative impacts, and maximising positive environmental and socioeconomic impacts, are supported. The ECAC has recommended that '*Essex produces enough renewable energy within the county to meet its own needs by 2040*', with the ECAC seeing a role in this for large scale solar production but "on available land without unduly compromising agricultural land".
- 6.9 A survey by ECC in May 2021 heard residents' views and opinions on developing solar farms, both on land owned by ECC and more widely in Essex. Some 79.11% of residents' responses were generally accepting of more solar farms in Essex but raised that it is equally important that any negative impacts are mitigated. Some 77.93% of respondents judged it very important that ECC develops renewable energy infrastructure.
- 6.10 The proposed development would provide a positive impact in terms of clean green, low carbon energy production. The development would contribute to a reduction in the carbon emissions of the energy supply in the UK and contribute to securing a stable energy source for over 25 years.
- 6.11 ECC recognises the positive impact on renewable energy generation will need to be balanced against the potential positive and negative impacts of the proposed scheme. Due to the scale of the DCO application, there will be significant adverse effects upon landscape character and visual amenity which, with the exception of harm to the Ter Valley and PDA1, can be managed and over time lessened as the mitigation proposals in the form of landscaping establish. These matters including the loss of agricultural land, are covered in the LIRs of Braintree District Council and Chelmsford City Council. ECC fully supports the conclusions on these matters and endorses the conclusions in these LIRs.



- 6.12 In relation to local guidance contained in the Solar Farm Guiding Principles document, developments should bring wider benefits to the local community. Please refer to sections 13 and 14 covering Socio-Economics -Jobs and skills and Community Part-Ownership and Local Benefits respectively.

#### Adequacy of application/DCO

- 6.13 The draft DCO is adequate with respect to the description of the development it proposes to authorise, including that the scheme would make a direct contribution to the provision of low carbon generation capacity that is urgently required in order to meet the Government's objectives and commitments for the development of a secure, affordable and low carbon energy system.

### **7. Highways and Transportation (Local Highways Authority)**

#### Local Policy

- 7.1 Local Highway Development Management policies seek to balance the need for new housing and employment opportunities, the regeneration and growth agenda, whilst protecting the transport network for the safe movement of people and goods. Policies aim to protect and maintain a reliable and safe highway infrastructure, offer where possible alternative travel options to the car and address the impact of HGV movement on the highway network and communities. The proposed development has been assessed in relation to the Development Management policies listed in Appendix 1.

#### Local Issues

- 7.2 Essex County Council as Highway Authority has engaged collaboratively with Longfield Solar Farm and their consultants AECOM to scope the detail required in the Transport Assessment and other supporting documents including the Construction Traffic Management Plan. ECC is satisfied that once constructed Longfield Solar Farm will generate very few vehicle movements on the Local Highway network in connection with the operational phase. Therefore, from the information presented to ECC, the impact of the operational phase would be neutral with very little traffic generation.
- 7.3 It is considered that the main impact from Longfield Solar Farm will occur during the construction and decommissioning phases and the highways and transportation focus has been on these periods.
- 7.4 With the decommissioning period being 40+ years away it is difficult to accurately predict the operation of the Local Highway Network. Therefore, whilst decommissioning is an important aspect of the Longfield Project the transportation work concentrates on the Construction phase and uses this as a proxy for a future decommissioning scenario.

- 7.5 The Transport Assessment indicates that a total of 126 two-way vehicle trips are expected to use the access on Waltham Road during the AM development peak hour (07:00 to 08:00) and 94 two-way trips during the PM development peak hour (18:00-19:00). This equates to approximately 2-3 vehicles per minute during the busiest times.
- 7.6 The Transport Assessment highlights that there are expected to be significantly fewer trips during the local network peak hours of 08:00 to 09:00 and 17:00 to 18:00. Where 32 additional two-way trips will be expected during each of these hours.
- 7.7 The Transport Assessment anticipates as a worst case, during peak construction there would generally be up to 50 HGVs per day to/from the Solar Farm site (100 two-way) movements potentially rising to 75 HGVs per day (150 two-way movements) for a one-month period during this peak construction period.
- 7.8 For the Bulls Lodge sub-station this would be 46HGVs per day representing 92 two-way movements.
- 7.9 Key local junctions identified at the scoping stage have been modelled for the 2025 future year scenario with construction traffic. These include the following junctions:
- Longfield Solar Farm site access (off Waltham Road)
  - Waltham Road and Cranham Road Junction
  - B1137 Main Road/Waltham Road Junction
- 7.10 This modelling work is satisfactory and ECC generally agrees with the conclusions that no additional off-site highway improvements are necessary beyond those already identified in support of the scheme. This is however based on assumptions contained in the Transport Assessment and upon which further clarification is sought as covered in Appendix 2. ECC consider that it is important that both HGV traffic and construction workers traffic are monitored effectively by the Travel Plan Co-ordinator for the duration of the construction phase of the development and additional mitigation/interventions sought, if necessary, e.g., additional car parking at the park and ride site to reduce impacts on the local road network.
- 7.11 Until the highway matters raised in Appendix 2 have been clarified the Highway Authority is not in a position to confirm whether the impact from Longfield Solar Farm during the construction phase would be positive, neutral or negative.
- 7.12 On the basis that the operational phase is being used as a proxy for decommissioning, the Highway Authority's position, as covered in paragraph 7.11 applies also to the decommissioning phase.

- 7.13 ECC is generally satisfied that AECOM on behalf of the applicant have identified cumulative schemes and timescales insofar as they are anticipated at the time of submission of the DCO. Where necessary traffic movements associated with local committed development proposals (those developments yet to come forward that have planning approval) have been added to the traffic flows contained within the submitted transport assessment.
- 7.14 The Chelmsford North-East Bypass scheme includes provision of an overbridge on Cranham Lane/Drakes Lane, that forms part of the construction traffic routing for Longfield Solar Farm. It been identified that construction of the overbridge has the potential to coincide with the construction programme for Longfield Solar Farm, and therefore close co-ordination between the contractors delivering Longfield Solar Farm and Chelmsford North-East Bypass is essential to satisfactorily manage this situation. Alternative construction traffic routing and associated traffic management/works could therefore be required during the construction period for the Longfield Solar Farm.
- 7.15 Other projects, for example the A12 widening was submitted on 12<sup>th</sup> August 2022. This is also subject to a Construction Traffic Management Plan as part of that DCO.

#### Adequacy of application/DCO

- 7.16 The transport related effects have been considered comprehensively within the Environmental Statement Volume 1 Chapter 13 Transport and Access, supported by Appendix 13A: Transport Assessment and Appendix 13B: Framework Construction Traffic Management Plan.
- 7.17 ECC is generally satisfied that the construction and decommissioning traffic can be managed through a comprehensive traffic management plan the framework of which is set out in Appendix 13B: Framework Construction Traffic Management Plan.
- 7.18 There has been ongoing dialogue with ECC Highways up to the submission of the DCO to the Planning Inspectorate. In reviewing the DCO application ECC has further comments, as set out in Appendix 2.
- 7.19 Mitigation is set out in Chapter 7 of the Framework Construction Traffic Management Plan and the Mitigation Schedule. This is generally satisfactory subject to the matters raised in Appendix 2 in need of resolution and Glint and Glare being satisfactorily addressed.
- 7.20 In general, as regards transport and access the Longfield Solar Farm scheme is in accordance with the Development Management Policies subject to a series of conditions/obligations securing the agreed mitigation, subject to the additional points raised in Appendix 2 and Glint and Glare title being satisfactorily addressed.

## **8. Highway Safety - Glint and Glare**

### Local Policy

- 8.1 The Essex Design Guide – Solar Farm Guiding Principles states that consideration needs to be given to the design of solar panels and site layout as this will have potential implications from glint and glare on existing and new communities, landscape and visual amenity, users of the Public Rights of Way (PROW) network and road, rail and aircraft safety.

### Local Issues

- 8.2 From a highway perspective, the Glint and Glare Assessment examines a 1km survey area around the Order limits for the assessment of road receptors. Users of the PROW network are not identified as a receptor. Mitigation measures include hedgerows to be grown, infilled and maintained to a height of at least 3m. Until the hedgerows reach this 3m height, a temporary 3m wooden hoarding would be used. Once the planting has been established and reaches the height necessary to provide permanent screening, the fence should be removed.
- 8.3 ECC anticipate that the Average Annual Traffic Daily Traffic (AADT) data for the affected routes is generally low.
- 8.4 The Glint and Glare Assessment raises a number of questions including whether calculations consider every vehicle type with HGV's ride height for example being significantly different to a low sports car. As such all road user groups need to be taken into consideration within the assessment / calculations. Additionally, there does not appear to be any reference to users of the PROW network across the site, in particular equestrian users of the Public Bridleway.
- 8.5 It is unclear whether there be a management regime in place to ensure that hedgerows, taken into consideration as part of this glint and glare study; that act as screening, will remain in place and effective for the duration of the project and will not inadvertently be coppiced, cut back drastically, or removed.
- 8.6 Further, are there situations that could arise seasonally, when due to leaf fall hedgerows lose some of their screening effectiveness. In such circumstances mitigation would need to be doubled up with additional man-made screening.
- 8.7 ECC is also mindful that as this is a rural area and planting of additional screening/construction of man-made screening should not compromise forward visibility around tight bends etc.
- 8.8 ECC is unclear on what basis a 1km survey area has been taken, or whether this is based on any guidelines which may exist for investigating impacts from glint and glare on the road network.

- 8.9 In summary if the 1km survey area is appropriate and the glint and glare study has taken place in accordance with current best practice then the mitigation propose, as set out in Chapter 7 of the Glint and Glare report appears logical. However, the locations for screening and hedgerows cannot be seen in Figure 6 Appendix A, due to the key being unclear.
- 8.10 Imagery in the latter part of the report appears to be based on google street view imagery. If this be the case ECC is concerned that since the nature and environment of the land / roads / hedges changes significantly then it may be necessary for additional survey data to be collected on site.

#### Adequacy of application/DCO

- 8.11 Until the matters raised above have been clarified, the Highway Authority is not in a position to make comment on the adequacy of the application/DCO in relation to glint and glare.

### **9. Public Rights of Way (Local Highways Authority)**

#### Local Policy

- 9.1 The proposed development has been assessed in relation to the Development Management Policy DM11 – Public Rights of Way which seeks, amongst other matters:
- to safeguard the existing network of Definitive Public Rights of Way where affected by development, ensuring that it remains protected and open for use by the public.
  - require that, where Definitive Public Rights of Way exists through a development site, it will be retained on its existing alignment and the development designed and laid out to accommodate it.
  - require the creation of new and/or enhancement of existing Definitive Public Rights of Way and/or permissive routes to encourage alternative modes of travel.
- 9.2 *The Essex Design Guide – Solar Farm Guiding Principles* states that any PROW through or surrounding a solar farm should remain usable, retain their recreational amenity and character, and be integrated as part of the development proposal. Further, applicants will need to demonstrate to the Highway Authority that all PROW impacted upon by a development will remain accessible by the general public and the public's rights and ease of passage over public footpaths / bridleways / byways should be maintained free and unobstructed at all times, including during construction, unless formally diverted, to ensure the continued safe passage of the public on the definitive right of way. The use of PROW for construction vehicle usage will not be acceptable.

## Local Issues

- 9.3 The proposed development includes a number of potential permissive routes within the site, which are outside of the Highway Authority's responsibility.
- 9.4 The PROW Management Plan, (EN010118/APP/6.2) paragraph 3.1.7 states that: 'The minimum legal PROW widths (specified by ECC) will be maintained for all PROW throughout the construction phase.'
- 9.5 For the operational stage, paragraph 3.2.1 states that 'All PROW will have a minimum 5m spacing (each way) between the centreline of the PROW and any infrastructure such as solar PV fencing and located within a minimum 10m wide undeveloped passageway. This will avoid the tunnelling issue that ECC and Essex Police raised as a potential concern during statutory consultation i.e. 10m is considered sufficient width to allow safe passage for pedestrians/ cyclists along the PROW.'
- 9.6 The fear or crime would be at its most pronounced when the PROW widths provided are at their least (the aforementioned legal minimum widths) which is proposed to be the provision during the construction period.
- 9.7 There would be a potential negative impact from a fear of crime for PROW users during the construction (and decommissioning) stages. Information on how the applicants will manage/mitigate the fear of crime during the construction period is consequently required.
- 9.8 Clarification is also required as to which PROW the minimum 5m spacing (for the operational phase) applies to. The PROW Management Plan, paragraph 3.2.1 states 'all PROW'. However, the examples given are for PROW which run across PV fields. Reassurance is therefore sought from the Applicant that this applies to all PROW, including field-edge PROW and other PROW not routed through PV fields.
- 9.9 Similarly, to avoid the fear of crime, the same information is sought for PROW widths to be provided during/after decommissioning and clarification on whether the PROW will return to their legal minimum widths or retain the enhanced widths.
- 9.10 The PROW within the Order limits is part of a much valued, interconnected, multi-parish network. There are no proposals for any permanent new PROW routes to offset the loss of amenity from this development. This is contrary to the advice in the Essex Design Guide – Solar Farm Guiding Principles which requests 'Mitigation and enhancement measures such as consequential improvements to the PROW network through improving connectivity'. The applicant has suggested that they do not have the ownership to facilitate permanent new connections, however, they would have compulsory purchase powers available within the DCO and have presented no evidence to show that they have attempted to negotiate

permanent new PROW connections with any landowners. Mitigation against the impact on the existing PROW network and especially the loss of amenity is therefore considered inadequate at this time.

- 9.11 The proposed development, once operational would transform the character of the landscape from a rural environment with arable and grazing use to a quasi-industrial one. These changes would significantly and detrimentally affect the Public Footpaths that pass directly through the development, and the enjoyment of the same users of the PROW network, in addition to the wider PROW network that surrounds the site. Further, there will be visual impacts and negative amenity impacts on the PROW network during the construction, operational and decommissioning phases.
- 9.12 Whilst it is accepted that the severity and level of impact on each PROW will depend on the location of the route, the visual and amenity impacts on some routes, such as Footpath 52 Great and Little Leighs 53, Footpath 18 Boreham, and Footpaths 25 and 32 Terling being those passing through the solar fields, are likely to be the most significant during the operational phase and may deter users of the paths. Screening and the provision of the 5m width/buffer should to some extent mitigate this effect, however it is important that no PROW within the site become enclosed, denying walkers any views.
- 9.13 During the construction and decommissioning phases, the PROW which will be driven along by construction (and decommissioning) traffic (physically separated) will be most affected. Others most affected are those which will be crossed by the construction routes, namely: Footpath 53 Great & Little Leighs, Footpaths 4, 5 and 18 Boreham, and Footpaths 25, 30, 32 and 33 Terling.
- 9.14 In respect to wider network connectivity, the roads surrounding the proposed development site e.g. Waltham Road provide vital links between off-road PROW. The predicted increase in HGV movements along these routes during the construction and decommissioning phases of the project, raises safety concerns for non-motorised users and may deter people from walking along or crossing the roads to access the PROW. The construction traffic associated with this development will have a negative effect on the public's access to the PROW network by making road access and crossing more hazardous and introducing delays.
- 9.15 Sections of some PROW will be used for vehicle access with separation for safety provided by fencing. Dust, debris and noise will greatly affect the user experience of walkers using those routes. Use of sections of PROW as construction access albeit with physical separation will have a negative effect on the amenity value of the effected PROW (Footpaths 25 and 32 Terling, and Footpath 4 Boreham).
- 9.16 There is a risk of surface damage along PROW during the construction phase, as a result of vehicle movements and the installation of new infrastructure required for the operation of the Solar Farm, such as the laying of cables. Construction

traffic crossing and using PROW if monitored and addressed should have a neutral effect on the surface condition of PROW. A commitment by the applicants to survey and improve (as required) PROW surfaces could see this change to a positive effect.

### *Mitigation*

- 9.17 Mitigation and Management measures are set out within Section 7.4.11 of the Framework Construction Traffic Management Plan.
- 9.18 It is noted that the proposed construction routes and crossing locations within the Order limits may be subject to minor changes during detailed design; these changes would not change the principles presented in the PROW Management Plan or result in any additional adverse impacts. Changing construction routes which will then affect temporary PROW closures/diversions will have a negative effect on PROW users in respect convenience and possible delays. This should be mitigated by minimising any changes and publicising/signing them to minimise the inconvenience to PROW users.
- 9.19 During operation, the existing PROW will have a minimum 5m spacing, either side of the PROW from the centreline of the PROW and any infrastructure such as solar PV fencing. Clarity is required to confirm that this applies to all PROW (not just those passing through the middle of PV fields), and whether the enhanced width will be retained during and after the decommissioning stage. Subject to clarification on the applicability (to all PROW) of the 5m width (and 5m either side e.g, 10m for cross-PV-field PROW) mitigation proposed is acceptable for the operational phase of the site. That notwithstanding, the overall effect on the PROW amenity, views etc. remains negative. Views will either be changed (PV fields and infrastructure i.e. rural fields) or lost through screening measures.

### Adequacy of application/DCO

- 9.20 The PROW related effects, mitigation proposals and PROW management to ensure PROW are safe and accessible have been considered within the Environmental Statement Volume 1 Chapter 13 Transport and Access, supported by Appendix 13A: Transport Assessment, Appendix 13B: Framework Construction Traffic Management Plan and Appendix 13C: Public Rights of Way Management Plan. However, the impacts on the PROW, as covered in this LIR are not fully recognised in these documents.
- 9.21 The Essex Design Guide – Solar Farm Guiding Principles states that any PROW through or surrounding the site should remain usable, retain their recreational amenity value and character, and be integrated as part of the development proposal. ECC accepts that providing a minimum 10m wide underdeveloped passage along existing PROW affected by the proposals, along with other management measures will allow a less enclosed passage for pedestrians and



cyclists along the PROW network. However, due to the scale of the DCO application, there will be negative effects on the recreational amenity of users of the PROW network within the Order limits during the construction, operational and decommissioning phases.

- 9.22 Potential new permissive routes have been proposed, some of which would link to the existing PROW, while others will provide a connection to the Chelmsford Garden Village development. These permissive routes would be for the 40-year operational lifecycle of the site. The Highway Authority is concerned that no permanent PROW network improvements have been offered to offset the negative impact on the PROW within the Order limits. The lack of permanent PROW enhancements is contrary to the Essex Right of Way Improvement Plan (ROWIP) on both enhancing connectivity and safety, the ECC Solar Farm Policy on providing improved connectivity, and paragraph 100 of the National Planning Policy Framework: “100. Planning policies and decisions should protect and enhance public rights of way and access, including taking opportunities to provide better facilities for users, for example by adding links to existing rights of way networks including National Trails.”

## **10. Flood Risk, Drainage and Surface Water (Lead Local Flood Authority)**

### Local Policy

- 10.1 The proposed development has been assessed in relation the Sustainable Drainage Systems Design Guide for Essex, 2020 and further local policies listed in Section 4.
- 10.2 Solar Farm development on Greenfield sites require appropriate flood mitigation and surface runoff management throughout the development site. The poor management of surface runoff from these sites has the potential to increase surface water flood risk.
- 10.3 For Longfield Solar Farm development, the applicant commissioned AECOM to prepare site specific Flood Risk Assessment to assess flood risk from all sources such as Fluvial, Tidal, Pluvial (Surface Water), Ground water, Sewers and Artificial Sources.
- 10.4 The Flood Risk Assessment has been prepared in accordance with the requirements of the Overarching National Policy Statement for Energy (EN-1) and the draft NPSEN-1 2021, the National Policy Statement for Renewable Energy Infrastructure (EN-3) and the National Planning Policy Framework, 2019 (NPPF).

### Local Issues

- 10.5 Two important water features intersect the Order limits. The River Ter main river passes through the southern part of the site and Boreham Brook Tributary crosses the Order limits in the southwest corner.

- 10.6 The Flood Risk Assessment showed the vast majority of site within the Order limits fall within flood zone 1 but some areas lie in Flood Zone 2, 3a and 3b, adjacent to the River Ter and Boreham Brook. No development will occur in Flood Zone 3.
- 10.7 Surface water flood risk is predicted to be low however there are localized areas susceptible to surface water flooding such as field ditches and flood risk at these locations is predicted shallow and considered very low risk.
- 10.8 There will be a neutral impact on surface water flood risk during the construction and operational phases and a positive impact at the decommissioning phase due to Sustainable Drainage System remaining after the removal of the solar panels and associated infrastructure.

#### Adequacy of application/DCO

- 10.9 The surface water modelling undertaken by ARCUS, November 2021 (FRA annex D) is satisfactory. The effective use of sustainable drainage principles to manage runoff from the site has satisfied the localised impact of surface water flood risk.
- 10.10 The Longfield Solar Farm Surface Water Drainage Strategy prepared by ARCUS February 2022 includes the incorporation of SuDS measures and will ensure that greenfield runoff rates are maintained during the construction and operational phases of the Scheme. Rural Sustainable Drainage System measures are proposed to limit possible channelisation from surface water runoff from the PV panels by promoting interception and infiltration.
- 10.11 The Lead Local Flood Authority (LLFA) is satisfied with the SuDS measures proposed in the DCO application including:
- The ground surrounding and between the PV Arrays will be planted with native species rich grassland and wildflower mix which will act as dripline planting. This will allow surface water which falls from the drip line across the face of PV arrays to be intercepted by the vegetation and limit the potential of surface water to concentrate and run across the surface.
  - The introduction of ponds and swales to capture flows from the site, swales with check dam to manage flows during operational phase of the scheme. Shallow filter drains are incorporated to facilitate interception and infiltration for the runoff generated from Ancillary Building.
- 10.12 The Surface Water Drainage Strategy is satisfactory from the Battery Energy Storage System (BESS) compound. The runoff rates are limited to 1-year greenfield rates for all storm events including 100 year plus climate change event. A pond is proposed to attenuated runoff from the site and the final outfall will be to an existing open land drain to the east.

- 10.13 The Surface Water Drainage Strategy and water quality measures are satisfactory for the extension of the Bull Lodge Substation. A Hybrid drainage system is provided which is ECC's preference where onsite infiltration is not fully achieved. Any rainfall for events up to and including the 1 in 5-year return period will discharge via infiltration. A piped outfall is provided for rainfall events greater than 5 years up to and including 100 years plus climate change events and the discharge rate limited to 1-year greenfield rates.
- 10.14 The incorporation of Sustainable Drainage System across the Longfield Solar Farm development has mitigated the localised impact of surface water flooding across the site.

## **11. Minerals and Waste (as Minerals and Waste Planning Authority)**

### Local Policy

- 11.1 The planning policy framework for minerals and waste within Essex is set out in the adopted Essex Minerals Local Plan (MLP) 2014 and the adopted Essex and Southend-on-Sea Waste Local Plan (WLP) 2017. The MLP is currently undergoing a review. This review has not yet reached Regulation 19 stage and therefore the Minerals and Waste Planning Authority (MWPA) currently places no weight on any proposed amendments to relevant policies.

### Local issues

- 11.2 In summary, the MWPA accepts that the majority of the development is temporary in nature and therefore prior extraction is not required. Where the site relates to the extension of a substation, which will be a permanent land use, it is accepted that it is not practical to prior extract this parcel in isolation. However, this land is already consented for extraction as part of the wider extraction of Brick Farm<sup>1</sup>, which is itself part of the wider Bulls Lodge Quarry. As such, the DCO application as it relates to Bulls Lodge Substation site would sterilise land that already has planning permission for extraction. Further, the MWPA has been provided with no indication that the mineral site operator, Hanson Aggregates do not intend to extract mineral in accordance with their planning permission.

### *Safeguarding Mineral Resources*

- 11.3 The vast majority of the application site is located within land which is designated as a Mineral Safeguarding Area (MSA) and therefore the application is subject to Policy S8 of the Essex Minerals Local Plan 2014 (MLP).
- 11.4 Policy S8 of the MLP requires that a non-mineral proposal located within an MSA which exceeds defined thresholds must be supported by a Minerals Resource Assessment (MRA) to establish the existence, or otherwise, of a mineral resource

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<sup>1</sup> Planning Application Reference CHL/1890/87

capable of having economic importance. This will ascertain whether there is an opportunity for the prior extraction of that mineral to avoid the sterilisation of the resource, as required by the National Planning Policy Framework (Paragraph 210). The NPPF requires policies that encourage the prior extraction of mineral where it is practical and environmentally feasible. The application site significantly exceeds the 5ha threshold for development within a sand and gravel Mineral Safeguarding Area.

- 11.5 The DCO application includes a Mineral Safeguarding Assessment, February 2022 (EN0101188). At Paragraph 6.1.1, the MRA concludes that:

*'The Solar Farm is temporary and reversible in nature, with an expected operational lifespan of circa 40 years. At the end of the Solar Farm's lifespan (i.e. circa 40 years), the solar panels and associated infrastructure would be removed, and the Longfield Site restored. No permanent installations are proposed in this area, although a section of redundant cable may be left in situ. This would not be expected to prevent extraction of mineral in the future. As such, no mineral resources within or adjacent to the Longfield Site would be permanently sterilised by the Scheme, nor would the Scheme in this area unduly restrict the extraction of mineral deposits or negatively affect the viability of exploiting the mineral resource in future; it would simply delay the availability of the resources for possible extraction in future.'*

- 11.6 The MWPA accepts that the temporary nature of the majority of the proposed development means that any underlying mineral where the development is temporary is not at risk of permanent sterilisation and therefore there is no need to consider prior extraction of that mineral which is not already consented for extraction. Given this conclusion, the MWPA accepts that the MRA is largely sound without the inclusion of borehole information. It is also agreed that the redundant cabling that would be left behind following decommissioning is unlikely to be a barrier to future extraction.

- 11.7 However, whilst the MWPA accepts the overall conclusion, the MWPA would draw attention to a further two observations made within the MRA which require qualification. The first of these relates to land shown as an extension to Bulls Lodge Substation, which would be retained following decommissioning of the wider development.

- 11.8 Paragraph 5.4.5 of the MRA states that:

*'Regarding the land that on which the extension to Bulls Lodge Substation is proposed to be located, BGS Geological Mapping shows that Glacial Till, potentially underlain by fluvio-glacial sand and gravel, only outcrops in the north-eastern half of this area. It is therefore unlikely that sand and gravel resources are present in the south-west of the Substation Extension area.'*

- 11.9 The MWPA however notes Figure 4-1 of the MRA, which was originally supplied by the MWPA, which shows that land safeguarded for mineral covers the whole of the land pertaining to the Bulls Lodge Substation and therefore this statement is questioned.
- 11.10 The second observation relates to a matter of principle. The MRA states at Paragraph 6.1.2 that *'the small area of extractable mineral within the Order limits in these areas means that prior extraction in these areas is unlikely to be either practicable or economic.'* Whilst this statement is accepted in isolation, the MWPA would reference the wider context which is that the area of land within the Order limits is part of a far wider MSA, and this may have the potential to be worked on a greater scale in the future. Indeed, the land in question already benefits from planning permission to extract as part of larger extractive works. It is noted that any significant MSA could be sub-divided to the point that it is not economic to extract, and it is the subsequent avoidance of this piecemeal loss of MSA land that is, in part, the role of mineral safeguarding policy.
- 11.11 Putting aside that the land is permitted for prior extraction as part of the permission to work the Brick Farm area of Bulls Lodge Quarry, in immediate proximity to the land subject to the substation extension is land that includes the existing substation and associated pylons and electricity lines. Paragraph 5.4.8 of the MRA states that:
- '.....working of mineral would impact on the proposed development by reducing ground levels under part of the Substation Extension. Restoration to original ground levels to allow development would require the importation of suitable inert materials. This would further reduce the economic viability of any mineral extraction. The mineral extraction and restoration would also delay the start date for construction of the Substation which would affect the programme for delivery of this nationally important renewable energy infrastructure project'.*
- 11.12 This conclusion is disputed. Putting aside again that the land has permission to extract as part of the wider quarry, an appropriate conclusion is that whilst development will lead to mineral sterilisation, it would not be 'practical' to prior extract this land in isolation, and therefore the test set out in NPPF Paragraph 210d is met, and any sterilisation would not be 'unnecessary', which meets the MLP Policy S8 test.
- 11.13 The MWPA accepts the overall general conclusion of the MRA which is that the proposed development will not result in the permanent sterilisation of the majority of the MSA and therefore prior extraction is not required ahead of the delivery of the non-mineral development. The MWPA does however conclude that a small part of the development will result in sterilisation where this pertains to land designated to accommodate the substation extension but accepts that it would not be practical to extract that parcel of land in isolation and therefore its sterilisation

would be acceptable as part of the planning balance when considered solely in the context of the proposed development.

- 11.14 However, and as set out in subsequent paragraphs below, this conclusion ignores the wider planning context. This is addressed in more detail by the accompanying Minerals Infrastructure Impact Assessment.

#### *Safeguarding Mineral Infrastructure*

- 11.15 The site of the proposed development lies within a Minerals Consultation Area associated with Bulls Lodge Quarry and a coated roadstone plant situated within the quarry. In compliance with Policy S8 of the MLP 2014, a Minerals Infrastructure Impact Assessment (MIIA), February 2022 (EN010118) was produced to assess the potential impacts that may result from the proposed development being located within and in close proximity to existing permitted mineral extraction and associated plant.

- 11.16 In relation to Bulls Lodge Quarry, the MIIA notes that part of the proposed development falls within land associated with the Bulls Lodge Quarry, which already has permission for extraction. At Paragraph 4.1.3, the MIIA states (inter-alia) that:

*'The permanent land take to the north of the proposed extension to the Bulls Lodge Substation comprises an area of approximately 0.2 Ha, which represents approximately 0.1% of the 243 Ha of land within the boundary of Bulls Lodge Quarry... This could potentially sterilise approximately 18,000 m<sup>3</sup> of mineral in the south-west of the Brick Farm area. This represents less than 0.5% of the remaining 6 million m<sup>3</sup> reserve for which consent is being sought to continue working. This will not impact on the viability of the remainder of the reserve in Brick Farm or significantly reduce the mineral supply in Essex.'*

- 11.17 The MWPA accepts that the proportion of land and mineral yield within Bulls Lodge Quarry which falls within the Order limits is small when compared to the total amount of land and yield. The MWPA would also not dispute that the sterilisation of the estimated 18,000m<sup>3</sup> of mineral in the Brick Farm area would not impact on the overall viability of the quarry. However, the DCO application includes, however small, land allocated and permitted for mineral extraction, which if consented would prohibit the permitted extraction of that mineral. Further, the mineral operator has not expressed any intention to not work the land associated with Bulls Lodge Quarry to the extent permitted through their extant planning permission.

- 11.18 It is also the view of the MWPA that matters of abundance, local or otherwise, are not relevant in the consideration of safeguarding mineral. As such the significance or otherwise of the loss of this consented mineral on the Essex sand and gravel landbank is immaterial.

11.19 At Paragraph 4.1.3, the MIIA further contends that:

*'Prior extraction of this mineral may be possible but is unlikely to be economic as a standalone activity, or warranted by the extremely small area and volume that would be affected. If this mineral is removed, it may require subsequent replacement by inert materials to allow construction of the northern edge of the Bulls Lodge Substation Extension.'*

11.20 The MWPA questions the appropriateness of this conclusion given that this land already benefits from a permission granting extraction as part of the wider consent at Bulls Lodge Quarry. It is also noted that this same area is also permitted to be used for overburden and topsoil stockpiling as part of working Bulls Lodge Quarry. The MWPA therefore notes that its loss could have unforeseen operational implications for the wider Bulls Lodge Quarry. It is also noted that Figure 3.4 of the MIIA shows that there is another area within the Order limits which is proposed to be used temporarily during construction of the solar farm to the north of the existing substation owned by the National Grid, which has planning permission for mineral extraction. The ability to extract mineral could potentially be compromised depending on the phasing/ delivery of the Solar Farm. The MIIA does not comment on this piece of land.

11.21 The MIIA concludes (inter-alia) at Paragraph 5.1.1 that, other than for the land discussed above,

*'....it is not considered that the Scheme would experience significant adverse effects as a result of the on-going operations at Bulls Lodge Quarry or that the quarry would experience significant adverse effects as a result of the construction and operation of the Scheme.... As such, no additional mitigation measures are required.'*

11.22 The MWPA accepts this overall conclusion. Where the MWPA might have had an outstanding concern, which would have related to potential dust emissions impacting on the efficiency of the Solar farm, Paragraph 4.2.5 of the MIIA states that:

*Outputs from the solar farm will also be monitored and if generation drops due to dust this will be addressed by cleaning.'*

11.23 The acceptance that any impact of the quarry, as the existing business, is required to be addressed by the new development is considered to be in accordance with NPPF Paragraph 187 which sets out the Agent of Change Principle.

11.24 It is additionally noted that the MIIA states at Paragraph 5.1.3 that:

*'Overall, it therefore follows that the Scheme complies with Policy S8 of the EMLP (2014), which requires that development proposals do not conflict with*

*the effective workings of permitted minerals development or Preferred or Reserve Mineral Site allocations.'*

- 11.25 The MWPA does not agree with this statement; it is recognised in the MIIA itself that the proposed development conflicts with the existing permission of the existing quarry.

#### *Safeguarding Waste Infrastructure*

- 11.26 The application site passes through a Waste Consultation Area associated with Boreham Recycling Centre and a Waste Consultation Area associated with Bulls Lodge Inert Recycling facility. Its location within these Waste Consultation Areas means that the application is subject to Policy 2 of the Essex and Southend-on-Sea Waste Local Plan 2017 (WLP).
- 11.27 Policy 2 of the WLP seeks to ensure that existing and allocated waste sites and infrastructure are protected from inappropriate neighbouring developments that may prejudice their continuing efficient operation or ability to carry out their allocated function in the future. Policy 2 defines Waste Consultation Areas as extending up to 250m from the boundary of existing or allocated waste infrastructure, unless they are Water Recycling Centres, where the distance increases to 400m.
- 11.28 Due to the proposed project passing through a Waste Consultation Area, a Waste Infrastructure Impact Assessment (WIIA) was produced (EN010118/APP/7.9) The WIIA concludes that there would be no impact on either Boreham Recycling Centre or Bulls Lodge Inert Recycling facility, stating at Paragraph 5.1.4 that:

*'Overall, it therefore follows that the Scheme complies with Policy 2 (Safeguarding Waste Management Sites and Infrastructure) of the Essex and Southend-on-Sea Waste Local Plan (2017).'*

- 11.29 The MWPA accepts this conclusion. Therefore, the MWPA concludes the proposed development would have a neutral impact at all stages on proximal waste infrastructure.

#### Adequacy of application/DCO

- 11.30 The MWPA accepts that the majority of the proposed development is temporary and will therefore not result in the permanent sterilisation of significant amounts of mineral. It is accepted that where the proposed development is permanent, it would not be practical to prior extract this land when this land is considered in isolation.



- 11.31 The MWPA also accepts that the proposed development will not have an impact on the operation of the coated roadstone plant at Bulls Lodge, the inert recycling facility at Bulls Lodge or the Boreham Recycling Centre.
- 11.32 However, the DCO application as it relates to Bulls Lodge Substation site, would result in permanent development; in an area where mineral extraction has been permitted through Application Reference CHL/1890/87. As such the DCO application does not comply with Policy S8 of the MLP, given that prior extraction of this parcel of land is not practical, and the mineral operator has not expressed any intention to not extract the land associated with Bulls Lodge Quarry to the extent permitted through their extant planning permission.

## **12. Cultural Heritage (Archaeology)**

### Local Policy

- 12.1 This section relates to the known and potential below ground archaeological deposits.
- 12.2 The proposed development has been assessed in relation to Local Plan policy and the Essex Design Guide – Solar Farm Guiding Principles. The Solar Farm Guiding Principles state that any solar farm proposal should consider its impact on both designated and non-designated heritage assets and their setting in accordance with National Planning Policy Framework (NPPF), paragraph 194. The Essex Historic Environment Record should be the primary source for assessment of archaeological potential assessing the character, significance and extent of archaeological remains.

### Local Issues

- 12.3 Chapter 7 Cultural Heritage, Section 7.8.6 provides a list of construction related intrusive activities which have the potential to impact on archaeological remains. However, the cumulative impacts of the many, various areas of ground disturbance during construction, including excavation necessary for concrete pads for panels, all cabling, landscaping and ecological enhancements will also need to be considered as part of the mitigation as these are not included within list 7.8.6.
- 12.4 Targeted archaeological trial trench evaluation was carried out in very specific areas, within the Order limits, these areas were identified through geophysical survey and aerial mapping. A more detailed trenching strategy was undertaken in those areas which had limited flexibility within the overall scheme, such as the Battery Energy Storage System (BESS) compound area. A number of archaeological remains were identified in the trenches excavated that were not detected through geophysical survey.
- 12.5 The results of the targeted trial trench evaluation suggest there is greater potential for the survival of further unknown archaeological assets within the Order limits

than the geophysical survey detected, the nature and significance of which is unknown.

- 12.6 The assessment of likely impacts and effects, Chapter 7 - Cultural Heritage, Section 7.8, identified the known non-designated archaeological assets where the effect is considered significant. The sensitivity/value of assets may need to be re-assessed to take into account the antiquity of the historic landscape and the need for more considered understanding of the origins of the historic landscape within the Order limits.
- 12.7 There are two areas of significant (medium or high -value) archaeological activity (Sites A70 and A127-) which have been removed from the area of the Scheme within the Order limits and are now within an area for landscaping. A127 is identified as Site D from the trial trench evaluation, where an Upper Palaeolithic blade and possible prehistoric occupation layer with gravel surface was uncovered only 300-400mm below surface. A potential highly significant Palaeolithic tool has been recovered which, if related to in situ deposits would be of national significance. The trial trenching report states:
- ‘The crested blade provides some proxy evidence for the site having highly significant evidence for Upper Palaeolithic activity. If the piece can be assigned sites A70 to an Earlier Upper Palaeolithic date, as is strongly suspected, the site would be highly significant in a North-west European context.’
- 12.8 ECC would not support any intrusive proposals on these sensitive sites and the potential for disturbance to the possible prehistoric deposit from any vegetation planting or landscaping will need to be assessed through a detailed programme of further archaeological investigation in order for a suitable mitigation strategy to be proposed. These areas of landscaping will require further archaeological investigation prior to any works commencing in those areas.
- 12.9 The nature and significance of the World War I (WWI) practise trenches and possible associated features remains to be adequately assessed. The DCO application recognises that these assets are uncommon nationally and rare regionally in Essex and that the area may contain features of the trial trenches that survive to a greater extent than those evaluated. The Historic England (HE) publication “First World War fieldworks in England” (Brown, M 2017) has identified the need for better understanding of the archaeological resource for surviving WWI monuments and features, including training features and defences. It recognises that there are significant gaps in knowledge that should be addressed and improvements for the protection of any surviving features.
- 12.10 The fieldwork carried out was limited in extent and has not provided sufficient information to assess condition, survival and significance. The HE publication on WWI military features shows that the trenches identified through cropmark features may also be accompanied by underground tunnels and other subterranean features which would not be visible as cropmarks. The full extent of

the practise ground may not have been realised along with the potential for unexploded ordnance. It would be preferable to preserve these elements through design (ground-based supports and cables above ground), however if this is not feasible then a site-specific mitigation strategy will need to be considered and a suitable programme of archaeological investigation proposed. Further investigation into the possible WWI military features to determine their significance and extent is required to ensure a suitable mitigation strategy is proposed.

- 12.11 There are some inaccuracies in paragraph 7.4.8 of Chapter 7 Cultural Heritage, which need addressing.

*7.4.8 Archaeological evaluations were also undertaken to refine and augment the desk-based data, including a geophysical survey (detailed magnetometry) of the whole scheme and targeted trial trenching.*

- 12.12 This statement is incorrect, as geophysics was not completed for the whole scheme.

- 12.13 Paragraph 7.6.3 below also requires updating, with the results from the trial trenching which identified Roman activity.

*'The Roman period is well attested in the area, and likely a focal point of Roman activity given the proximity of the Order limits to the London to Colchester Roman Road 100m south of the Order limits and an important Roman settlement at Chelmsford (Caesaromagus). The remains of a villa or small settlement were recorded at Great Holts Farm 300m west of the Order limits. A Roman isled hall, suggestive of a Roman Principa, were recorded at Bulls Lodge mineral extraction area 200m north-west of the south-western end of the Order limits. Cropmarks near Toppinghoe Hall suggest the possible presence of a small Roman settlement 200m south of the Order limits. Nevertheless, no Roman period remains have been recorded within the Order limits.'*

- 12.14 Further, paragraph 7.6.35 should be updated to reflect the response at statutory consultation from the Council of the Essex Society for Archaeology and History; copied below:

*'The sites investigated to the west of the LSF include not only a scatter of farms, as that paragraph suggests, but quite major settlements including what may have been a manorial centre (Clarke, 2003). More importantly it is not the case that '...the Bulls Lodge farms were abandoned during the emparkation of Newhall Palace in the 13th century...' the abandonment of these sites happened long before Newhall and its park were created in the 16th (not 13th) century. The critical point is that the areas historically dispersed and polyfocal settlement pattern was also shifting. The predecessors of existing late medieval or early postmedieval farms are often some distance away rather than occupying precisely the same location.'*

- 12.15 The development would have a negative impact on any below ground archaeological remains during the construction phase, the magnitude of this across the whole scheme is currently undetermined and will only be understood once a further phase of archaeological evaluation by trial trenching is completed. The impact can be mitigated through preservation by design or preservation by record.
- 12.16 It is anticipated that there would be no further impact to below ground archaeological remains through the operational and decommissioning phases.

Adequacy of application/DCO

- 12.17 The Environmental Statement includes Chapter 7 - Cultural Heritage. This is supported by Figures 7-1 and 7-2 and four technical appendices A7A to A7D. The Historic Environment Desk-Based Assessment (Appendix A7A), Aerial Investigation and Mapping Report (A7B), Geophysical Survey (A7C) and a targeted trial trench evaluation report (Appendix7D). Currently no Outline Written Scheme of Investigation has been submitted, however a summary mitigation schedule is included in Table 7.8.
- 12.18 Chapter 7 Cultural Heritage (EN010118/APP/6.1) and the supporting Heritage Desk Based Assessment, Appendix 6.2 7A, provide a reasonable account of the archaeological and historical background of the area within the Order limits. However, this assessment has failed to recognise the antiquity of the historic landscape, which in turn has implications for the assessment of value of the known non-designated heritage assets identified within the Order limits and for the presence and significance of currently unknown non-designated heritage assets within the Order limits. There is a requirement for the Cultural Heritage Chapter to be revised in line with paragraphs 12.12, 12.13 and 12.14.
- 12.19 Chapter 7 Cultural Heritage, section 7.9.2 says that where no appropriate design mitigation can be applied to the management of the archaeological resource, additional mitigation measures will be applied. This is supported, however, the proposals submitted in section 7.9.2 are not appropriate. The form of mitigation will need to be assessed following the completion of a suitable programme of archaeological evaluation by trial trenching to adequately assess the age, nature and extent of archaeological remains within the Order limits.
- 12.20 Section 7.9.3 proposes no mitigation for assets consisting of postmedieval field boundaries (A146, A147 and A148) subject to negligible effects. It is agreed that where there is no impact on below ground archaeological remains there would not be a requirement for mitigation, however assets A146 and A148 are considered likely postmedieval field boundaries and their origin has not been established. The trial trenching exercise positively identified only one single medieval/postmedieval field boundary therefore the origin of these features cannot be assumed unless there is further evidence to establish this. The definition of 'negligible effects' on

below ground archaeological remains will also need to be re-considered in light of paragraph 12.3 above.

- 12.21 Within the Mitigation Schedule Table (Chapter 6.6) the terminology is misleading. Under the CH01 Mitigation measures the table states Archaeological Monitoring. This should be changed to archaeological investigation as it is unlikely to consist of archaeological monitoring and will require, in the first instance, a programme of further archaeological trial trenching potentially followed by a programme of open area excavation. Mitigation Schedule Table (Chapter 6.6) will require amending.
- 12.22 Appendix 7D Trial Trenching Report does not provide sufficient information to make a considered judgement on the validity of the geophysical survey. As a result, there is concern over whether the proposed mitigation strategy is appropriate. There will be a requirement for the trial trenching report to be revised and re-submitted.
- 12.23 ECC is of the view that the DCO submission documents have provided a moderate level of understanding of the site's archaeological potential. However, ECC is concerned over the lack of corroboration of results between the geophysical survey and the targeted trial trenching, and lack of previous investigation across the area. The limited targeted trial trenching has provided an indication on the nature and possible extent of archaeological remains within very specific areas within the Order limits although significantly it does not provide an overall understanding of the potential of the site.
- 12.24 Section 7.9.6 of Chapter 7 Cultural Heritage, states that additional archaeological work would be secured by a DCO condition which would be secured by the production of a Written Scheme of Investigation (WSI). This programme of work would need to comprise a phased approach of investigation, the first covering archaeological trial trenching over the remaining areas which will require ground disturbance prior to any construction, and second, an open area excavation of deposits identified, unless an alternative programme of preservation or excavation is agreed.
- 12.25 Agreement on the detail of a WSI needs to be reached as part of the DCO process to ensure that archaeological deposits will be appropriately investigated. ECC notes there are no proposals for outreach and enhanced public understanding as part of the mitigation beyond appropriate publication of the results and archiving. It is considered there would be scope to demonstrate a commitment to delivering enhanced public understanding/benefit and legacy is part of the mitigation considering the significant size of the scheme and the interest in the heritage of the area. The details of outreach should be included within the WSI.

### 13. Socio-Economics – jobs and skills

#### Local Policy

- 13.1 The Essex Sector Development Strategy identifies ‘clean energy’ as an economic sector with significant growth potential that could be realised in Essex. Within this sector the Strategy identifies green growth as intrinsic to meeting the target for net zero by 2050.
- 13.2 The proposed Longfield Solar Farm development is listed as a major project which will result in demand for green skills in the Green Skills Infrastructure Review for Essex County Council, March 2022.
- 13.3 The Essex Climate Action Commission (ECAC) has set out recommendations for Essex County Council on tackling the climate change crisis across six core themes. Energy is one of the six core themes. Within this core theme there is a trajectory of targets and milestones that will need to be met for Essex to become a net zero county by 2050.
- 13.4 The energy recommendations focus on ways to invest in renewable energy, switch to a greener electricity supply and create community energy neighbourhoods. Key recommendations include:
- Essex to be made a centre of innovation for emerging renewable technologies (e.g. small scale nuclear and manufacturing of renewables products such as solar tiles).
  - Essex to produce enough renewable energy within the county to meet its own needs by 2040.
- 13.5 Further, the Solar Farm Guiding Principles advises:

*‘Solar developments should also contribute to the greening of the local economy through increasing green jobs, and green sector skills through upskilling their workforce for example, as these skills will be transferable for both large- and small-scale solar installations. This will also support the Essex Climate Action Commission recommendation to “make Essex a centre of innovation for emerging renewable technologies (e.g. small scale nuclear, & manufacturing of renewables products such as solar tiles)’.*

#### Local Issues

- 13.6 The proposed development would create 380 gross direct full-time employment (FTE) construction jobs on-site per day during the two-year construction phase. Of the 380 gross direct construction jobs on-site, it has been estimated that 171 FTE per annum will be created for residents within the study area during construction. Whilst these jobs are temporary, the skills attained would be transferrable to other energy and infrastructure projects, and as such it is accepted

that there would be a positive economic impact in the local area during the construction phase.

- 13.7 There would be 8 permanent jobs once the solar farm is operational. On the basis that the 8 permanent roles created at the operational stage could be near to the current number of agricultural related jobs, on agricultural land within the Order limits, it is therefore accepted that there will be a neutral impact on the number of permanent jobs in the local area at the operational phase.
- 13.8 At the decommissioning stage these 8 permanent jobs will no longer be needed and will be replaced by agricultural related jobs once the land has been returned to agricultural use. Given this there will be a neutral impact on the number of permanent jobs at the decommissioning phase.
- 13.9 It is accepted that there would be a positive multiplier effect to the local area, generated by indirect and induced effects of the construction activity, and the presence of other solar farm and infrastructure proposals within the region.
- 13.10 Given the specialist nature of both the temporary and permanent jobs, opportunities, including local upskilling should be maximised to ensure positive, long-term local employment gain to support the county's green economy.
- 13.11 The applicant should cooperate and work with relevant partners and use the Employment and Skills Plan to reduce the risk of skills and construction worker shortages, as other projects may come forward within similar timeframes. This requires investment in further education, apprentices and training within the local area to deliver the required workforce for the construction and operational phases in order to reduce the risk of disruption to this development and other projects coming forward.

#### Adequacy of application/DCO

- 13.12 The Socio-Economic effects have been adequately considered within the Environmental Statement, Chapter 12 Socio Economics and Land Use (EN010118/APP/6.1).
- 13.13 It is understood that the Local Skills and Employment Plan will be prepared prior to the commencement of construction and will set out measures that the applicant will implement in order to advertise and promote employment opportunities associated with the proposed development locally. Further the applicant will also make a skills and education contribution to assist and encourage local people to access apprenticeships and training.
- 13.14 ECC is satisfied, in principle, that a Local Skills and Employment Plan, secured by way of a DCO requirement, should help maximise positive gains for the local economy, including upskilling the construction workforce, including within

education settings to support emerging renewable technology innovation, jobs and skills retention within Essex.

- 13.15 A draft Heads of Terms, provided in the Planning Statement (EN010118/APP/7.2) is currently under discussion. ECC has produced a 'Skills and Employment Principles for Major Project and Developments' document, (please see Appendix 3) which outlines ECC expectations of what a Local Skills and Employment Plan should cover.

## **14. Community Part-Ownership and Local Benefits**

### Local Guidance

- 14.1 The Essex Climate Action Commission (ECAC) has set out recommendations for Essex County Council on tackling the climate change crisis across six core themes. Energy is one of the six core themes. Within this core theme there is a trajectory of targets and milestones that will need to be met for Essex to become a net zero county by 2050.
- 14.2 The energy recommendations focus on ways to invest in renewable energy, switch to a greener electricity supply and create community energy neighbourhoods. Key recommendations include:
- A network of community energy neighbourhoods to be built across every district in Essex, to generate, store, share and use energy locally by 2035.
  - All large-scale renewable developments to have an element of community ownership from 2021.
  - 100 per cent of fuel-poor households to be retrofitted and supplied with affordable renewable energy by 2030.
- 14.3 Further, the Solar Farm Guiding Principles advises:

*'Considering the potential scale of solar farms, many neighbouring communities may be impacted by the development and as such it is important that local communities can realise the benefits associated with the project throughout its lifetime through a "community led locality benefit" approach. Developer-led renewable energy infrastructure generation should make a financial or other contribution to the locality, led by the community such as:*

- *Assigned revenue to the locality at a £/MW installed or £/MWH generated*
- *Supply of energy generated directly to local communities sold at a discounted rate*
- *Negotiate a part community ownership model in collaboration with community energy groups*



- *Community investment through crowdfunding/community share offer, an alternative to the ownership model where residents could invest in and own a share of the solar farm*
- *Use of retained business rates for the Local Authority and ring-fenced for community energy-related measures and projects.'*

### Commentary

- 14.4 ECC would wish to see opportunities and options explored by the applicant for community ownership, together with detail of the scope and operation of a community fund open to applications from community projects or groups.

## **15. Summary**

- 15.1 ECC has reviewed the DCO application and evaluated the impacts in the context of the local development plans and other relevant policy and local guidance. The impacts, whether positive, neutral or negative at construction, operational and decommissioning stages, have been assessed within each of the topic headings of this report.
- 15.2 ECC considers that (subject to resolution of specific issues raised and requests made in this LIR) the DCO application, in combination with the proper implementation of ancillary documents it provides for, or that the applicant has agreed to in the Statement of Common Ground; in particular:
- Construction Environmental Management Plan
  - Operational Environmental Management Plan
  - Construction Traffic Management Plan
  - Public Rights of Way Management Plan
  - Permissive Paths Plan
  - Decommissioning Environmental Management Plan
  - Surface Water & Drainage Management Plan
  - Written Scheme of Investigation

would ensure that the local impacts are acceptable and in accordance with local development plans and other relevant policy and local guidance.

## **APPENDIX 1: Development Plan Documents and Local Guidance**

### ***Braintree District Council Local Plan***

The Local Plan comprises the Braintree District Local Plan 2013-2033. Section 1 of the Local Plan is the Shared Strategic Plan for North Essex, adopted in February 2021. Section 2 Local Plan covers Policies, Maps and sites for development, housing, employment and regeneration and was adopted July 2022. The Local Plan policies of relevance to the topic areas covered in this LIR are:

- i. Strategic Policy 3 – Spatial Strategy for North Essex
- ii. Strategic Policy 6 – Infrastructure and Connectivity
- iii. Strategic Policy 7 – Place Shaping Principles
- iv. Policy LPP1 – Development Boundaries
- v. Policy LPP42 – Sustainable Transport
- vi. Policy LPP43 – Parking Provision
- vii. Policy LPP47 – Built and Historic Environment
- viii. Policy LPP57 – Heritage Assets and their Settings
- ix. Policy LPP59 – Archaeological Evaluation, Excavation and Recording
- x. Policy LPP69 – Protected Lanes
- xi. Policy LPP71 – Climate Change
- xii. Policy LPP73 – Renewable Energy Schemes
- xiii. Policy LPP74 – Flood Risk and Surface Water Drainage
- xiv. Policy LPP76 – Sustainable Urban Drainage Systems

Also of relevance is the Hatfield Peveral Neighbourhood Development Plan, 2019.

### ***Chelmsford City Council Local Plan***

The Chelmsford Local Plan 2013-2036 was adopted in May 2020. The Local Plan policies of particular relevance to the topic areas covered in this LIR are:

- i. Strategic Policy S2 – Addressing Climate Change and Flood Risk
- ii. Strategic Policy S3 – Conserving and Enhancing the Historic Environment
- iii. Policy DM13 – Designated Heritage Assets
- iv. Policy DM14- Non-Designated Heritage Assets
- v. Policy DM15 – Archaeology
- vi. Policy DM 18 – Flooding/SUDS
- vii. Policy DM 19 – Renewable and Low Carbon Energy

Chelmsford City Council has produced a Solar Farm Development Supplementary Planning Document, November 2021 which provides guidance on preparing and submitting proposals for solar farms and guidance on how planning applications should be considered in the light of national and local requirements.

## **Essex Minerals Local Plan July 2014 Essex and Southend-on-Sea Waste Local Plan 2017**

The planning policy framework for minerals and waste within Essex is set out in the adopted Essex Minerals Local Plan (MLP) 2014 and the adopted Essex and Southend-on-Sea Waste Local Plan (WLP) 2017. The MLP is currently undergoing a review. This review has not yet reached Regulation 19 stage and therefore the Minerals and Waste Planning Authority (MWPA) currently places no weight on any proposed amendments to relevant policies.

The policies of particular relevance to this development are:

- i. Policy S8 of the Minerals Local Plan requires that a non-mineral proposal located within a Mineral Safeguarding Area which exceeds defined thresholds must be supported by a Minerals Resource Assessment (MRA) to establish the existence, or otherwise, of a mineral resource capable of having economic importance.
- ii. Policy 2 of the Waste Local Plan seeks to ensure that existing and allocated waste sites and infrastructure are protected from inappropriate neighbouring developments that may prejudice their continuing efficient operation or ability to carry out their allocated function in the future.

### Other relevant Local Policy

In addition to the development plan documents listed above, there are a number of additional policy documents produced which provide local policy on key topics of relevance to this development.

### **Local Highway Authority Policies – Development Management Policies – February 2011**

Local Highway Development Management policies have been the subject of a full public consultation exercise, together with a Sustainability Appraisal and Strategic Environmental Assessment. They have been approved by ECC cabinet members for Highways and Transportation and for Communities and Planning and as such have been formally adopted as ECC Supplementary Guidance.

Key policies of relevance to this DCO are:

- i. DM1 General Policy
- ii. DM2/3/4/5 Highway Access Policies
- iii. DM7 Vehicle Parking Standards
- iv. DM9 Accessibility and Transport Sustainability
- v. DM10 Travel Plans
- vi. DM11 Public Rights of Way
- vii. DM13 Transport Assessments
- viii. DM14 Safety Audits
- ix. DM15 Congestion

- x. DM19 HGV Movement
- xi. DM20 Construction Management
- xii. DM22 Maintenance Contributions for Damage to the existing highway

***Essex Design Guide – Solar Farm Guiding Principles, 2022***

Essex local authorities have produced guidance covering the principles of solar development for developers to use to inform their plans and proposals. This guidance seeks to ensure that the local area and communities benefit as much as possible from solar farm development through high quality solar farm developments that maximise environmental and socio-economic benefits, minimise local environmental impact and provide significant community benefits.

Guidance of relevance to this LIR covers:

- Community Part-Ownership and Local Benefits
- Protection and Enhancement of the Rights of Way Network
- Designated and Non-Designated Heritage Assets
- Glint and Glare
- Traffic and Transport
- Minerals and Waste
- Construction considerations, end of life and site restoration
- Flood risk and SUDS

## APPENDIX 2: The Transport Assessment

1. The Transport Assessment is based on assumptions that were discussed with the Highway Authority at the pre submission stage. At that time assumptions including derivation of HGV trips, car share factors and the split of non-local construction workers were questioned, and this is contained within the meetings notes which form part of the Transport Assessment. Whilst ECC appreciate that the Longfield Solar Farm team will have drawn upon their experience of other similar projects to establish the assumptions this work does not appear to be contained within the Transport Assessment.

Clarification on these points is required:

- Construction worker split local 45% and non-local 55% was discussed (ref 08 meeting minutes 14 July 2021), has local accommodation been identified and can an effective shuttle bus service be used to deliver 55% of the construction workforce to site from local accommodation?
  - Car share factor, it appears this is based on previous experience, and it has been decreased from 1.7 workers per vehicle to 1.5. However, ECC were citing 1.35. Is there evidence to corroborate the use of 1.5 workers per vehicle as contained within the Transport Assessment?
  - HGV generation was questioned within the Longfield Solar Farm Transportation Scoping Report Review. At this time it was 25 HGVs (50 two way movements) travelling to and from the site, in the latest Transport Assessment it is 50 HGVs (100 two-way movements). It remains unclear how this level of HGV movements has been derived?
  - Monitoring of HGV traffic is mentioned within the supporting documentation to monitor compliance with routing/times and volumes of traffic but it is not clear if construction worker traffic will also be monitored to ensure that the car mode share referred to above and transfer of non-local construction workers is effective and are being met in accordance with the assumptions, and if not what further action/mitigation can take place should this be the case with additional private vehicles/LGVs arriving on site.
  - There are limited details contained within the supporting information regarding the shuttle bus service, location of non-local construction worker accommodation and how the Chelmer Valley Park and Ride will be utilised.
  - Speed Surveys were conducted in October 2019 on Waltham Road, the locations are shown in Appendix D1 but it is unclear as to the location of the speed detection loops in relation to the proposed site access and proposed Waltham Road crossing.
2. Road Safety Audits are referred to in the documentation. Policy DM14 requires and road safety audit report including designer's response where appropriate to accompany any planning application which seeks to materially alter the existing highway and that such audit has been carried out in accordance with current standards by an independent safety auditor.

Road safety audits are required for the following locations:

- Solar Farm site access from Waltham Road
  - Waltham Road crossing point (for construction of the Grid Connection Route)
  - Proposed carriageway widening on Wheelers Hill, Cranham Road and Waltham Road.
  - Noakes Farm crossing point
  - Locations where permissive routes join or cross existing highway.
3. It would generally be assumed that the cable crossing of Waltham Road connecting the Longfield Solar Farm to Bull's Lodge quarry sub-station would be installed via trenchless construction rather than an open trench that would likely require closure of Waltham Road.
  4. ECC considers that despite the widening to 6 metres, where possible there remains the possibility that additional traffic could impact on the condition of the highway asset and verges adjacent to the highway. The Construction Traffic Management Plan should include reference to before and after studies for any vulnerable sections of the highway asset being required together with a programme for reinstatement of any defects both during and after the construction period.
  5. Permissive routes are to be provided through the works for the operational phase of the development. It will be necessary for the applicant to ensure that the locations where these permissive routes connect with and/or cross existing public highway are safe. Additional works within the highway may be required to achieve this as identified through Road Safety Audit.

## **APPENDIX 3:**

### **ECC Skills and Employment Principles for Major Projects and Developments**

#### **Introduction**

ECC would like to see the county's major projects and developments make a significant contribution to support our Essex skills and employment landscape. This document is a summary of our vision and ambition.

The Skills and Employability Team aims to develop a strong and flexible skills system that addresses issues related to low productivity, business development and economic inclusion and we encourage early engagement from the Major Project sponsor or developer to outline how they intend to align their work to support our priorities. Our priorities are identified in our Essex Skills Plan, our Sector Development Strategy, as well as in Everyone's Essex, our strategy for Levelling Up the County.

#### **Scale of economic opportunity**

National Strategic Infrastructure Projects and other large-scale developments have the potential to generate lasting regional economic growth and prosperity. Our focus is to drive strong strategic leadership and partnerships which promote the development of a highly-skilled local workforce and sustainable employment. A responsive and flexible local skills system will help mitigate dependencies on single large local employers which can, potentially, drive out other opportunities or make communities vulnerable to economic shocks.

#### **Economic clustering and skills**

Our strategic aim is to ensure that major projects work to bring about skills clusters that support the matching of workers to in-demand career opportunities, and companies to communities where the skills they need exist or are being trained for.

We therefore expect major projects to:

- cultivate and foster partnerships to develop a flexible and responsive skills system that aids regional and sub-regional business development, and which develops industry clusters and skills engines.
- develop highly-skilled sub-regional talent eco-systems with transferable skills and competence, responsive to current and future jobs which:
  - builds capacity and conditions to enable shared prosperity
  - enables innovation, knowledge-driven and digital skills that increase productivity, and thereby aiding wealth, output and opportunity
- mitigate adverse employment effects that may arise from a large-scale influx of non-home-based workers which evidence suggests increases salaries and job competition, thereby leading to higher churn and displacement effects. This crowding out effect raises the cost for all local people, including those not directly employed by the large employers, by increasing demand for property and local services.
- create the conditions for effective skills devolution by developing and taking forward an integrated whole-system approach to employability and skills.

## Skills and Employment principles for major projects



To meet our principles, the sponsor / developer will be expected to:

**1. Link educators, business and people** to develop a shared understanding of skills and drive local prosperity

Working in partnership with ECC, SELEP, SEB, employer/business reps and training providers:

- Drive strong leadership to enable local anchor institutions/strategic infrastructure projects to invest in and deliver local outreach and engagement to support sub-regional, latent talent pools; enabling future employment and agglomeration spin-out
- Ensure local educational provision aligns with sub-regional employment needs
- Develop and take forward integrated approaches to employability and skills with other agencies.
- Foster educational partnerships to upskill and train highly-skilled workers

**2. Cultivate skills needed for the future economy supporting productivity, future prosperity and the fourth industrial revolution**

Working in partnership with ECC, SELEP, SEB, JCP, training providers and others:

- Invest in lifelong learning, to adapt to changing employment landscapes
- Develop and unlock skills needed for future jobs
- Prioritise knowledge-driven skillsets and higher-level jobs

**3. Develop and enhance sustainable high-value employment opportunities**

Working in partnership with ECC, SELEP, SEB, JCP, training providers and others:

- Support access to a highly skilled pool of local labour
- Drive knowledge economy jobs
- Increase the percentage of residents with skills at Level 3 and above



- Further utilise the apprenticeship levy and opportunities for skills devolution to support industry and develop highly-skilled sub-regional talent eco-systems
- Maximise local labour opportunities from regional developments, with career sustainability and lifelong learning at its foundation

#### **4. Develop world class training and provision**

Working in partnership with ECC, SELEP, district(s) and training providers:

- Invest in and support the local educational landscape
- Develop a culture of education and industry knowledge share and pool of associate lecturers, teachers\tutors and assessors
- Invest in new models of skills facilities and equipment which are aligned to employer skills need to support 'skills for the future' and a knowledge-based economy
- Invest in and develop new vocational pathways such as apprenticeships, T-Levels and new models of Work Based Learning

#### **5. Ensure a diverse and inclusive workforce**

Working in partnership with ECC, SELEP, SEB, district(s) and training providers:

- Offer targeted opportunities for the hard to reach and those furthest away from the job market to access sustainable employment
- Address workforce gender imbalances and promote a culture of fairness, inclusion and respect for all, through vigorous outreach, local engagement and pro-active measures to break down negative perceptions
- Create localised initiatives addressing the skills needs of specific subregions of Essex, such as addressing: in work poverty, low skills levels, long term unemployment or high levels of individuals Not in Education, Employment or Training (NEET)
- Invest in and work with specific cohorts of residents that are furthest away from the jobs market to promote employability and skills development