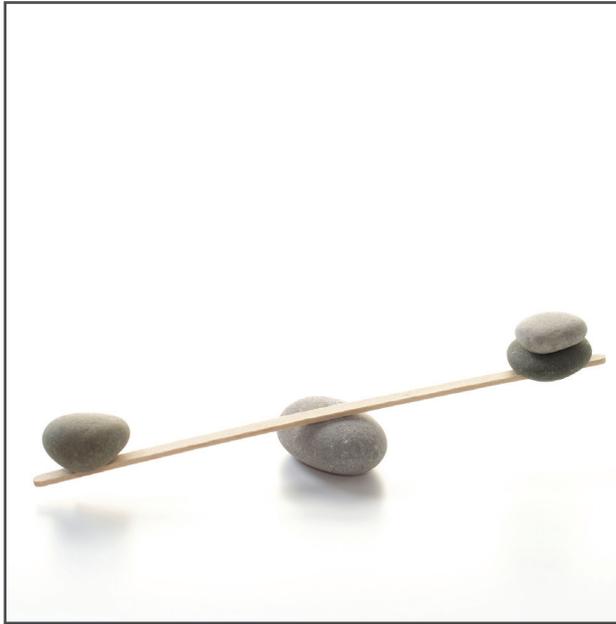


CHAPTER 17 - RESIDUAL IMPACTS

Residual Impacts

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RESIDUAL IMPACTS

- 17.1 The following table (Table 16.1 on page 376) provides a summary of the avoidance and mitigation measures applied to the proposed Tye Lane Solar farm, for each environmental assessment undertaken within the EIA.
- 17.2 Table summarises the enhancement measures included within the proposed development.

Table 17.1 - Residual Impacts

Chapter	Para.	Residual Impact
Chapter 8 - Transport and Access	8.88	Given that predicted peak HGV movements are anticipated to exceed 220% of existing HGV movements along the stretch of Tye Lane between the B1113 junction and the site entrance, significant local disruption may occur to local traffic at limited times during the construction period.
	8.89	The predicted peak HGV movements is less than 30% of the existing HGV movements elsewhere on the road network and so is not significant on the B1113 and beyond.
	8.90	Measures are proposed for the construction period to mitigate significant impacts and disruption to local traffic as far as possible.
	8.91	Following mitigation, minimal non-significant impacts are predicted for users of Public Rights of Way surrounding the proposed development with temporary delays as vehicles cross the rights of way under the control of banksmen.
Chapter 9 - Hydrology and Flood Risk	9.48	The proposed development is not shown to be at risk from fluvial flood risk sources. There is an area of surface water flood risk along the southern boundary of the site at Tye Lane, adjacent to an existing ditch/ flow route into the River Gipping. It is likely that the generic surface water flood mapping overestimates flood risk in this area as the flow route shown does not correspond with the ditch location. Solar panels will be appropriately sited such that a clearance is provided between the predicted flood level and the underside of the panel.
	9.49	It is recommended that any vegetation removal during the construction phase is replaced on site as soon as possible to promote natural infiltration, in line with the literature surrounding solar farm hydrology (Cook L.M. and McCuen R.H (2013)). In this case, the solar farm is not anticipated to lead to a significant increase in surface water run-off rates.
	9.50	The site has been split into three drainage zones which have been treated separately in terms of runoff routes to reflect the topography of the site. It is proposed to utilise swales within zone 2 of the site as a precautionary measure adjacent to the existing flood risk area at Tye Lane and landscape vegetation features to act as buffer strips in the remaining zones. It has therefore been demonstrated that surface water at the site can be managed appropriately by adopting a sustainable and conservative approach.

CHAPTER 17 - RESIDUAL IMPACTS

Chapter	Para.	Residual Impact
Chapter 10 - Ecology	10.80	Bramford Meadows LNR and Little Blackenham Pit SSSI - There will be no impact on the sites and accordingly no mitigation is proposed.
	10.85	Badger - the change of arable to wildflower meadow will be long term and have a minor positive impact on the species
	10.88	Bats - the proposed mitigation will ensure there are no significant negative impacts.
	10.90	Birds - Habitat creation, enhancement and management, such as the planting of wildflower meadows, addition of trees and enhancing the hedgerows along with the addition of eight bird boxes around the site will lead to an impact that will be direct and long term and will result in a positive impact
	10.94	Great Crested Newt - The habitat additions and pond enhancement will lead to an impact that will be direct and long term and will result in a positive impact.
	10.95	Reptiles - The addition of hedgerows and treeline and change from arable to wildflower planting will lead to an impact that will be direct and long term and will result in a positive effect.
	10.99	Cumulative (Demolition and Construction) - Given the information available for Cumulative Schemes and the nature of the developments this does not indicate any significant impacts. The predicted impacts within the Environmental Statement conclude no significant impact on any receptor, and it is unlikely that it would cause a significant cumulative impact to biodiversity at any geographical level.
	10.100	Cumulative (Completed EIA Development) - The information available for Cumulative Schemes does not indicate any significant impacts. The predicted impacts of this development are not significant and it is unlikely that it would cause a significant cumulative impact to biodiversity at any geographical level.
	10.102	The assessment shows that overall the extensive enhancements to all habitats on site (arable, hedgerow and trees) will ensure that a Biodiversity Net Gain is achieved by the proposed development.

Chapter	Para.	Residual Impact
Chapter 11 - LVIA	11.130	<p>The significant effects of this proposal would be limited to:</p> <ul style="list-style-type: none"> • The character of the landscape of the site and surrounding area up to approximately 0.4km from the site. This includes limited parts of LCT 3 Ancient Plateau Claylands and LCT 18 Rolling Valley Farmlands. The proposal would often only be intermittently and partially visible within the area local to the site which is already partially characterised by infrastructure elements. • The visual amenity of a limited number of residents in individual properties in the surrounding landscape local to the site and Little Sage Hill camping and caravan site. Some mitigation planting measures have been proposed, where feasible, to further screen the proposal and once established these measures would begin to add further filtering and screening of views of the solar panels. <ul style="list-style-type: none"> • The visual amenity of users of a few sections of footpath local to the site (mainly the footpaths through and directly adjacent to the site). • The visual amenity of cyclists along Tye Lane as part of a local cycle route and motorists on a few sections of the local road network in the vicinity of the site. Some mitigation planting measures have been proposed, where feasible, to further screen the proposal and once established these measures would begin to add further filtering and screening of views of the solar panels.
	11.131	<p>There would not be any significant effects on landscape fabric, landscape designations or any of the other six LCTs located within the 5.0km radius study area. There would be no significant effects on the visual amenity of the vast majority of residential receptors within the study area, or on the visual amenity of visitors to any of the visitor attractions, areas of access land or rail passengers within the study area as a result of the proposal.</p>
	11.132	<p>Furthermore, over time the proposed mitigation measures within the site would establish and begin to provide increased filtering and screening of views of the proposal within the area local to the site, strengthening the local landscape fabric and improving the existing network of hedgerows and tree belts which characterise parts of the locality.</p>

CHAPTER 17 - RESIDUAL IMPACTS

Chapter	Para.	Residual Impact
Chapter 11 - LVIA (continued)	11.133	In cumulative terms, consideration has been given as part of Development Scenario 2 (DS2) of the potential future baseline if both the Tye Lane and Bramford solar proposals were permitted. Given the size and position of the two proposals, some limited significant cumulative effects on the landscape character of LCT 3 Ancient Plateau Claylands are anticipated in the landscape located between the two proposals. In addition some significant cumulative effects are expected on the visual amenity of walkers on footpaths in this same general area, as well as some public rights of way users across and between the two sites, on the local cycle route along Tye Lane and around Flowton and motorists along Tye Lane.
Chapter 12 - Archaeology and Cultural Heritage	12.171	The implementation of the programme of archaeological work will result in the preservation by record of archaeological deposits impacted by the scheme. The resulting research will contribute to the increased knowledge and understanding of the landscape and settlement evolution of the area. The scheme will also instigate land use change, resulting in improved conditions for the protection of archaeological remains. This offsets rather than reduces the overall effects on archaeology which remain Minor Adverse. This is Not Significant in EIA terms.
	12.172	The settings of designated heritage assets in the wider area around the scheme extent have been assessed and due to the presence of considerable screening, distance and the nature of the local topography, the scheme would not harm the significance of most of the designated heritage assets in the wider area.
	12.173	The scheme would impact to a Minor/Negligible degree the wider settings of Rutters Farmhouse, Grade II [1251604]) and Outhouse approximately 8 metres west of Rutters Farmhouse, Grade II [1251604]) and Tye Farmhouse, Grade II [1263018]).
	12.174	However, the scheme would not compete for prominence with either of these heritage assets, and will not detract from appreciation of the heritage values apparent in their views. On this basis, it is considered that the scheme would result in a Minor/Negligible effect on the significance of these designated heritage assets. This is Not Significant in EIA terms.

TYE LANE SOLAR FARM

Chapter	Para.	Residual Impact
Chapter 13 - Noise	13.90, Table 13.8	The short-term effects of the construction phase would be controlled through the CEMP and may include some of the mitigation measures suggested within this chapter. This will ensure the noise impacts during the construction phase are suitably controlled and there are no residual effects due to the short-term nature of the construction phase. Neutral significance.
	13.91, Table 13.8	Noise during the operational phase is likely to be negligible though given the conservative nature of the assessment, it is considered that there are no residual noise effects. It is possible some noise may be just audible during times when the background noise is very low. Neutral significance.
	13.98, Table 13.8	While there is another solar farm proposed in the vicinity of the Tye Lane site, the impact of cumulative noise arising from the two sites is considered to be negligible/ minor significance.
Chapter 14 - Glint and Glare	14.173	The effects of glint and glare and their impact on local receptors has been analysed in detail and the impact on all receptors is predicted to be None once all mitigation measures have been implemented and the tree belt has sufficiently grown along the eastern boundary of the Proposed Development. However, until the tree belt has grown, in five years, the impacts at Residential Receptors 30 and 31 will be Low.
Chapter 15 - Socio Economics and Sustainability	15.14	Rural Diversification - In providing a source of diversification this proposal will provide a means to maintain the current, and develop the future farming practices and overall diversify the operations of the farm ensuring the long term viability of the farm and associated benefits for the local rural economy.
	15.33 - 15.35	Electricity - As stated at Chapter 1 - Introduction it is predicted that the solar farm at this site would have a potential annual yield of approximately 67 500MWh. In terms of household electricity usage this would be sufficient to offset the equivalent annual energy needs of 14 500 (to 3 S.F) average Mid Suffolk homes.
	15.52	Emissions - The generation of this electricity will offset electricity generated from other sources. As the project is connected to the local electricity distribution network (operated by UK Power Networks), all electricity generated by the site will be transferred to the distribution network. This means that whilst the solar array is generating electricity, the equivalent amount of electricity is not imported into the distribution network from the National Grid. This in turn reduces demand on the large fossil fuel power stations connected to the transmission network.
	15.63	The electricity produced by the Tye Lane Solar Farm will offset approximately 17 100 000kgCO ₂ /annum or 17 100 tonnes CO ₂ per annum (to 3 S.F.).

CHAPTER 17 - RESIDUAL IMPACTS

Chapter	Para.	Residual Impact
Chapter 15 - Socio Economics and Sustainability (continued)	15.86 - 15.87	<p>Employment and Local Businesses -As well as direct contracts, the construction and operation phase will also benefit local business and the economy through the supply chain. Examples of such areas include; tools and consumables, catering, accommodation, and other support and service industries</p> <p style="text-align: center;">This represents a significant positive impact by way of benefits to the local economy.</p>
	15.91- 15.92	<p style="text-align: center;">Tourism - A full appraisal of potential visual impacts of the proposal and associated mitigation are provided in Chapter 11.</p> <p>Whilst some visual impacts have been identified, overall, impacts on local tourism are not considered to be significant. Road and recreation route users are also considered further at Chapter 11.</p>
	15.97	<p style="text-align: center;">Public Opinion - For solar energy specifically, the DBEIS (Wave 37) tracker found that support for solar energy remained high and stable at 84%.</p>
	14.103	<p style="text-align: center;">Community Benefits - If approved, the solar farm development will bring further significant benefit to the local community, as follows:</p> <ul style="list-style-type: none"> • widespread ecological benefits as the project will also include extensive species-rich wild flower and grass margins to enhance the local biodiversity; • significant tree planting will occur providing further woodland blocks and hedge planting in the area; <ul style="list-style-type: none"> • bird and bat boxes will be placed on established trees; and • (whilst no a planning consideration)a community fund will be established by EDF Renewables to support local social, environmental and community initiatives.
	15.106	<p>This Chapter has considered the anticipated socio-economic impacts associated with the proposed Tye Lane Solar Farm. Significant economic and environmental benefits have been identified at both the national and local level.</p>

