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Design and Access Statement

Installation of a 120kW Roof Mounted Photovoltaic Array at

**Fulney Farm Centre
Low Fulney
Spalding
Lincolnshire
PE12 6EW**

Applicant

**JL Farms Ltd
Fulney Farm Centre
Low Fulney
Spalding
Lincolnshire
PE12 6EW**



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Supporting Documents

- (1) Site Plan 28/07/15
- (2) Location Plan 28/07/15
- (3) Roof 1 Elevation Plan 28/07/15
- (4) Roof 1 Profile View 28/07/15
- (5) Roof 2 Elevation Plan 28/07/15
- (6) Roof 2 Profile View 28/07/15
- (7) Roof 3 Elevation Plan 28/07/15
- (8) Roof 3 Profile View 28/07/15
- (9) Roof 4 Elevation Plan 28/07/15
- (10) Roof 4 Profile View 28/07/15

1. The Applicant

The Applicant is JL Farms Ltd of Fulney Farm Centre, Low Fulney, Spalding, Lincolnshire, PE12 6EW.

2. Proposed Development

The installation consists of a 120kW Roof Mounted Photovoltaic Array at Fulney Farm Centre.

The Photovoltaic Panels (PV's) would be installed on the south side of 4 existing buildings at Fulney Farm Centre, with a total combined capacity of 120kW, covering 780m².

Each PV panel is 1.64m x 1m and would be installed in landscape format.

PV's convert daylight into electricity, direct sunlight is not required.

The installation of the PV's would not require the construction of any additional buildings.

Electricity generated by the PV's would be utilised on site, helping to reduce energy costs, CO₂ emissions and the Applicants dependency on the National Grid.

Electricity not used on site would be exported to the National Grid providing a wider community benefit.

3. Prior Approval

The PV installation now proposed complies, with the provisions of The Town and Country Planning (General Permitted Development) (England) Order 2015 and permission would ordinarily have been sought as a Prior Approval under Schedule 2, Part 14 Class J (c) as detailed below.

However, as the PV's have already been installed, it is not possible to seek Prior Approval.

The PV's have however not been installed in deliberate disregard for the planning regulations. An application for a CLOPUD was submitted, but the advice from the Local Authority was that as the PV's had already been installed, it would be more appropriate to now seek formal planning permission.

4. Permitted Development

The installation for which permission is now sought constitutes Permitted Development under Schedule 2, Part 14 Class J (c) as follows (direct extract from GPDO):

Permitted development

J. The installation, alternation or replacement of -

- (a) microgeneration solar thermal equipment on a building;***
- (b) microgeneration solar PV equipment on a building; or***
- (c) other solar PV equipment on the roof of a building,***

Other than a dwelling house or a block of flats.

Development not permitted

J.1 Development is not permitted by Class J if –

(a) the solar PV equipment or solar thermal equipment would be installed on a pitched roof and would protrude more than 0.2 metres beyond the plane of the roof slope when measured from the perpendicular with the external surface of the roof slope;

The proposed system sits flush with the pitch of each roof, and protrudes no more than 100mm beyond the plane.

(b) the solar PV equipment or solar thermal equipment would be installed on a flat roof, where the highest part of the solar PV equipment would be higher than 1 metre above the highest part of the roof (excluding any chimney):

N/a – the proposed system is on pitched roofs.

(c) the solar PV equipment or solar thermal equipment would be installed within 1 metre of the external edge of that roof;

The system has been designed so that all panels are located more than 1 metre from the edge of each roof.

(d) in the case of a building on article 2 (3) land, the solar PV equipment or solar thermal equipment would be installed on a roof slope which fronts a highway;

N/a – The proposal does not involve any building located within Article 2(3) land.

(e) the solar PV equipment or solar thermal equipment would be installed on a site designated as a scheduled monument; or

The proposal is not located within a site designated as a Scheduled Ancient Monument.

(f) the solar PV equipment or solar thermal equipment would be installed on a listed building or on a building with the curtilage of a listed building.

The proposal is not located on a Listed Building, or within the curtilage of a Listed Building.

J.3 Development is not permitted by Class J (c) if the capacity of the solar PV equipment installed (together with any solar PV equipment installed under Class J (b) to generate electricity exceeds 1 megawatt.

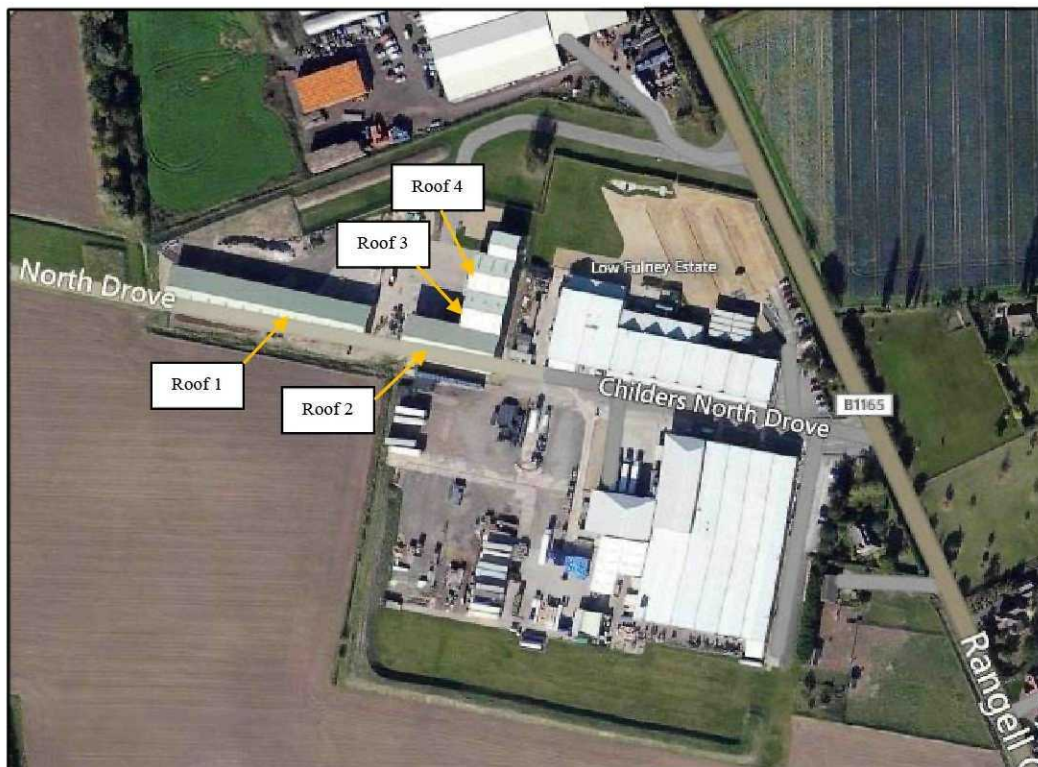
The proposal involves the installation of a system with a maximum capacity of 120kW.

5. Location

The buildings are located 0.6km south west of Low Fulney and 1.5km north east of Clay Lake. The 'Google Earth' image below shows the position for the PV's on the Applicant's land.

The site comprises of agricultural buildings which are utilised as grain and machinery storage.

Fulney Farm Centre is circled red below.



The image below, for illustration purposes only, shows an existing 155kW roof mounted PV installation.

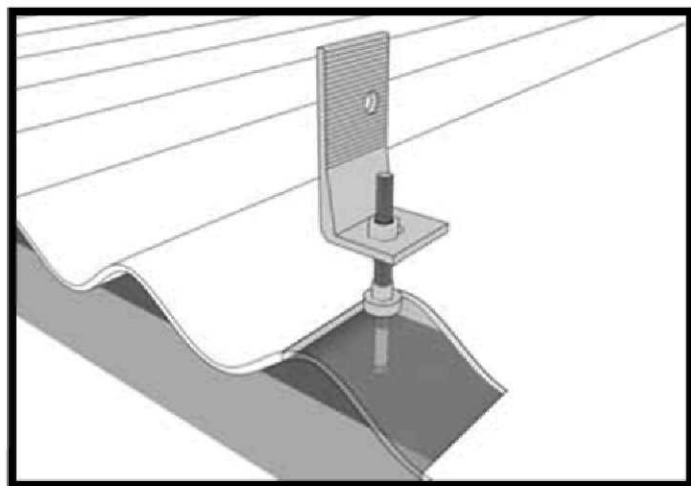


6. Panel Design

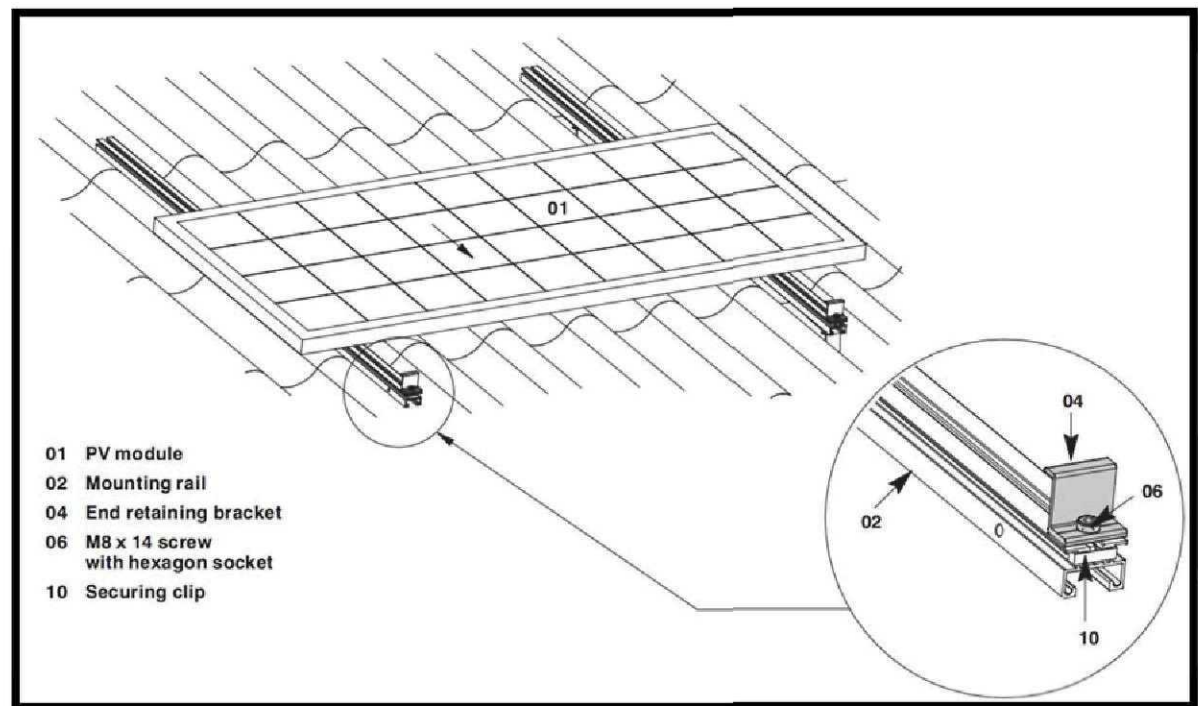
The PV's would be fitted to the roof using a mounting rail secured with stainless steel hanger bolts as shown below.



Stainless steel hanger bolt
10 x 200mm



The PV's are mounted as shown below.



7. Access

The installation of the PV's would not require the creation of any new access from the highway or site roads.

The route to the site would be off the public highway 'B1165 Rangell Gate' and would utilise the access currently used by the vehicles servicing Fulney Farm Centre.

The PV's and associated equipment would be delivered to site on approximately 4 artics, with the installation taking approximately 2 weeks.

The PV's are off loaded by a fork lift truck and there would be approximately 2 transit vans to and from site every day to transport the installation workers.

8. Landscape Impact

The development consists of the installation of a 120kW Roof Mounted Photovoltaic Array on existing agricultural buildings at Fulney Farm Centre.

The Application site is not located within the Green belt or any designated Special Landscape Area.

The PV's would be fitted flat, on the south side, against the roof of the existing buildings as shown on the plans submitted with this application, and would protrude no more than 10cm above the existing roof line.

The PV's are to be laid consistent with the profile of the roof, and would not create an unacceptable landscape intrusion.

The closest residential property is approximately 400m south west of the Application site. Due to the distance of the property from the Application site, and substantial tree screening surrounding the property, there would be minimal views of the PV's.

The proposed installation would not fundamentally change the appearance of the buildings and the site setting. The panels would sit close to the roof plane meaning there would be no significant change to the height of the building, or orientation of the rooftop.

The height and orientation of the buildings, natural terrain screening, distance of the buildings from visual receptors and the low effects of glint and glare means the effect of the development would be minimal.

Overall, there would be minimal views of the PV's from outside the Applicants land and it is considered the PV's could be installed with no adverse effect to the surrounding environment.

9. Environmental Benefits

The PV's proposed would produce in the region of 120,000kWh of electricity per annum.

By generating their own electricity, the Applicant would reduce energy costs, CO₂ emissions and their dependency on the National Grid.

Electricity not used on site, would be exported to the National Grid, providing a wider community benefit and a positive benefit to the existing business.

As a combined figure for the various types of power station in the UK using fossil fuels (coal, gas and oil), each kWh (kilo Watt hour) of electricity produces 430g CO₂.

If the electricity to be generated by the PV's were produced using fossil fuels, a total of 51,600kg/CO₂ would be produced.

The generation of electricity using the PV's does not produce any CO₂; consequently the PV's would reduce CO₂ emissions by 51,600kg.

10. Risk of Flooding

Fulney Farm Centre is situated within Flood Zone 3. However, the proposed PV's are roof mounted and therefore would not create a flood risk.

11. Glint and Glare

There is sometimes a misconception that PV panels might result in significant adverse glint and glare effects, with reflected sunlight creating a nuisance or even a safety risk for planes or traffic. This is not the case.

Glint refers to a specular reflection, produced as a direct reflection of the sun off a surface.

Glare refers to a continuous source of brightness, being the general reflection of a bright sky rather than a direct reflection of the sun.

The glass used to make the panels is not like window glass; it is specifically designed to absorb as much daylight as possible to convert into electricity, therefore has a low level of reflectivity when compared to surfaces such as window glass, water or snow.

The potential for glint and glare from a rooftop PV installation is much lower than the potential for glint and glare from other man-made structures, such as poly tunnels and glass houses, as well as natural features such as water or snow.

Once the sun reaches sufficient height, the sunlight would fall directly on the panels and there may be a slight chance of glint occurring, however, the reflected beam would be directed back into the sky. Because most of the reflections from the panels would be skyward, the PV's would not create a traffic hazard, or nuisance to residential properties.

This skyward reflection does not create a safety hazard for aeroplanes. In Germany and the US, it is common for PV systems to be installed on airport terminal buildings, or within airport grounds, and in 2012, solar panels were installed on the terminal buildings at Birmingham and Gatwick Airport in the UK.

12. Ecology

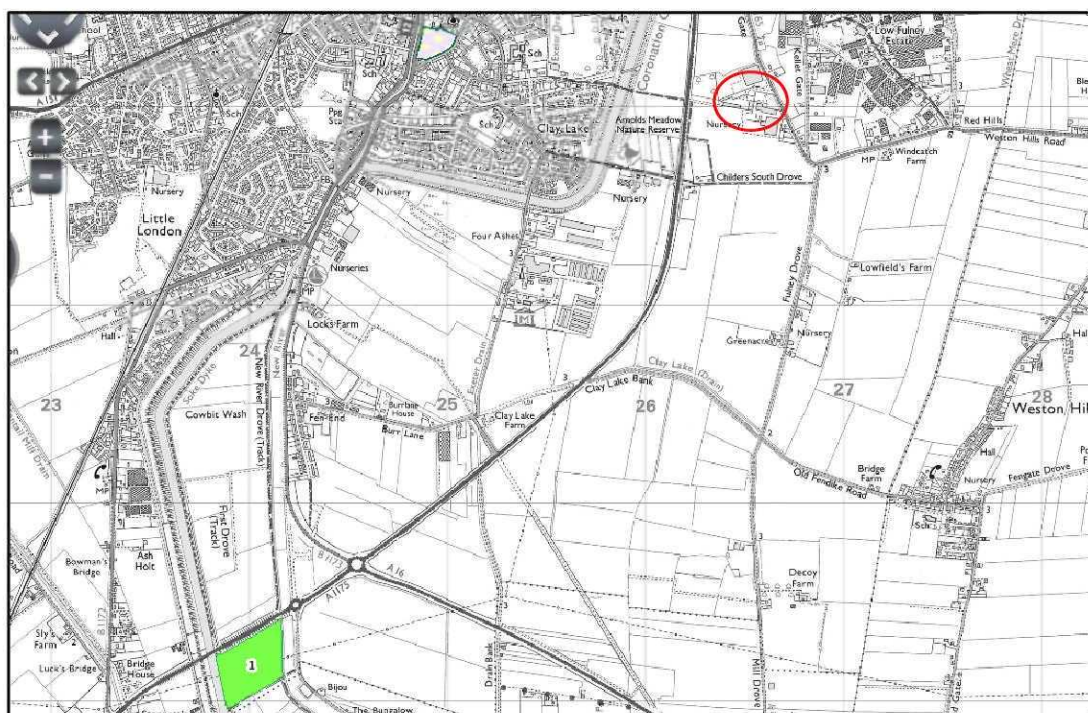
A desk top survey of the area within a 500m radius of the Application site has been carried out.

The survey results reveal no Sites of Special Scientific Interest, Local Nature Reserves, Important Bird Areas or National Nature Reserves within the search area.

Cowbit Wash SSSI is located approximately 3.6km south west of the Application site as highlighted green on the Magic Map below.

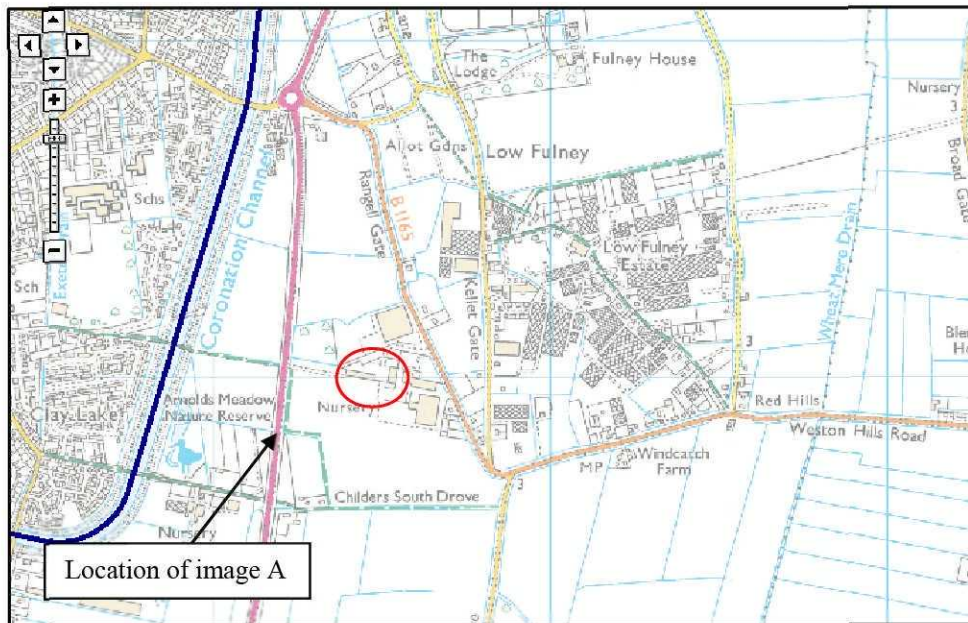
The Application site is circled red.

Due to the distance from site, the PV's proposed would not impact upon the SSSI.



13. Public Rights of Way

Footpaths and Bridleways are shown as green dotted lines on the map below. The application site is circled red.



A Bridleway runs east to west approximately 400m south of application site, before turning north/ north west. At its closest point, the Bridleway is approximately 250m from the position of the buildings where the PV's are proposed.

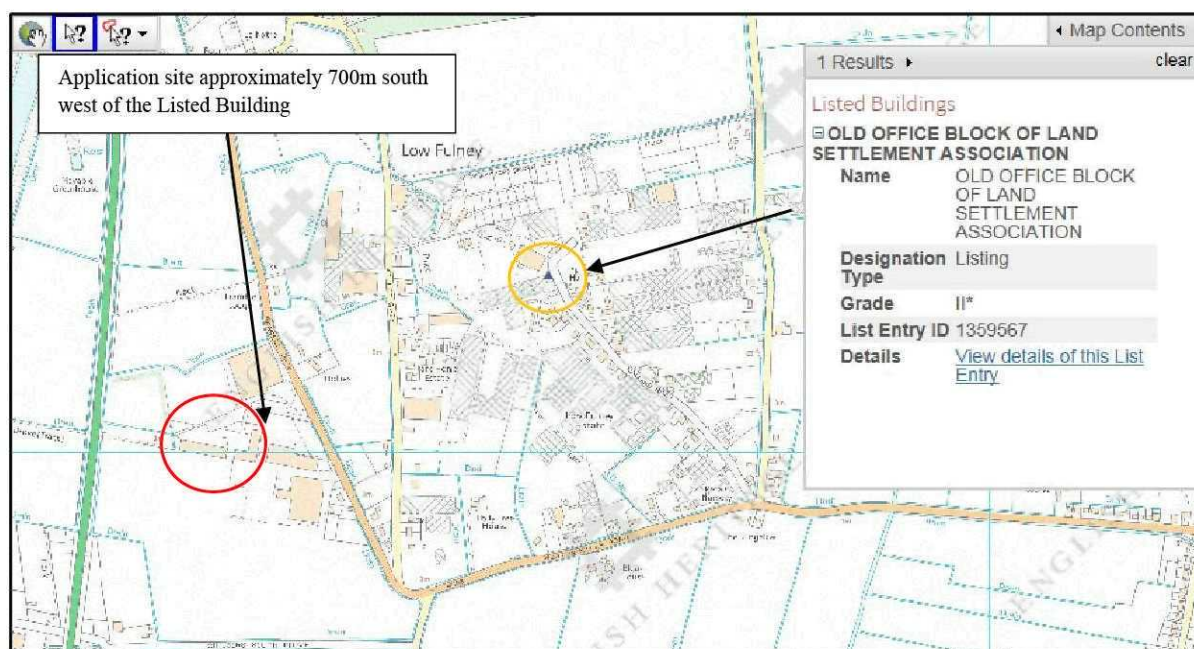
There would be some views of the PV's to users the Bridleway south of the Application site, however, the PV's would be seen as part of the existing roofs, therefore would not cause any impact.

The image below (from the point of the Bridleway south west of the Application site, off the A16) shows views of the buildings at Fulney Farm Centre. Views of the PV's would be minimal due to the distance from site and orientation of the roofs.



14. Historic Environment

There are no listed buildings within 500m of the Application site. There is a single listed building approximately 700m north east of the Application site as shown on the plan below.



Due to the, distance, orientation of the PV's and buildings between the Application site and the Listed Building, there would be no views of the PV's from the listed building.

15. Environmental Impact Assessment

This Application is not a project listed in Schedule 2.3(i) The Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999 (SI 293 No. 1999) and an Environmental Impact Assessment is not required.

16. Conclusion

The electricity generated by the PV's would be used on site. The generation of electricity on site reduces the need to import electricity from the National Grid, and therefore will reduce the costs of the business and increase its profitability.

When the PV installation is generating electricity, at a time when the use on site is less than that being used, the excess would be exported to the National Grid, providing an additional source of income for the business.

The NPPF actively encourages the development of a prosperous rural economy and provides at paragraph 28:-

28. Planning policies should support economic growth in rural areas in order to create jobs and prosperity by taking a positive approach to sustainable new development. To promote a strong rural economy, local and neighbourhood plans should:

- *support the sustainable growth and expansion of all types of business and enterprise in rural areas, both through conversion of existing buildings and well designed new buildings;*

- *promote the development and diversification of agricultural and other land-based rural businesses;*
- *support sustainable rural tourism and leisure developments that benefit businesses in rural areas, communities and visitors, and which respect the character of the countryside. This should include supporting the provision and expansion of tourist and visitor facilities in appropriate locations where identified needs are not met by existing facilities in rural service centres; and*
- *promote the retention and development of local services and community facilities in villages, such as local shops, meeting places, sports venues, cultural buildings, public houses and places of worship.*

The installation would increase the profitability of the business at Fulney Farm Centre and support a strong local rural economy in the area through the recirculation of wealth. If Fulney Farm Centre, as a local business is more profitable, it will have increased funds to spend in the local economy.

The PV's would not have a significant impact in the landscape and, it is submitted, this application satisfies the requirements of the NPPF, along with Local Planning Policy.

July 2015.