



YORK

CITY OF YORK
LOCAL PLAN

Further Sites Consultation
Appendix 8: Renewable Energy Methodology
and Site Assessment Proformas
April 2014

Appendix 8: Renewable Energy

Contents:

A8.1 INTRODUCTION.....	1
A8.2 RENEWABLE ENERGY- SITE SELECTION METHODOLOGY..	2
A8.2.1 SOLAR PHOTOVOLTAICS (SOLAR PV).....	2
A8.3 OUTCOMES OF THE ASSESSMENT – SOLAR PV SITES.....	4
A8.4 DETAILED SITE ASSESSMENT PROFORMAS.....	6

Site Ref	Site Name	Appendix Page Number
772	Knapton Moor, Wetherby Rd	7
750	Hermitage Farmland, Towthorpe Moor Lane	10
178	North Selby Mine	13

A8.1 Introduction

The Council is undertaking further work, in conjunction with consultants, on renewable energy to assess the potential of sites for renewable energy use. This Appendix sets out the methodology and results of the assessment undertaken for identifying sites with potential for renewable energy where they were submitted specifically for this use through the 2012 Call for Sites or the Local Plan Preferred Options consultation.

A8.2 Renewable Energy- Site Selection methodology

The following methodology has been used for assessing the sites:

A8.2.1 Solar Photovoltaics (Solar PV)

Table A8.1 sets out the evaluation criteria used for assessing sites. In addition to these criterion, there are other general issues that need to be considered when looking at solar PV development.

- Security of a solar farm is an important consideration. Sites are generally surrounded by security fencing with CCTV installed. Natural features such as hills, rivers etc can assist in securing a site as can the avoidance of an isolated site.
- Delivery of solar panels and associated equipment is done by standard vehicles with no abnormal loads required.
- Grid capacity and proximity. Should a development be considered, there are two important factors to be considered: the distance of the nearest grid connection point and the capacity of the local network to accept the additional electricity generated by the solar farm.

Table A8.1: Evaluation criteria for Solar

Category	1	2	3	Description
Unconstrained area available	>10 ha	<10 ha	<2 ha	An area >10 ha would provide enough space for a solar farm >5MW
Land use	Brownfield land previously used for industrial/commercial use	Low value land/low grade agricultural	High value agricultural land/ecologically valuable or land value to community	It is preferable to develop on non-agricultural land to retain valuable land for agricultural/ecological/community purposes
Topography	Flat	Some gradient	Undulating/ slopes	Solar arrays require flat ground, gradients may require levelling prior to installation which adds costs
Sensitivity	Low sensitivity/designations nearby	Medium sensitivity/designations nearby	High sensitivity/designations nearby	Is the area valued by people, community or visitors? Is there any landscape, ecological, historic designations? Is it recognised locally, regionally or nationally?
Flood Risk	Low/None	Moderate	Significant	As identified using Flood maps provided by the Environment Agency. Brief definitions are as follows: <ul style="list-style-type: none"> • <u>None</u>: No flood risk assessment information available as it is outside the floodplain or due to insufficient information. • <u>Low</u>: unlikely to flood except in extreme conditions. • <u>Moderate</u>: Moderate chance of flooding, between 0.5%-1.3% chance of flooding each year. • <u>Significant</u>: Significant change of flooding >1.3% chance each year.
Glint and Glare	Not likely to be an issue	Potential to effect some receptors	Sensitive receptors nearby, could be an issue	Glint and glare results from reflection of sunlight off solar panels. Solar panels are designed to absorb light however there is potential for visual impact and effects on aircraft safety.
Landscape and Visual	Low visual impact	Medium visual impact	High visual impact likely	The visual impact is measured by how well screened the development could be and how many sensitive receptors are likely to be effected by the development.

A8.3 Outcomes of the Assessment – Solar PV Sites

Table A8.2 sets out the assessment of the two sites submitted for Solar PV use and their associated scoring between 1 and 3 based on the criteria in Table A8.1.

Table A8.2: Sites outcomes for Solar PV sites

Site Ref	772		750	
Strategic Site	Knapton Moor, Wetherby Rd		Hermitage Farmland, Towthorpe Moor Lane	
	Assessment	Score	Assessment	Score
Area Available	1.9 ha	3	8.8 ha	2
Land Use	Agricultural	3	Agricultural	3
Topography	Flat	1	Mostly flat, small hill in western area	2
Sensitivity	No designation apparent	1	Towthorpe Dam hill Area of Local interest located directly south. Strensall Common Nature reserve and Special Area of Conservation (SAC) is located directly north.	2
Flood risk	Low	1	None	1
Glint and Glare	Passing drivers	2	No receptors	1
Landscape and Visual	Isolated areas, no designations	3	Quite isolated location, no designations within site boundary, passing traffic and nature reserve directly to north.	2
Overview	Agricultural land located southwest of Knapton village		Site is split in two parts, agricultural land in east, unknown land use in west. Forested area	

		between both.
Overall score	13 points	13 points
Conclusion	Medium potential for Solar PV	Medium potential for Solar PV
Recommendation	To include the site in the Local Plan for solar renewable energy generation.	To include the site in the Local Plan for solar renewable energy generation.

A8.4 Detailed Site Assessment Proformas

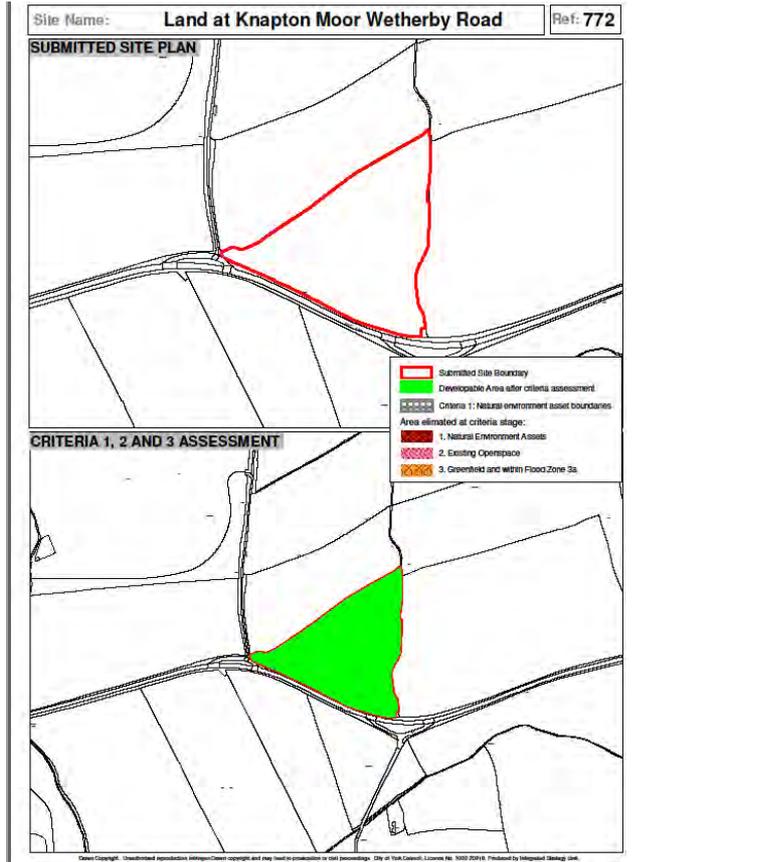
Criteria 1 to 3 Analysis

Site: 772

Land at Wetherby/Knapton Moor

Source:
New Site

Submitted For: Renewable
Energy



Submitted Size: 3.285835327

Technical Analysis

Evidence/Mitigating Factors

Criteria 1 - Primary Constraints

Flood Zone 3b:	No
Historic Character:	No
Ancient Woodland:	No
Regional GI Corridor :	No
National Conservation:	No
SINC:	No
Local Nature Conservation	No
Site Size Remaining:	3.285835327

Floodrisk Evidence:	N/A
Landscape Evidence:	N/A
Habitat Evidence:	N/A

N/a

Criteria 2 - Openspace

Openspace:	No
Site Size remaining:	3.285835327

Openspace Evidence:	N/A
---------------------	-----

N/a

Criteria 3 - Greenfield 3A

Greenfield/Brownfield:	Greenfield
Greenfield Within 3a:	No
Site Size Remaining:	3.285835327

Floodrisk Evidence:	N/A
---------------------	-----

N/a

Technical Officer Assessment

Site: 772

Land at Wetherby/Knapton Moor

Submitted For: Renewable Energy

TRANSPORT

With the exception of construction vehicle traffic the site is not expected to generate much traffic once operational. As such there are no significant transport impacts.

Green

GEO-ENVIRONMENTAL CONSIDERATIONS

Contamination: No particular concerns regarding land contamination at this site. However, the developer must undertake an appropriate assessment of the ground conditions.

Green

Air Quality: Air Quality: Standard air quality requirements would be necessary for any development.

Green

Noise: No noise issues

Green

Flood Risk: Site is greenfield therefore runoff rates must comply with the 1.4 l/sec/ha.

Green

This site is located in flood zone 1.

Ecology: No known ecological issues on this site as it is not close to any designated site that could be affected and nothing on the site that would be significantly affected by such proposed development. The area is not renowned for birds which are the most likely group to be affected by such a development and the field itself is not suitable for ground nesting species such as skylark so the impact is likely to be minimal.

Green

HISTORIC ENVIRONMENT, LANDSCAPE AND DESIGN

Heritage/
Archaeology: An archaeological desk based assessment and evaluation will be required to identify archaeological features and deposits. There are no known archaeological showstoppers.

Green

Landscape/
Design: The site very visually exposed to the Wetherby Road – approach to Rufforth and the city. There is an accumulative visual impact with Harewood Whin and other recent development consents/applications. Suitable landscape mitigation may compromise feasibility.

Amber

Openspace/
Recreation: No requirement for open space with this proposed use.

Green

CONCLUSIONS

Summary: Site submitted for consideration as a Renewable Energy site. Site has been assessed by consultants Amec who the Council has commissioned to undertake a piece of Local Plan evidence base work on Renewable Energy Viability. The results of this emerging piece of work suggest that the site has good technical potential to be considered suitable for solar PV use with the potential capacity for 1.3 MWp and an estimated annual energy output of 1,100 MWh.

Green

Outcome: **Passed technical officer comments**

Green

Site Ref:	772
Site Name:	Knapton Moor, Wetherby Road
<p><small>Crown Copyright. City of York Council, Licence No. 1000 20818. Produced by Forward Planning</small></p>	
Submitted for:	Renewable Energy – Solar
Site Size:	2.4 ha
Potential Capacity:	1.3 MWp
Estimated Annual Energy Output:	1,103 MWh
Recommendation:	To include the site in the Local Plan for solar renewable energy generation.

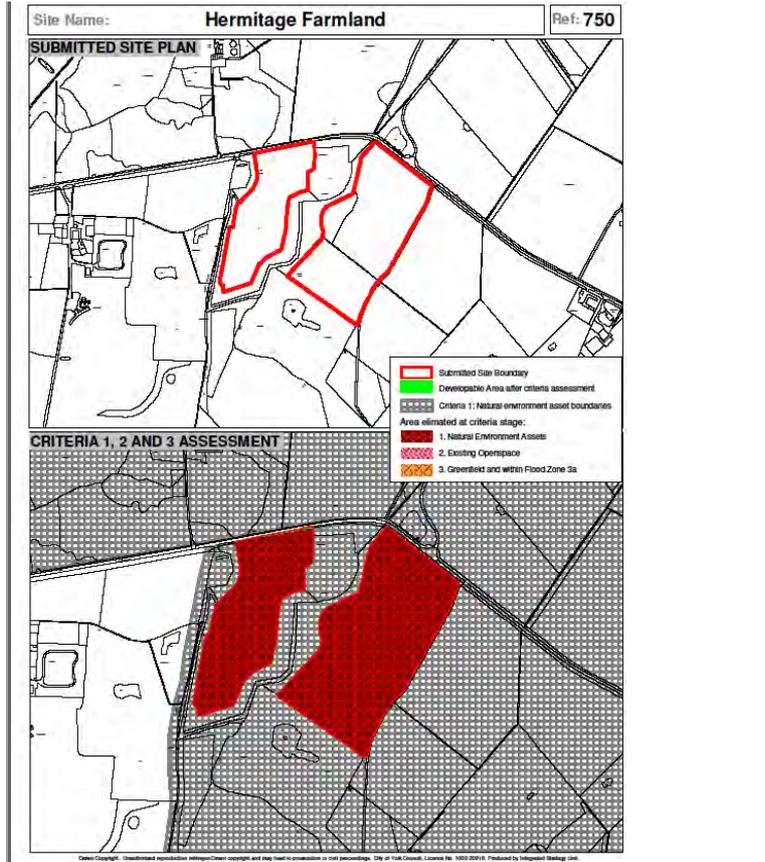
Criteria 1 to 3 Analysis

Site: 750

Hermitage Farmland, Malton Road

Source:
New Site

Submitted For: Renewable
Energy



Submitted Size: 11.007451509

Technical Analysis

Evidence/Mitigating Factors

Criteria 1 - Primary Constraints

Flood Zone 3b:	No
Historic Character:	Part
Ancient Woodland:	No
Regional GI Corridor :	No
National Conservation:	No
SINC:	No
Local Nature Conservation	Adjacent
Site Size Remaining:	0.010034720

Floodrisk Evidence:	N/A
Landscape Evidence:	N/A
Habitat Evidence:	N/A

N/A

Criteria 2 - Openspace

Openspace:	No
Site Size remaining:	0.010034720

Openspace Evidence:	N/A
---------------------	-----

N/A

Criteria 3 - Greenfield 3A

Greenfield/Brownfield:	Greenfield
Greenfield Within 3a:	No
Site Size Remaining:	0.010034720

Floodrisk Evidence:	N/A
---------------------	-----

N/A

Technical Officer Assessment

Site: 750

Hermitage Farmland, Malton Road

Submitted For: Renewable Energy

TRANSPORT

There are no concerns regarding highways for this site with regards to its use as a solar farm.

Green

GEO-ENVIRONMENTAL CONSIDERATIONS

Contamination:

Part of this site has previously been used as a landfill site, so land contamination could be present. The developer must undertake an appropriate assessment of the ground conditions and remedial work if necessary. This will ensure that the land is safe and suitable for its proposed use.

Amber

Air Quality:

Standard air quality requirements including EVR infrastructure.

Green

Noise:

No noise issues.

Green

Flood Risk:

This site is greenfield land therefore runoff rates must be 1.4 l/sec/ha. This site is located in flood zone 1.

Green

Ecology:

The majority of this site is arable. There is potential ecological interest. Further investigation is required to establish this. Particular interest is in relation to bats (light from solar panels) and proximity/impact on Strensall Common (SAC). This would require a full Environmental Impact Assessment to assess the impacts of solar panels on wildlife and heathland corridor.

Amber

HISTORIC ENVIRONMENT, LANDSCAPE AND DESIGN

Heritage/
Archaeology:

An archaeological desk based assessment and evaluation will be required to identify archaeological features and deposits on the eastern part of the site.

Green

Landscape/
Design:

This site is located within the Green Wedge as designated in the historic Character and Setting Assessment. Development for solar energy in this location would probably be considered suitable.

Green

Openspace/
Recreation:

No site specific comments.

Green

CONCLUSIONS

Summary:

The solar opportunity is generally supported although environmental impacts need to be explored more fully. It is considered that this site is suitable for Photo Voltaic use with the historic character and setting area.

Green

Outcome:

Passed Technical Officer Comments (for renewable energy use)

Green

Site Ref:	750
Site Name:	Land Northwest of Hermitage farmland
<p>The map displays a detailed view of the site area, which is highlighted in red with diagonal hatching. The site is located northwest of Hermitage Farm. Key features on the map include Towthorpe Common to the north, Stockton Common to the east, and Hermitage Farm to the south. Various woods are labeled, such as Greystone Wood, Damhill Wood, and Farm Hill. Other landmarks include the Recycling Centre, Sewage Works, and several farms like Grovetones Farm and Dam Hill Farm. An inset map in the top right corner shows the site's location within the City of York boundary, marked with a red dot. A north arrow and a 17m scale bar are also present.</p>	
Submitted for:	Renewable Energy – solar
Site Size:	9.7 Ha
Potential Solar Farm Capacity:	6 MWp
Estimated Annual Energy Output:	5,110 MWh
Recommendation:	To include the site in the Local Plan for solar renewable energy generation.

Site Ref:	178
Site Name:	North Selby Mine
<p style="font-size: small; text-align: center;">Crown Copyright. City of York Council, Licence No. 1000 20818. Produced by Forward Planning</p>	
Submitted for:	Anaerobic digestion (energy from waste) and horticultural glass house.
Site Size:	23.3 ha
Officer comment:	Detailed comments given as part of the planning application process (12/03385/FULM). Considered that if planning permission is granted (subject to

	Sectary of States decision), this site could be accommodated within the general extent of the Greenbelt and it is therefore not necessary to allocate the site within the Local Plan.
Recommendation:	To reflect the decision of the Secretary of State in relation to the current planning application (12/03385/FULM). Site can be accommodated within the general extent of the Greenbelt and therefore allocation in the Local Plan is not required.