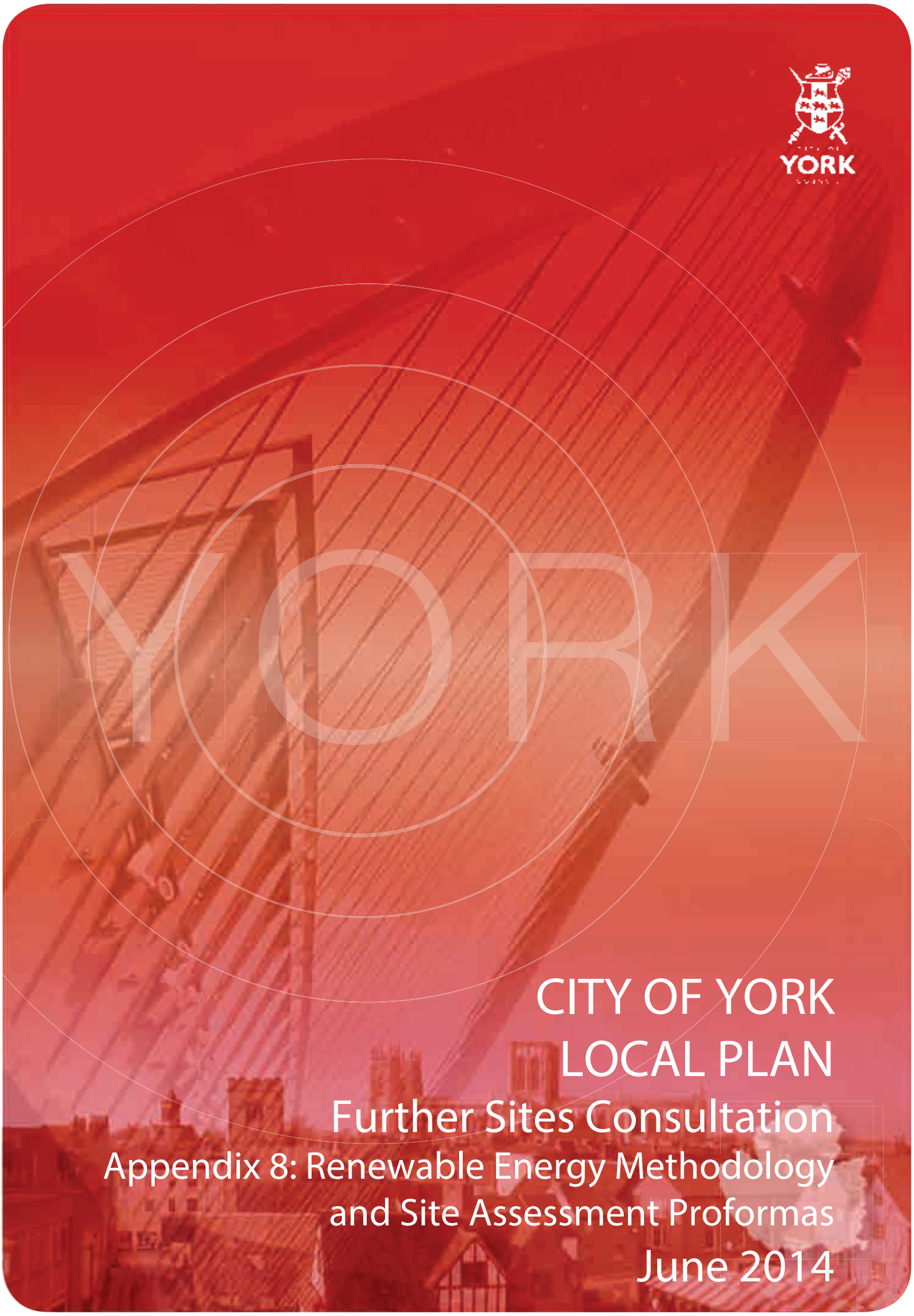


CITY OF YORK LOCAL PLAN

Further Sites Consultation

Appendix 8: Renewable Energy Methodology and Site Assessment Proformas

June 2014

Appendix 8: Renewable Energy

Contents:

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: • None: No flood risk assessment information available as it is outside the floodplain or due to insufficient information. • Low: unlikely to flood except in extreme conditions. • Moderate: Moderate chance of flooding, between 0.5%-1.3% chance of flooding each year. • Significant: 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.

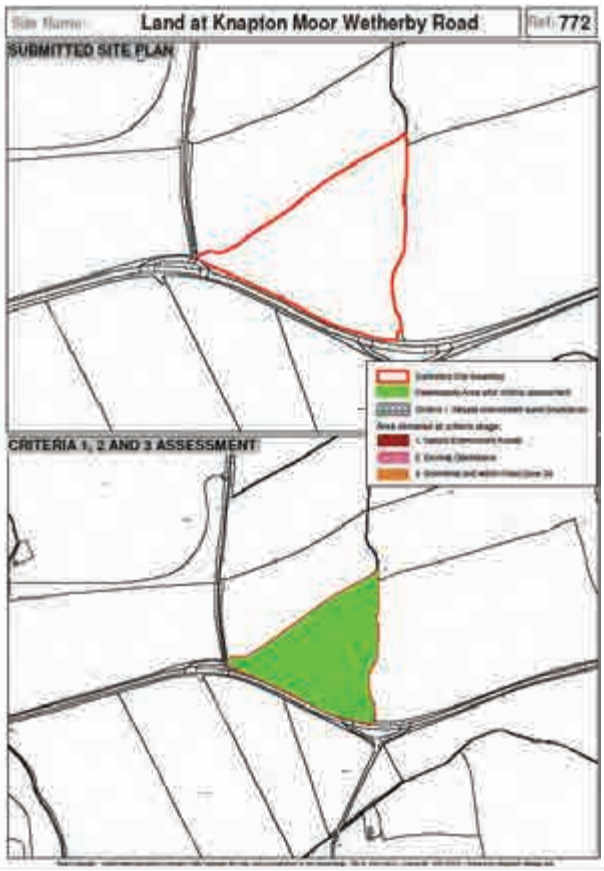
A8.4 Detailed Site Assessment Proformas

Criteria 1 to 3 Analysis

Land at Wetherby/Knapton Moor

Site: 772

Source: New Site



Submitted For: Renewable Energy

Submitted Size: 3.285835327

Technical Analysis		Evidence/Mitigating Factors		
Criteria 1 - Primary Constraints				
Flood Zone 3b:	No	Floodrisk Evidence:	N/A	N/a
Historic Character:	No	Landscape Evidence:	N/A	
Ancient Woodland:	No	Habitat Evidence:	N/A	
Regional GI Corridor :	No			
National Conservation:	No			
SINC:	No			
Local Nature Conservation	No			
Site Size Remaining:	3.285835327			
Criteria 2 - Openspace				
Openspace:	No	Openspace Evidence:	N/A	N/a
Site Size remaining:	3.285835327			
Criteria 3 - Greenfield 3A				
Greenfield/Brownfield:	Greenfield	Floodrisk Evidence:	N/A	N/a
Greenfield Within 3a:	No			
Site Size Remaining:	3.285835327			

Technical Officer Assessment

Land at Wetherby/Knapton Moor

Site: 772

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. This site is located in flood zone 1.	Green
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

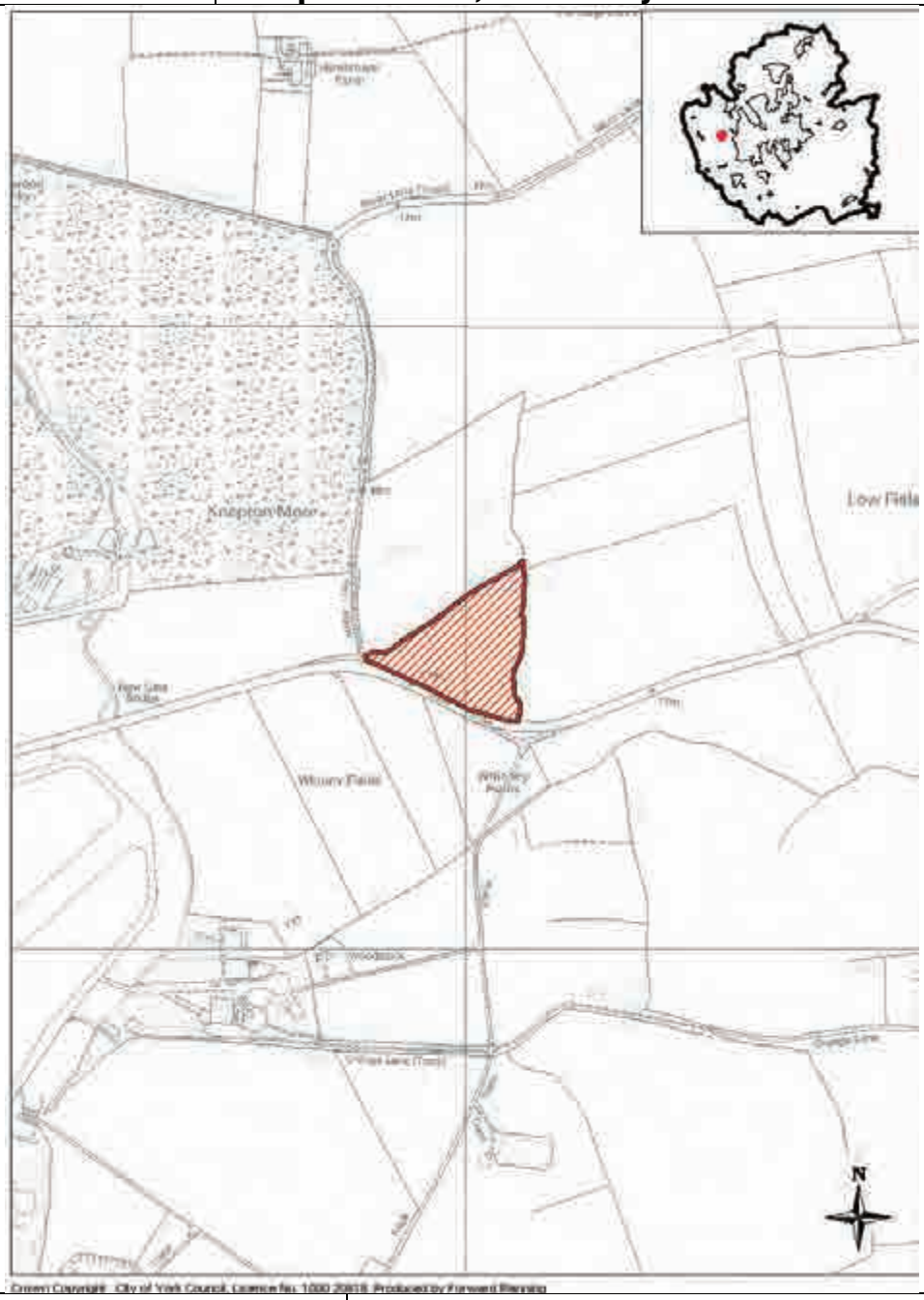
HISTORIC ENVIRONMENT, LANDSCAPE AND DESIGN

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 assesses 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**



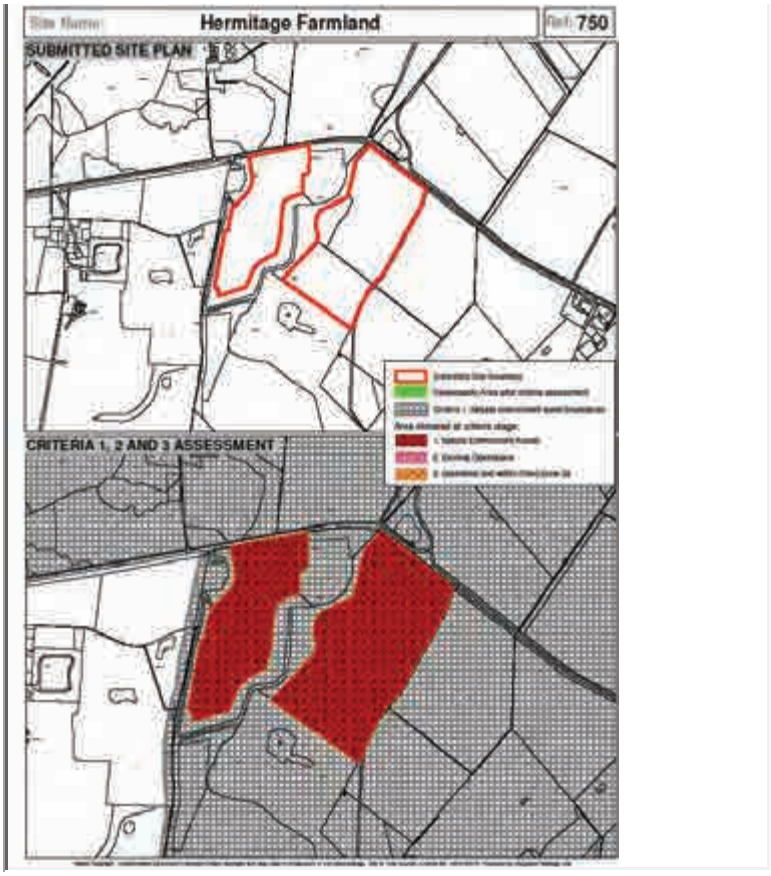
Submitted for:	Renewable Energy – Solar
Site Size:	2.4 ha
Potential Capacity:	1.3 MWp
Estimated Annual Energy Output:	1,103 MWh
Recommendation:	To include the site in the Local Plan for solar renewable energy generation.

Criteria 1 to 3 Analysis

Hermitage Farmland, Malton Road

Site: 750

Source:
New Site



Submitted For: Renewable Energy

Submitted Size: 11.007451509

Technical Analysis		Evidence/Mitigating Factors		
Criteria 1 - Primary Constraints				
Flood Zone 3b:	No	Floodrisk Evidence:	N/A	N/A
Historic Character:	Part	Landscape Evidence:	N/A	
Ancient Woodland:	No	Habitat Evidence:	N/A	
Regional GI Corridor :	No			
National Conservation:	No			
SINC:	No			
Local Nature Conservation	Adjacent			
Site Size Remaining:	0.010034720			
Criteria 2 - Openspace				
Openspace:	No	Openspace Evidence:	N/A	N/A
Site Size remaining:	0.010034720			
Criteria 3 - Greenfield 3A				
Greenfield/Brownfield:	Greenfield	Floodrisk Evidence:	N/A	N/A
Greenfield Within 3a:	No			
Site Size Remaining:	0.010034720			

Technical Officer Assessment

Hermitage Farmland, Malton Road

Site: 750

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

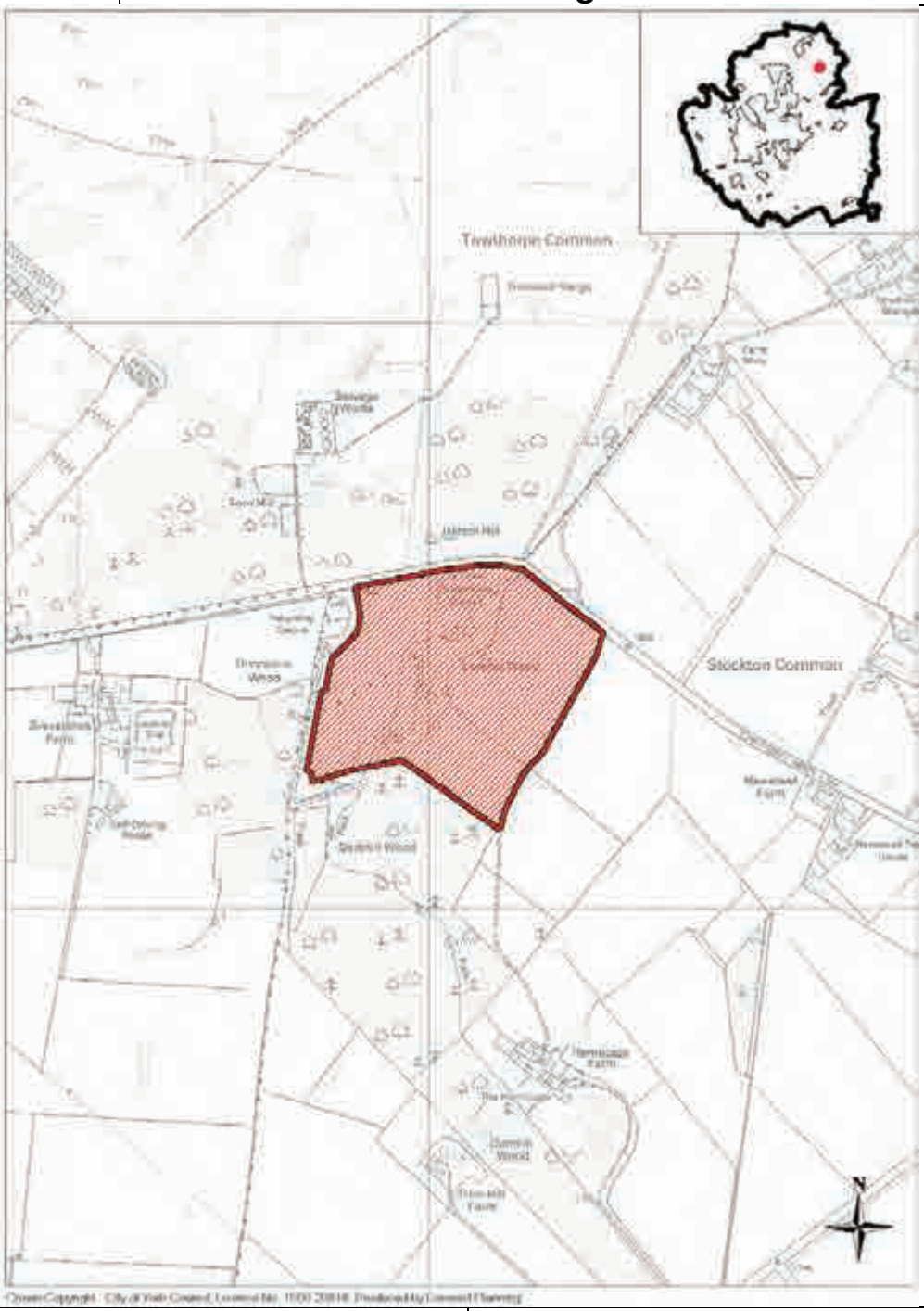
HISTORIC ENVIRONMENT, LANDSCAPE AND DESIGN

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

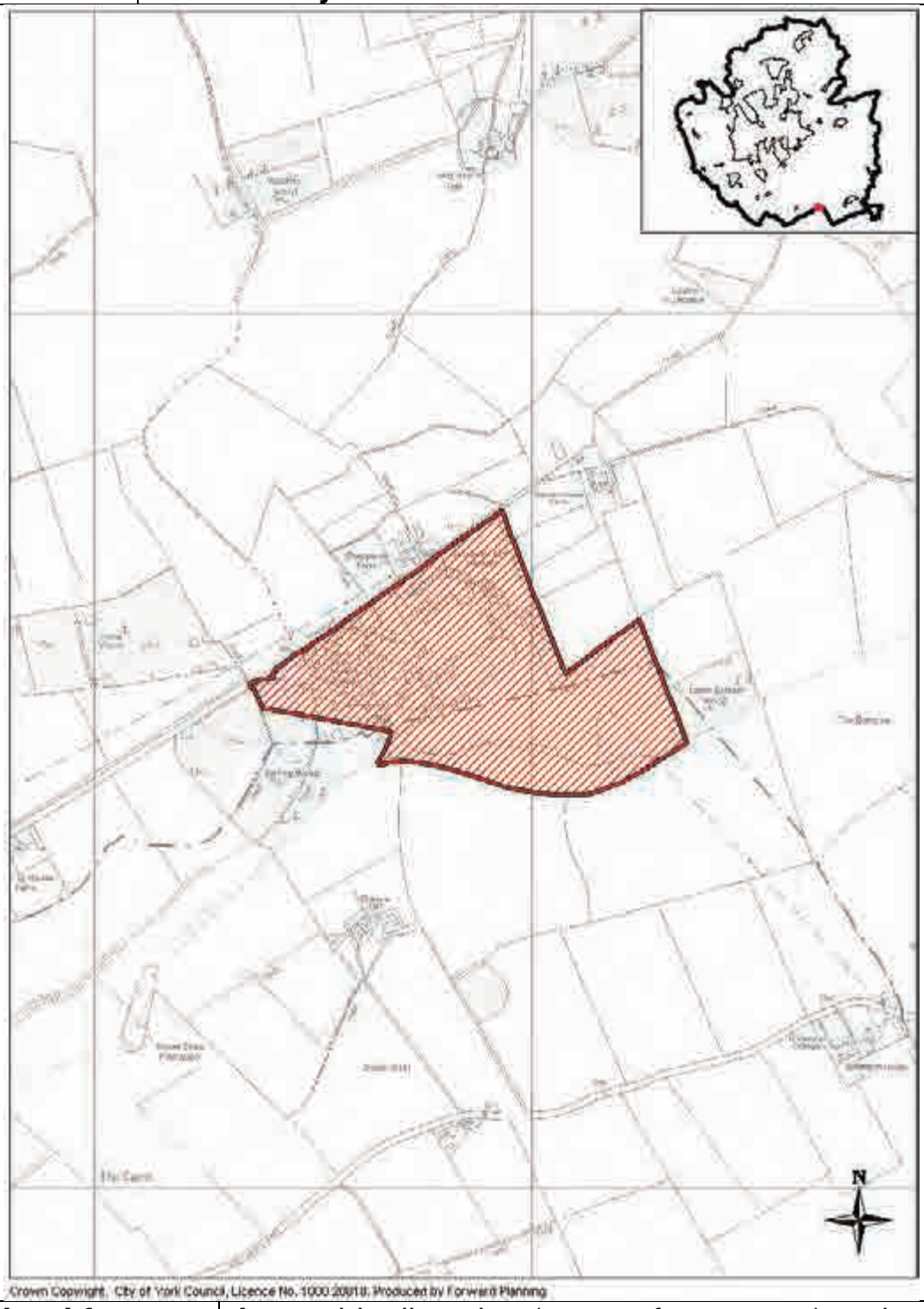
Summary:	The solar opportunity is generally supported although environmental impacts need to be explored more fully. It is considered that this site is suitable for Photo Voltaic use with the historic character and setting area.	Green
Outcome:	**Passed Technical Officer Comments (for renewable energy use)**	Green

Site Ref:	**750**
Site Name:	**Land Northwest of Hermitage farmland**



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**



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.