

INGLISTON FARM



Photomontage showing proposed development

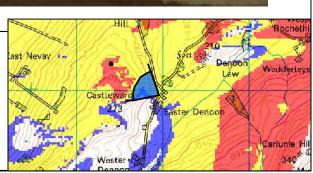


Locogen Ltd, 44 Constitution St, Edinburgh, EH6 6RS Tel:+44(0)131 555 4745; Email: info@locogen.com Company Number: SC370060

Project: Ingliston Farm Drawing no: ING039 Drawing by: Bojan Jevtic Approved by: Andy Lowe OS Licence N°: 100050069

Viewpoint No: VP01 Viewpoint Location: E334976 N743942 Field of View: 80° View direction: 301° Dist to turbine: 0.7 km Title: Easter Denoon

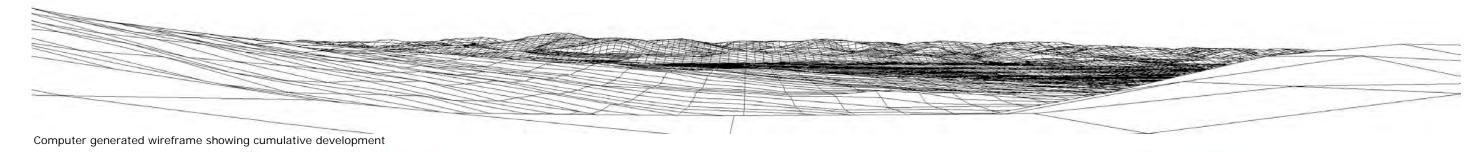
Camera: Nikon D60 Effective Focal Length: 50 mm Viewing Distance: 23.8 cm Elevation: 1.8 m Date taken: 19/08/2013 Time taken: 11:29



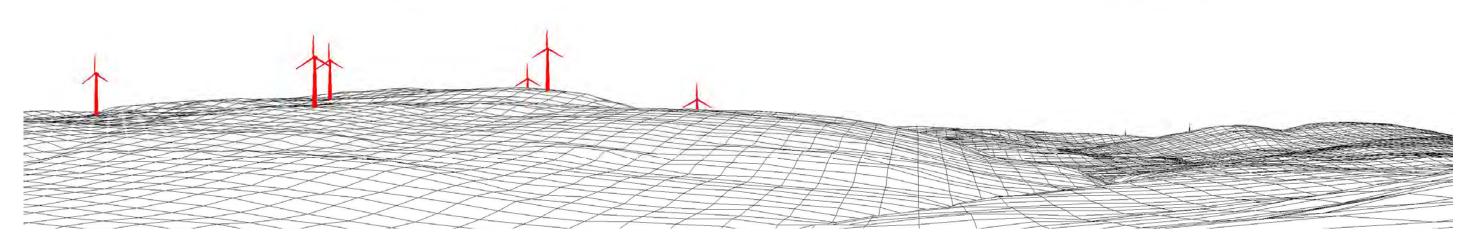
REEDIE FARM

GALLOW HILL

EAST MEMUS WHITE TOP



ARKHILL HENDERSTON QUARRY



Computer generated wireframe showing cumulative development



Locogen Ltd, 44 Constitution St, Edinburgh, EH6 6RS Tel:+44(0)131 555 4745; Email: info@locogen.com Company Number: SC370060

Project: Ingliston Farm Drawing no: ING040 Drawing by: Bojan Jevtic Approved by: Andy Lowe

100050069

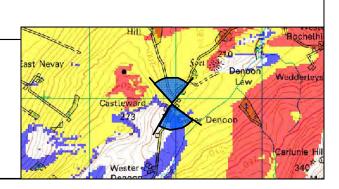
OS Licence N°:

Viewpoint No: VP01 Viewpoint Location: E334976 N743942 Field of View: 80°

View direction: 0° (top), 170 (bottom)° Dist to turbine: 0.7 km

Title: Easter Denoon

Nikon D60 Camera: Effective Focal Length: 50 mm Viewing Distance: 23.8 cm Elevation: 1.8 m Date taken: 19/08/2013 Time taken: 11:29







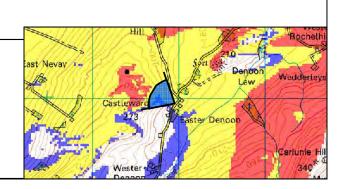
Locogen Ltd, 44 Constitution St, Edinburgh, EH6 6RS Tel:+44(0)131 555 4745; Email: info@locogen.com Company Number: SC370060

Project: Ingliston Farm ING041 Drawing no: Bojan Jevtic Drawing by: Approved by: Andy Lowe OS Licence N°: 100050069

Viewpoint No: VP01 Viewpoint Location: E334976 N743942 Field of View: 45° View direction: 301°

0.7 km Dist to turbine: Title: Easter Denoon

Camera: Nikon D60 Effective Focal Length: 50 mm Viewing Distance: 48.3 cm Elevation: 1.8 m Date taken: 19/08/2013 Time taken: 11:29





Existing view from Denoon Law







Locogen Ltd, 44 Constitution St, Edinburgh, EH6 6RS Tel:+44(0)131 555 4745; Email: info@locogen.com Company Number: SC370060 Project: Ingliston Farm
Drawing no: ING042
Drawing by: Bojan Jevtic
Approved by: Andy Lowe
OS Licence N°: 100050069

Viewpoint No: VP02
Viewpoint Location: E335467 N744432
Field of View: 80°
View direction: 264°
Dist to turbine: 1.1 km

Denoon Law

Title:

Camera: Nikon D60

Effective Focal Length: 50 mm

Viewing Distance: 23.8 cm

Elevation: 1.8 m

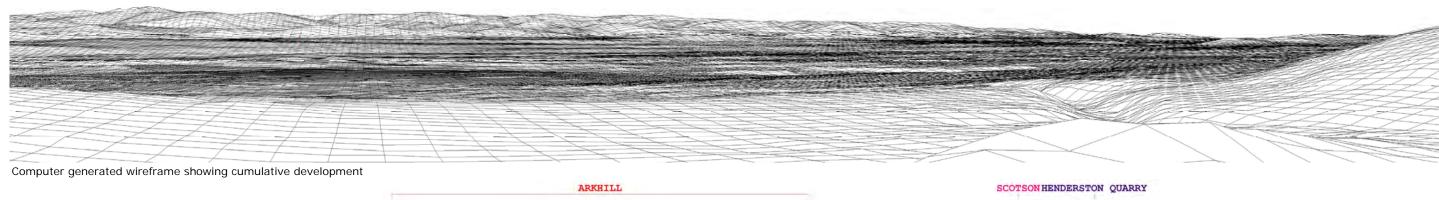
Date taken: 19/08/2013

Time taken: 11:16



GALLOW HILL

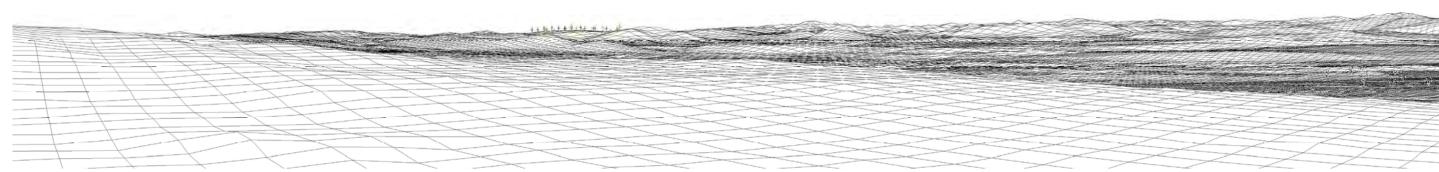
EAST MEMUS WHITE TOP AFFLOCHIE FARM BROOM FARM



Computer generated wireframe showing cumulative development

NETHERAIRD OF GLASCLUNE

BAMFF DRUMDERG THE CORB BRIDGE



Computer generated wireframe showing cumulative development



Locogen Ltd, 44 Constitution St, Edinburgh, EH6 6RS Tel:+44(0)131 555 4745; Email: info@locogen.com Company Number: SC370060

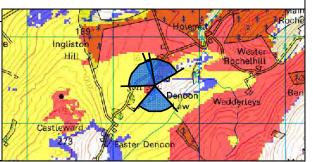
Project: Ingliston Farm ING043 Drawing no: Drawing by: Bojan Jevtic Approved by: Andy Lowe OS Licence N°: 100050069

VP02 Viewpoint No: Viewpoint Location: E335467 N744432 Field of View:

20° (top), 180° (middle), View direction:

310° (bottom) Dist to turbine: 1.1 km Title: Denoon Law

Nikon D60 Camera: Effective Focal Length: 50 mm Viewing Distance: 23.8 cm Elevation: 1.8 m Date taken: 19/08/2013 Time taken: 11:16





Photomontage showing proposed development



Locogen Ltd, 44 Constitution St, Edinburgh, EH6 6RS Tel:+44(0)131 555 4745; Email: info@locogen.com Company Number: SC370060 Project: Ingliston Farm
Drawing no: ING044
Drawing by: Bojan Jevtic
Approved by: Andy Lowe
OS Licence N°: 100050069

Viewpoint No: VP02
Viewpoint Location: E335467 N744432
Field of View: 45°
View direction: 264°
Dist to turbine: 1.1 km
Title: Denoon Law

Camera: Nikon D60

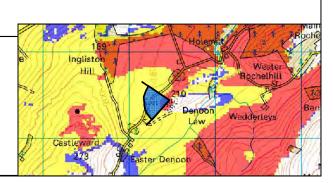
Effective Focal Length: 50 mm

Viewing Distance: 48.3 cm

Elevation: 1.8 m

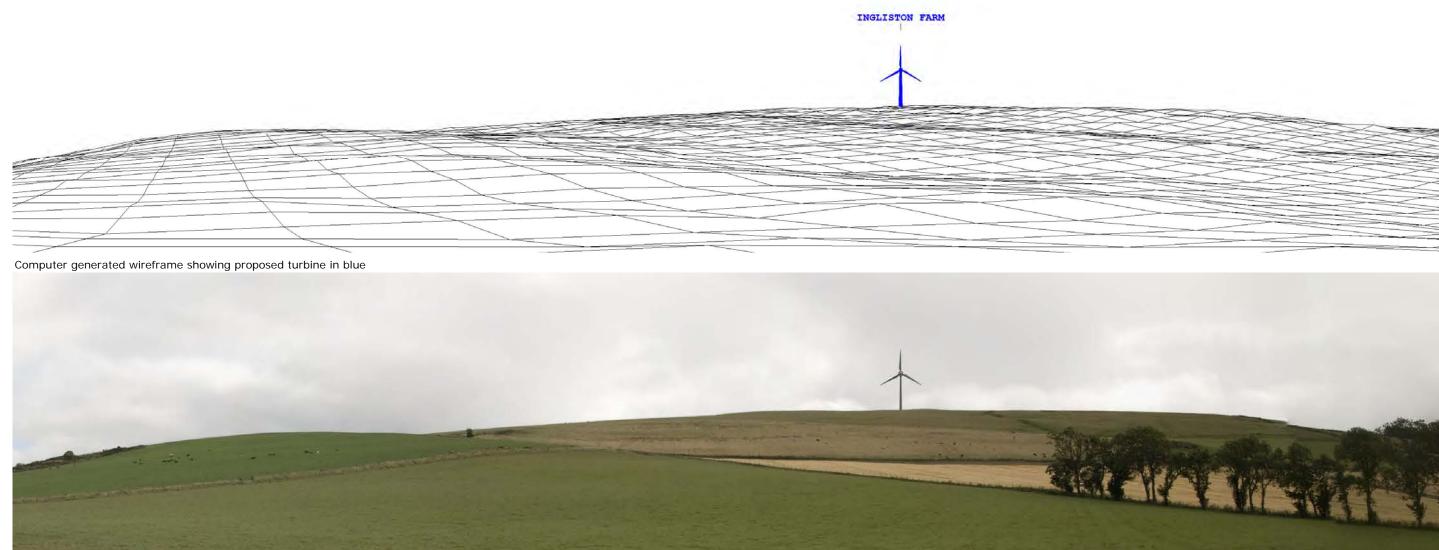
Date taken: 19/08/2013

Time taken: 11:16





Existing view from local road near Eassie School





Locogen Ltd, 44 Constitution St, Edinburgh, EH6 6RS Tel:+44(0)131 555 4745; Email: info@locogen.com Company Number: SC370060

Project: Ingliston Farm Drawing no: ING045 Bojan Jevtic Drawing by: Approved by: Andy Lowe OS Licence N°: 100050069

Viewpoint No: VP03 Viewpoint Location: E333482 N745062 Field of View: 80°

View direction: 120° Dist to turbine: 1.2 km

Title: Local road near Eassie School

Camera: Nikon D60 Effective Focal Length: 50 mm Viewing Distance: 23.8 cm Elevation: 1.8 m Date taken: 19/08/2013 Time taken: 10:21



Computer generated wireframe showing cumulative development

Locogen Ltd, 44 Constitution St, Edinburgh, EH6 6RS Tel:+44(0)131 555 4745; Email: info@locogen.com Company Number: SC370060

Project: Drawing no:

OS Licence N°:

ING046 Drawing by: Bojan Jevtic Approved by: Andy Lowe

Ingliston Farm

100050069

VP03 Viewpoint No: Viewpoint Location: E333482 N745062

Field of View: 80°

20° (top), 215° (middle), View direction:

280° (bottom)

Dist to turbine: 1.2 km Title: Local road near Eassie School Camera:

Nikon D60 Effective Focal Length: 50 mm

Viewing Distance: 23.8 cm Elevation: 1.8 m 19/08/2013 Date taken:

Time taken: 10:21







Locogen Ltd, 44 Constitution St, Edinburgh, EH6 6RS Tel:+44(0)131 555 4745; Email: info@locogen.com Company Number: SC370060 Project: Ingliston Farm
Drawing no: ING047
Drawing by: Bojan Jevtic
Approved by: Andy Lowe
OS Licence N°: 100050069

Viewpoint No: VPO3
Viewpoint Location: E333482 N745062
Field of View: 45°

Field of View: 45°
View direction: 129°
Dist to turbine: 1.2 km

Title: Local road near Eassie School

Camera: Nikon D60

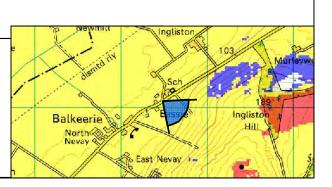
Effective Focal Length: 50 mm

Viewing Distance: 48.3 cm

Elevation: 1.8 m

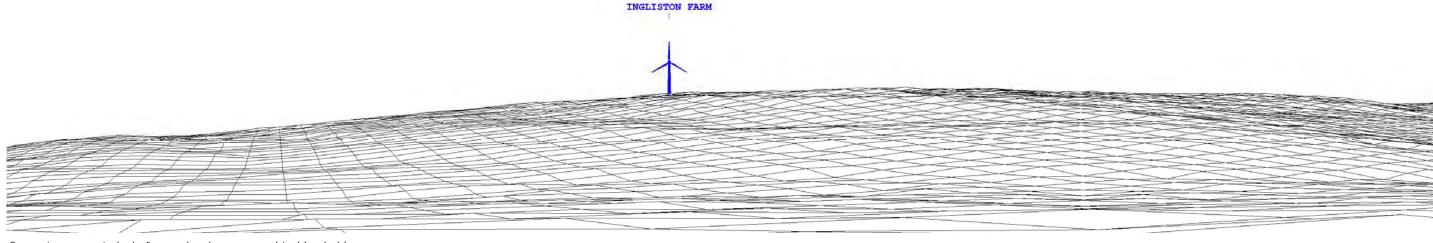
Date taken: 19/08/2013

Time taken: 10:21





Existing view from Balkeerie





Photomontage showing proposed development



Locogen Ltd, 44 Constitution St, Edinburgh, EH6 6RS Tel:+44(0)131 555 4745; Email: info@locogen.com Company Number: SC370060

Project: Ingliston Farm Drawing no: ING048 Drawing by: Bojan Jevtic Approved by: Andy Lowe OS Licence N°: 100050069

Viewpoint No: VP04 Viewpoint Location: E333122 N744830 Field of View: 80°

View direction: 115° Dist to turbine: 1.4 km Title: Balkeerie

Nikon D60 Camera: Effective Focal Length: 50 mm Viewing Distance: 23.8 cm Elevation: 1.8 m 19/08/2013 Date taken: Time taken: 11:58



Computer generated wireframe showing cumulative development

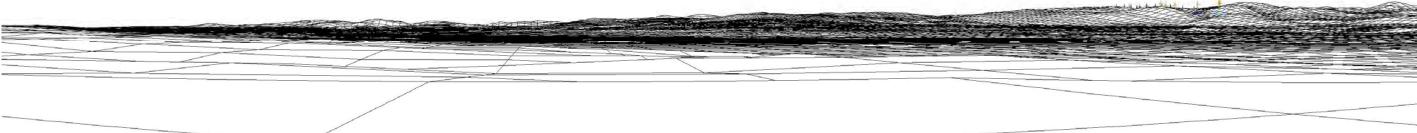
HOUSE ON THE HILL

HOUSE ON THE HILL KETTINS

Computer generated wireframe showing cumulative development

HILL OF LETHENDY FARM

EASTER LOGIE NETHERAIRD OF GLASCLUNE DRUMDERG



Computer generated wireframe showing cumulative development



Locogen Ltd, 44 Constitution St, Edinburgh, EH6 6RS Tel:+44(0)131 555 4745; Email: info@locogen.com Company Number: SC370060

Project: Ingliston Farm Drawing no: ING049 Drawing by: Bojan Jevtic Approved by: Andy Lowe

100050069

OS Licence N°:

Viewpoint Location: E333122 N744830 80° Field of View:

VP04

20° (top), 215° (middle), View direction: 280° (bottom)

1.4 km Dist to turbine: Title: Balkeerie

Viewpoint No:

Nikon D60 Camera: Effective Focal Length: 50 mm Viewing Distance: 23.8 cm Elevation: 1.8 m Date taken: 19/08/2013 Time taken: 11:58







Locogen Ltd, 44 Constitution St, Edinburgh, EH6 6RS Tel:+44(0)131 555 4745; Email: info@locogen.com Company Number: SC370060 Project: Ingliston Farm
Drawing no: ING050
Drawing by: Bojan Jevtic
Approved by: Andy Lowe
OS Licence N°: 100050069

Viewpoint No: VPO4
Viewpoint Location: E333122 N744830
Field of View: 45°
View direction: 115°

Dist to turbine: 1.4 km
Title: Balkeerie

Camera: Nikon D60

Effective Focal Length: 50 mm

Viewing Distance: 48.3 cm

Elevation: 1.8 m

Date taken: 19/08/2013

Time taken: 11:58





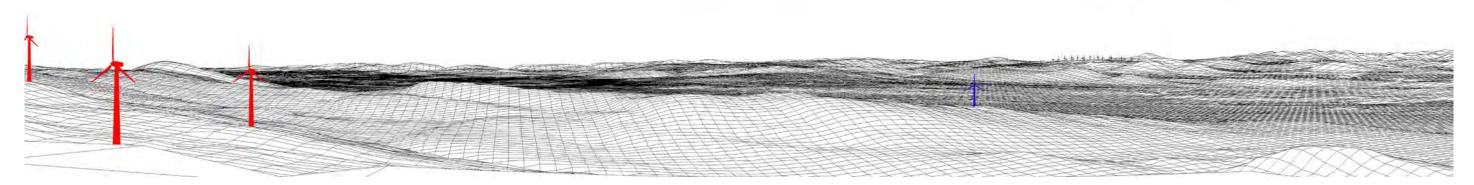
Existing view from Carlunie Hill

ARKHILL

HILL OF LETHENDY FARM

EAST GORMACK FARM EASTER LOGIE NETHERAIRD OF GLASCLUNE INGLISTON FARM

DRUMDERG THE CORB BRIDGE WESTER DERRY FARM





Photomontage showing proposed development



Locogen Ltd, 44 Constitution St, Edinburgh, EH6 6RS Tel:+44(0)131 555 4745; Email: info@locogen.com Company Number: SC370060

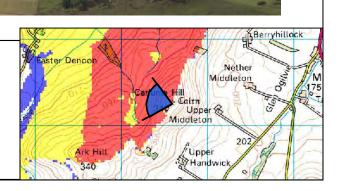
Project: Ingliston Farm Drawing no: ING051 Drawing by: Bojan Jevtic Approved by: Andy Lowe OS Licence N°: 100050069

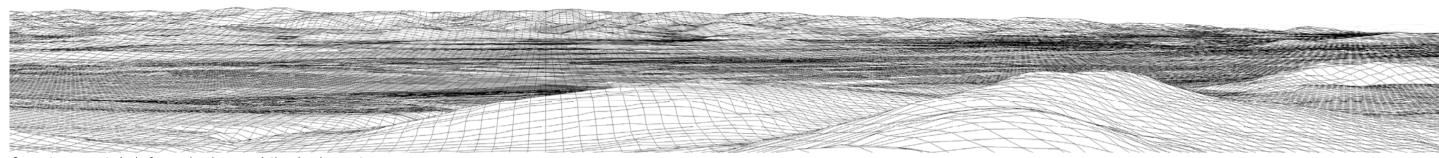
Viewpoint No: VP05 Viewpoint Location: E336575 N743253 Field of View: 80° View direction: 283° Dist to turbine: 2.4 km

Carlunie Hill

Title:

Nikon D60 Camera: Effective Focal Length: 50 mm Viewing Distance: 23.8 cm Elevation: 1.8 m 19/08/2013 Date taken: Time taken: 15:30





Computer generated wireframe showing cumulative development

PITKENNEDY FARM
WEST MAINS OF TURIN

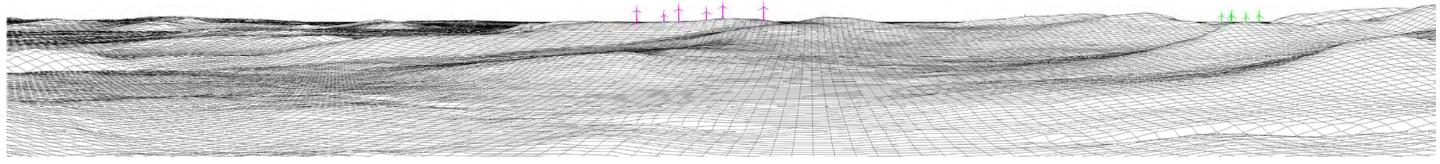
LOYAL FARM NEWMILL OF BALGAVIES GOVALS
NEWTON OF IDVIES FARM

LOCHLAIR

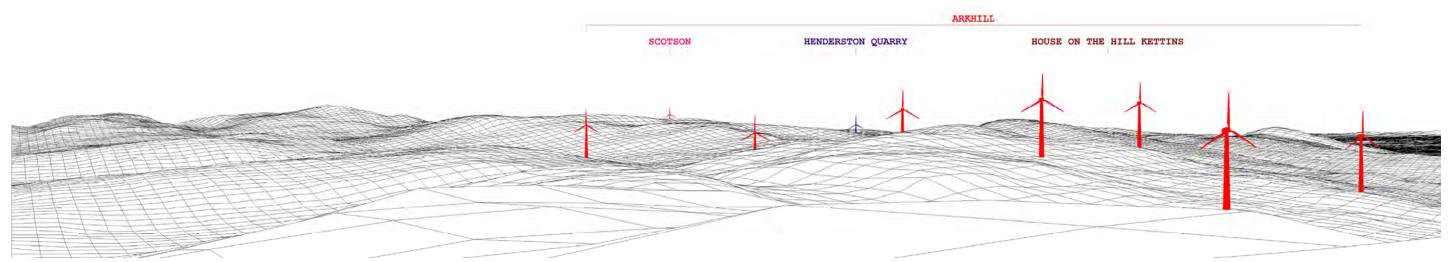
DODD HILL

FRAWNEY

NORTH MAINS OF CONONSYTH FARM WESTER MEATHIE FARM



Computer generated wireframe showing cumulative development



Computer generated wireframe showing cumulative development



Locogen Ltd, 44 Constitution St, Edinburgh, EH6 6RS Tel: +44(0)131 555 4745;

Tel: +44(0)131 555 4745; Email: info@locogen.com Company Number: SC370060 Project: Ingliston Farm

Drawing no: ING052

Drawing by: Bojan Jevtic

Approved by: Andy Lowe

OS Licence N°: 100050069

Viewpoint No: VP05
Viewpoint Location: E336575 N743253
Field of View: 80°
View direction: 10° (top), 85° (midd)

w direction: 10° (top), 85° (middle), 220° (bottom)

Dist to turbine: 2.4 km
Title: Carlunie Hill

Camera: Nikon D60

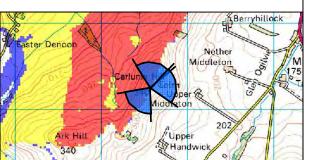
Effective Focal Length: 50 mm

Viewing Distance: 23.8 cm

Elevation: 1.8 m

Date taken: 19/08/2013

Time taken: 15:30





Photomontage showing proposed development



Locogen Ltd, 44 Constitution St, Edinburgh, EH6 6RS Tel:+44(0)131 555 4745; Email: info@locogen.com Company Number: SC370060 Project: Ingliston Farm
Drawing no: ING053
Drawing by: Bojan Jevtic
Approved by: Andy Lowe
OS Licence N°: 100050069

Viewpoint No: VP05
Viewpoint Location: E336575 N743253
Field of View: 45°
View direction: 296°
Dist to turbine: 2.4 km

Carlunie Hill

Title:

Camera: Nikon D60

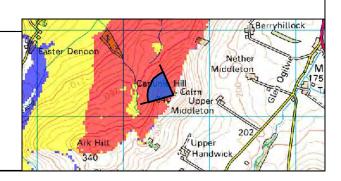
Effective Focal Length: 50 mm

Viewing Distance: 48.3 cm

Elevation: 1.8 m

Date taken: 19/08/2013

Time taken: 15:30





Existing view from Eassie Bridge



Computer generated wireframe showing proposed turbine in blue



Photomontage showing proposed development screened by vegetation



Locogen Ltd, 44 Constitution St, Edinburgh, EH6 6RS
Tel: +44(0)131 555 4745;
Email: info@locogen.com
Company Number: SC370060

Project: Ingliston Farm ING054 Drawing no: Bojan Jevtic Drawing by: Approved by: Andy Lowe

100050069

OS Licence N°:

Viewpoint No: VP06 Viewpoint Location: E335278 N747395 Field of View: 80° View direction: 196° Dist to turbine: 3.2 km

Eassie Bridge

Title:

Camera: Nikon D60 Effective Focal Length: 50 mm Viewing Distance: 23.8 cm Elevation: 1.8 m Date taken: 19/08/2013 Time taken: 10:45





AFFLOCHIE FARM

Computer generated wireframe showing cumulative development

WEST MAINS OF TURIN

GOVALS

Computer generated wireframe showing cumulative development



Locogen Ltd, 44 Constitution St, Edinburgh, EH6 6RS Tel:+44(0)131 555 4745; Email: info@locogen.com Company Number: SC370060

Project: Ingliston Farm Drawing no: ING055 Drawing by: Approved by:

OS Licence N°:

Bojan Jevtic Andy Lowe 100050069

Viewpoint No: VP06 Viewpoint Location: E335278 N747395

Field of View: 80°

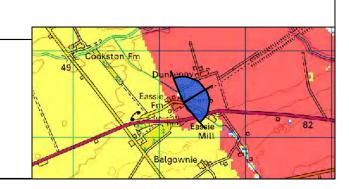
View direction: 20° (top), 100° (bottom) Dist to turbine: 3.2 km

Title: Eassie Bridge Camera:

Nikon D60 Effective Focal Length: 50 mm

Viewing Distance: 23.8 cm Elevation: 1.8 m Date taken: 19/08/2013

Time taken: 10:45





Existing view from Kinpurney Hill

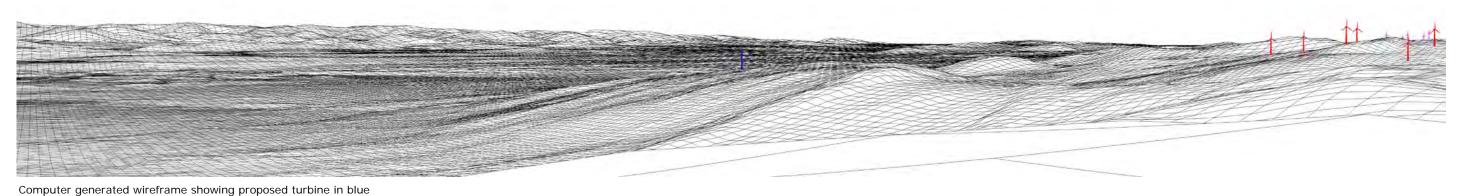
REEDIE FARM

GALLOW HILL

EAST MEMUS WHITE TOP

INGLISTON FARM DUNSWOOD AFFLOCHIE FARM BROOM FARM KALULU HOUSE

PITKENNEDY FARM WEST MAINS OF TURIN





Photomontage showing proposed development



Locogen Ltd, 44 Constitution St, Edinburgh, EH6 6RS Tel:+44(0)131 555 4745; Email: info@locogen.com Company Number: SC370060

Project: Ingliston Farm Drawing no: ING056 Drawing by: Bojan Jevtic Approved by: Andy Lowe

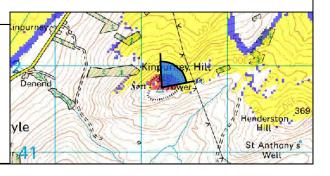
100050069

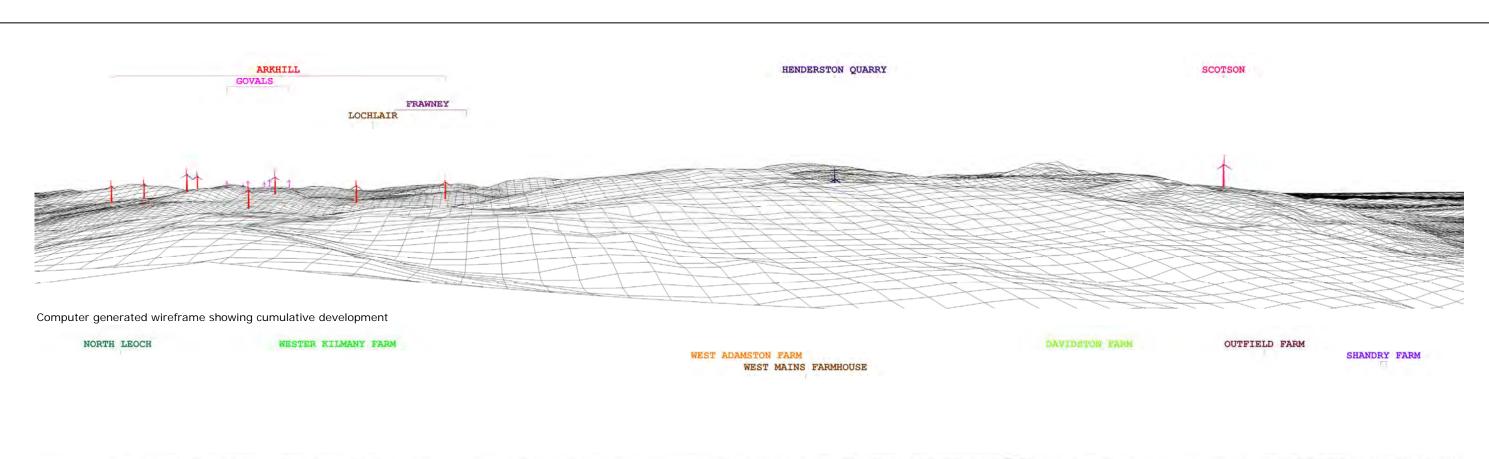
OS Licence N°:

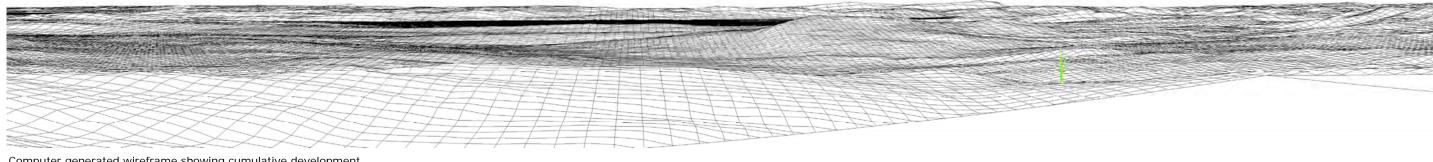
Viewpoint No: VP07 Viewpoint Location: E332260 N741739 Field of View: 80° View direction: 39°

Dist to turbine: 3.3 km Kinpurney Hill Title:

Nikon D60 Camera: Effective Focal Length: 50 mm Viewing Distance: 23.8 cm Elevation: 1.8 m 19/08/2013 Date taken: Time taken: 12:50

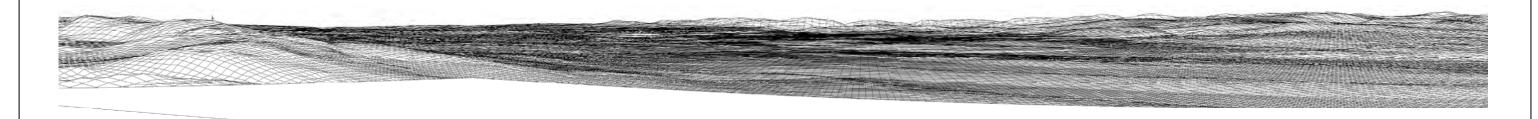






Computer generated wireframe showing cumulative development

HOUSE ON THE HILL KETTINS HOUSE ON THE HILL HILL OF LETHENDY FARM EAST GORMACK FARM NETHERAIRD OF GLASCLUNE EASTER LOGIE



Computer generated wireframe showing cumulative development



Locogen Ltd, 44 Constitution St, Edinburgh, EH6 6RS

Tel: +44(0)131 555 4745; Email: info@locogen.com Company Number: SC370060

Project: Ingliston Farm Drawing no: ING057 Drawing by: Bojan Jevtic Approved by: Andy Lowe OS Licence N°: 100050069

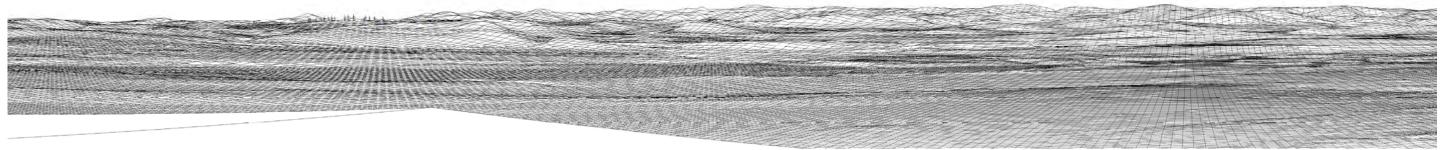
VP07 Viewpoint No: Viewpoint Location: E332260 N741739 Field of View: 80°

105° (top), 185° (middle), View direction: 265° (bottom)

Dist to turbine: 3.3 km Title: Kinpurney Hill

Nikon D60 Camera: Effective Focal Length: 50 mm Viewing Distance: 23.8 cm Elevation: 1.8 m 19/08/2013 Date taken: Time taken: 12:50





Computer generated wireframe showing cumulative development



Locogen Ltd, 44 Constitution St, Edinburgh, EH6 6RS Tel:+44(0)131 555 4745; Email: info@locogen.com Company Number: SC370060

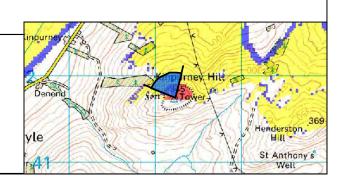
Project: Ingliston Farm ING058 Drawing no: Bojan Jevtic Drawing by: Approved by: Andy Lowe

100050069

OS Licence N°:

Viewpoint No: VP07 Viewpoint Location: E332260 N741739 Field of View: 80° View direction: 334° 3.3 km Dist to turbine: Title: Kinpurney Hill

Nikon D60 Camera: Effective Focal Length: 50 mm Viewing Distance: 23.8 cm Elevation: 1.8 m Date taken: 19/08/2013 Time taken: 12:50







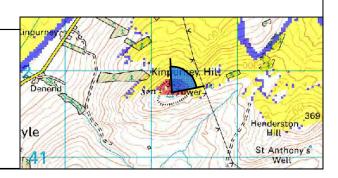
Locogen Ltd, 44 Constitution St, Edinburgh, EH6 6RS Tel:+44(0)131 555 4745; Email: info@locogen.com Company Number: SC370060

Project: Ingliston Farm ING059 Drawing no: Drawing by: Bojan Jevtic Approved by: Andy Lowe OS Licence N°: 100050069

Viewpoint No: VP07 Viewpoint Location: E332260 N741739 Field of View: 45° View direction: 39°

Dist to turbine: 3.3 km Title: Kinpurney Hill

Camera: Nikon D60 Effective Focal Length: 50 mm Viewing Distance: 48.3 cm Elevation: 1.8 m Date taken: 19/08/2013 Time taken: 12:50





Existing view from Auchterhouse Hill

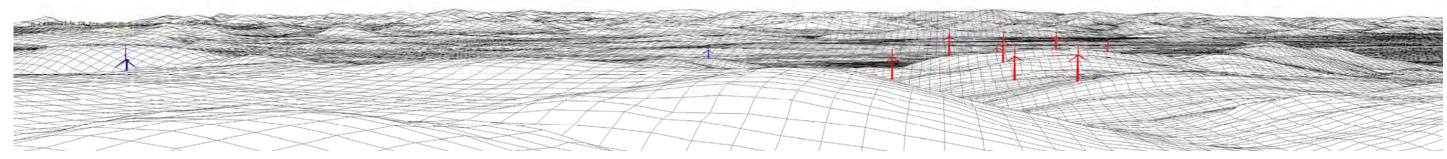
DRUMDERG
HENDERSTON QUARRY
THE CORB BRIDGE

INGLISTON FARM

REEDIE FARM

GALLOW HILL

EAST MEMUS WHITE TOP



Computer generated wireframe showing proposed turbine in blue



Photomontage showing proposed development



Locogen Ltd, 44 Constitution St, Edinburgh, EH6 6RS Tel:+44(0)131 555 4745; Email: info@locogen.com Company Number: SC370060 Project: Ingliston Farm
Drawing no: ING060
Drawing by: Bojan Jevtic
Approved by: Andy Lowe
OS Licence N°: 100050069

Viewpoint No: VP08
Viewpoint Location: E335421 N739831
Field of View: 80°
View direction: 348°
Dist to turbine: 4.6 km

Title: Auchterhouse Hill

Camera: Nikon D60

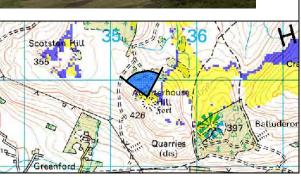
Effective Focal Length: 50 mm

Viewing Distance: 23.8 cm

Elevation: 1.8 m

Date taken: 19/08/2013

Time taken: 14:15



AFFLOCHIE FARM BROOM FARM KALULU HOUSE

DUNSWOOD

PITKENNEDY FARM WEST MAINS OF TURIN

GOVALS

NEWMILL OF BALGAVIES PICKERTON

NORTH MAINS OF CONONSYTH FARM

Computer generated wireframe showing cumulative development

GLENBRAN FARM

HOUSE ON THE HILL KETTINS

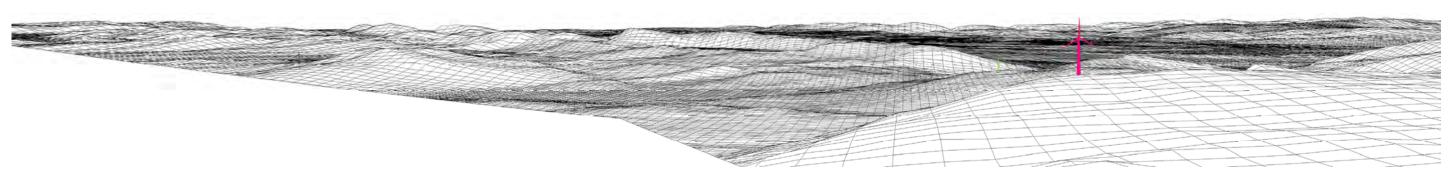
HILL OF LETHENDY FARM

SCOTSON

EAST GORMACK FARM EASTER LOGIE

NETHERAIRD OF GLASCLUNE

OUTFIELD FARM SHANDRY FARM WEST MAINS FARMHOUSE



Computer generated wireframe showing cumulative development

Locogen Ltd, 44 Constitution St, Edinburgh, EH6 6RS Tel:+44(0)131 555 4745; Email: info@locogen.com Company Number: SC370060

Project: Ingliston Farm Drawing no: ING061 Drawing by: Bojan Jevtic

Approved by: Andy Lowe OS Licence N°: 100050069

VP08 Viewpoint No: Viewpoint Location: E335421 N739831

Field of View: 80°

View direction: 65° (top), 260° (bottom)

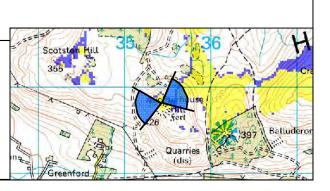
Dist to turbine: 4.6 km

Title: Auchterhouse Hill Camera:

Nikon D60

Effective Focal Length: 50 mm Viewing Distance: 23.8 cm Elevation: 1.8 m 19/08/2013 Date taken:

Time taken: 14:15







Locogen Ltd, 44 Constitution St, Edinburgh, EH6 6RS Tel:+44(0)131 555 4745; Email: info@locogen.com Company Number: SC370060 Project: Ingliston Farm
Drawing no: ING062
Drawing by: Bojan Jevtic
Approved by: Andy Lowe

100050069

OS Licence N°:

Viewpoint No: VP08
Viewpoint Location: E335421 N739831
Field of View: 45°
View direction: 348°

Title: Auchterhouse Hill

4.6 km

Dist to turbine:

Camera: Nikon D60

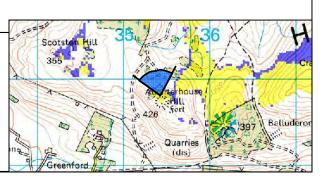
Effective Focal Length: 50 mm

Viewing Distance: 48.3 cm

Elevation: 1.8 m

Date taken: 19/08/2013

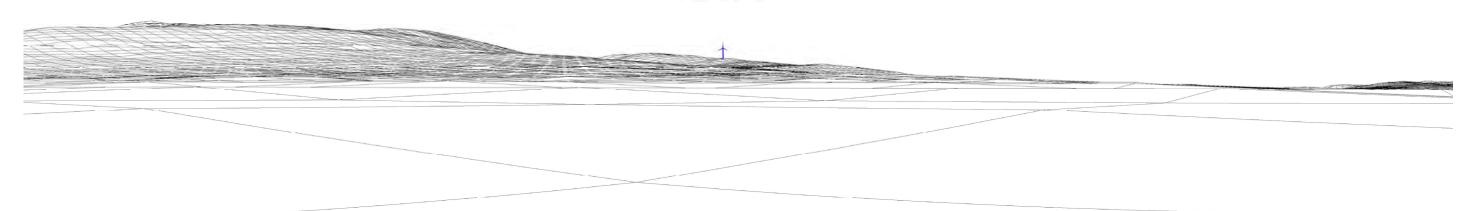
Time taken: 14:15





Existing view from Glamis Castle

INGLISTON FARM



Computer generated wireframe showing proposed turbine in blue

Photomontage showing proposed development screened by vegetation



Locogen Ltd, 44 Constitution St, Edinburgh, EH6 6RS Tel:+44(0)131 555 4745; Email: info@locogen.com Company Number: SC370060

Drawing no: ING063

Drawing by: Bojan Jevtic

Approved by: Andy Lowe

OS Licence N°: 100050069

Project:

Ingliston Farm

Viewpoint No: VP09
Viewpoint Location: E338415 N747238
Field of View: 80°
View direction: 235°

View direction: 235°
Dist to turbine: 5.0 km
Title: Glamis Castle

Camera: Nikon D60

Effective Focal Length: 50 mm

Viewing Distance: 23.8 cm

Elevation: 1.8 m

Date taken: 19/08/2013

Time taken: 09:58

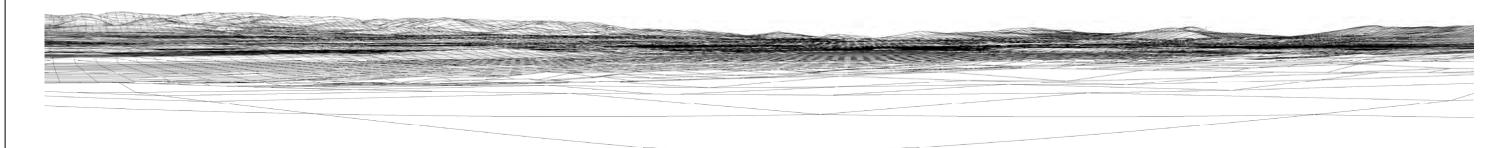


GALLOW HILL EAST MEMUS AFFLOCHIE FARM WHITE TOP

BROOM FARM KALULU HOUSE

DUNSWOOD

WEST MAINS OF TURIN



Computer generated wireframe showing cumulative development

GOVALS

WESTER MEATHIE FARM

Computer generated wireframe showing cumulative development

DRUMDERG THE CORB BRIDGE WESTER DERRY FARM

REEDIE FARM

Computer generated wireframe showing cumulative development



Locogen Ltd, 44 Constitution St, Edinburgh, EH6 6RS Tel:+44(0)131 555 4745; Email: <u>info@locogen.com</u>

Company Number: SC370060

Ingliston Farm Project: Drawing no: ING064 Drawing by: Approved by:

OS Licence N°:

Bojan Jevtic Andy Lowe 100050069

VP09 Viewpoint No: Viewpoint Location: E338415 N747238 Field of View: 80°

40° (top), 120° (middle), View direction: 300° (bottom)

Dist to turbine: 5.0 km Glamis Castle Title:

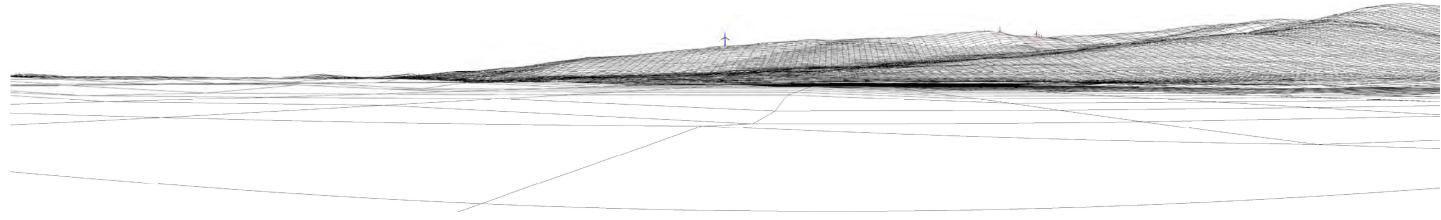
Nikon D60 Camera: Effective Focal Length: 50 mm Viewing Distance: 23.8 cm Elevation: 1.8 m 19/08/2013 Date taken: Time taken: 09:58





Existing view from B 954 near Belmont Castle

AFFLOCHIE FARM ARKHILL INGLISTON FARM WEST MAINS OF TURIN



Computer generated wireframe showing proposed turbine in blue



Photomontage showing proposed development



Locogen Ltd, 44 Constitution St, Edinburgh, EH6 6RS
Tel: +44(0)131 555 4745;
Email: info@locogen.com
Company Number: SC370060

Project: Ingliston Farm Drawing no: ING065 Drawing by: Bojan Jevtic Approved by: Andy Lowe OS Licence N°: 100050069

Viewpoint No: VP10 Viewpoint Location: E329011 N743745 Field of View: 80° View direction: 84°

Dist to turbine: 5.4 km

Title: B 954 near Belmont Castle

Camera: Nikon D60 Effective Focal Length: 50 mm Viewing Distance: 23.8 cm Elevation: 1.8 m Date taken: 19/08/2013 Time taken: 16:15



AFFLOCHIE FARM

WHITE TOP

Computer generated wireframe showing cumulative development

HOUSE ON THE HILL KETTINS

HOUSE ON THE HILL

Computer generated wireframe showing cumulative development

HILL OF LETHENDY FARM

NETHERAIRD OF GLASCLUNE

EASTER LOGIE

DRUMDERG

BAMFF

Computer generated wireframe showing cumulative development

Locogen Ltd, 44 Constitution St, Edinburgh, EH6 6RS Tel:+44(0)131 555 4745; Email: info@locogen.com Company Number: SC370060

Project: Drawing no:

OS Licence N°:

ING066 Drawing by: Bojan Jevtic Approved by: Andy Lowe

Ingliston Farm

100050069

VP10 Viewpoint No:

Viewpoint Location: E329011 N743745

Field of View: 80°

Title:

View direction: 20° (top), 200° (middle), 295° (bottom)

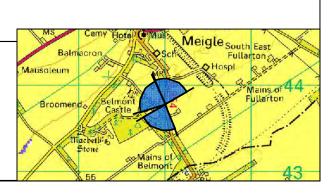
Dist to turbine:

5.4 km B 954 near Belmont Castle Camera:

Nikon D60 50 mm

Effective Focal Length: Viewing Distance: 23.8 cm Elevation: 1.8 m 19/08/2013 Date taken:

Time taken: 16:15





Photomontage showing proposed development



Locogen Ltd, 44 Constitution St, Edinburgh, EH6 6RS Tel:+44(0)131 555 4745; Email: info@locogen.com Company Number: SC370060 Project: Ingliston Farm
Drawing no: ING067
Drawing by: Bojan Jevtic
Approved by: Andy Lowe

100050069

OS Licence N°:

Viewpoint No: VP10
Viewpoint Location: E329011 N743745
Field of View: 45°
View direction: 84°
Dist to turbine: 5.4 km

Title: B 954 near Belmont Castle

Camera: Nikon D60

Effective Focal Length: 50 mm

Viewing Distance: 48.3 cm

Elevation: 1.8 m

Date taken: 19/08/2013

Time taken: 16:15

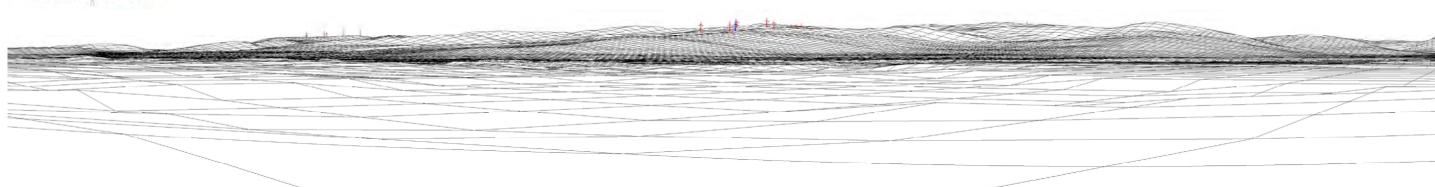




Existing view from local road near Dryloch

GOVALS INGLISTON FARM HENDERSTON QUARRY DAVIDSTON FARM

WESTER MEATHIE FARM



Computer generated wireframe showing proposed turbine in blue



Photomontage showing proposed development



Locogen Ltd, 44 Constitution St, Edinburgh, EH6 6RS Tel: +44(0)131 555 4745; Email: info@locogen.com Company Number: SC370060 Project: Ingliston Farm
Drawing no: ING068
Drawing by: Bojan Jevtic
Approved by: Andy Lowe
OS Licence N°: 100050069

Viewpoint No: VP11
Viewpoint Location: E329737 N749660
Field of View: 80°
View direction: 138°
Dist to turbine: 7.1 km

Title: Local road near Dryloch

Camera: Nikon D60

Effective Focal Length: 50 mm

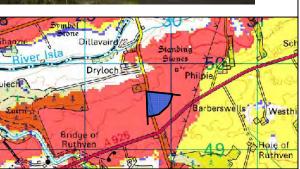
Viewing Distance: 23.8 cm

Elevation: 1.8 m

Date taken: 19/08/2013

Time taken: 16:40

SCOTSON



PITKENNEDY FARM

WEST MAINS OF TURIN

DUBTON FARM

PICKERTON

NORTH MAINS OF CONONSYTH

REEDIE FARM

Computer generated wireframe showing cumulative development

HOUSE ON THE HILL KETTINS HOUSE ON THE HILL HILL OF LETHENDY FARM

Computer generated wireframe showing cumulative development

Locogen Ltd, 44 Constitution St, Edinburgh, EH6 6RS Tel:+44(0)131 555 4745; Email: info@locogen.com Company Number: SC370060

Project: Ingliston Farm Drawing no: ING069 Drawing by: Bojan Jevtic Approved by: Andy Lowe

100050069

OS Licence N°:

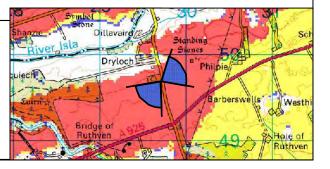
Viewpoint No: VP11 Viewpoint Location: E329737 N749660 Field of View: 80°

View direction: 60° (top), 220° (bottom)

Dist to turbine: 7.1 km

Title: Local road near Dryloch

Camera: Nikon D60 Effective Focal Length: 50 mm Viewing Distance: 23.8 cm Elevation: 1.8 m Date taken: 19/08/2013 Time taken: 16:40





Photomontage showing proposed development



Locogen Ltd, 44 Constitution St, Edinburgh, EH6 6RS Tel:+44(0)131 555 4745; Email: info@locogen.com Company Number: SC370060 Project: Ingliston Farm
Drawing no: ING070
Drawing by: Bojan Jevtic
Approved by: Andy Lowe
OS Licence N°: 100050069

Viewpoint No: VP11
Viewpoint Location: E329737 N749660
Field of View: 45°
View direction: 138°

Dist to turbine: 7.1 km

Title: Local road near Dryloch

Camera: Nikon D60

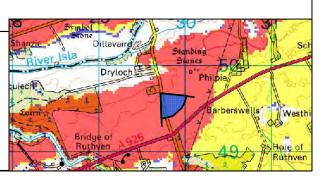
Effective Focal Length: 50 mm

Viewing Distance: 48.3 cm

Elevation: 1.8 m

Date taken: 19/08/2013

Time taken: 16:40

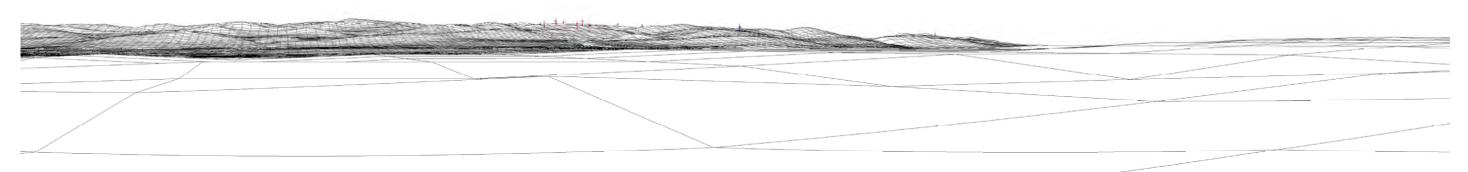




Existing view from A 928 near Kirriemuir

HENDERSTON QUARRY

HOUSE ON THE HILL KETTINS HOUSE ON THE HILL





Photomontage showing proposed development



Locogen Ltd, 44 Constitution St, Edinburgh, EH6 6RS Tel:+44(0)131 555 4745; Email: info@locogen.com Company Number: SC370060

Project: Ingliston Farm Drawing no: ING071 Drawing by: Bojan Jevtic Approved by: Andy Lowe

100050069

OS Licence N°:

VP12 Viewpoint No: Viewpoint Location: E338541 N753036 Field of View: 80° View direction: 205°

Dist to turbine: 9.7 km Title: A 928 near Kirriemuir

Nikon D60 Camera: Effective Focal Length: 50 mm Viewing Distance: 23.8 cm Elevation: 1.8 m 19/08/2013 Date taken: Time taken: 09:32



PITKENNEDY FARM

WEST MAINS OF TURIN

NEWMILL OF BALGAVIES

Computer generated wireframe showing cumulative development STOTFAULDS NORTH TARBAX LOCHLAIR WESTER MEATHIE FARM

Computer generated wireframe showing cumulative development

REEDIE FARM

Computer generated wireframe showing cumulative development



Locogen Ltd, 44 Constitution St, Edinburgh, EH6 6RS Tel: +44(0)131 555 4745; Email: info@locogen.com Company Number: SC370060

Project: Drawing no: Drawing by: Approved by:

OS Licence N°:

ING072 Bojan Jevtic Andy Lowe 100050069

Ingliston Farm

VP12 Viewpoint No:

Field of View: 80°

Viewpoint Location: E338541 N753036

View direction:

80° (top), 150° (middle), 260° (bottom)

Dist to turbine: Title:

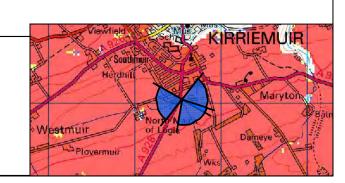
9.7 km A 928 near Kirriemuir Camera:

Nikon D60 50 mm 23.8 cm

Viewing Distance: Elevation: 1.8 m 19/08/2013 Date taken:

Time taken: 09:32

Effective Focal Length:







Locogen Ltd, 44 Constitution St, Edinburgh, EH6 6RS Tel:+44(0)131 555 4745; Email: info@locogen.com Company Number: SC370060 Project: Ingliston Farm
Drawing no: ING073
Drawing by: Bojan Jevtic
Approved by: Andy Lowe
OS Licence N°: 100050069

Viewpoint No: VP12
Viewpoint Location: E338541 N753036
Field of View: 45°

View direction: 205°
Dist to turbine: 9.7 km

Title: A 928 near Kirriemuir

Camera: Nikon D60

Effective Focal Length: 50 mm

Viewing Distance: 48.3 cm

Elevation: 1.8 m

Date taken: 19/08/2013

Time taken: 09:32





Existing view from A 926 near Padanaram

FRAWNEY GOVALS

ARKHILL

HENDERSTON QUARRY

INGLISTON FARM

HILL OF LETHENDY FARM

SCOTSON



Computer generated wireframe showing proposed turbine in blue



Photomontage showing proposed development



Locogen Ltd, 44 Constitution St, Edinburgh, EH6 6RS Tel:+44(0)131 555 4745; Email: info@locogen.com Company Number: SC370060

Project: Ingliston Farm Drawing no: ING074 Drawing by: Bojan Jevtic Approved by: Andy Lowe

100050069

OS Licence N°:

Viewpoint No: VP13 Viewpoint Location: E343377 N751564 Field of View: 80°

View direction: 231° Dist to turbine: 11.5 km

Title: A 926 near Padanaram

Nikon D60 Camera: Effective Focal Length: 50 mm Viewing Distance: 23.8 cm Elevation: 1.8 m Date taken: 19/08/2013

Time taken: 09:16



DUNSWOOD DUBTON FARM PICKERTON Computer generated wireframe showing cumulative development DODD HILL WESTER MEATHIE FARM Computer generated wireframe showing cumulative development REEDIE FARM WESTER DERRY FARM Computer generated wireframe showing cumulative development VP13 Nikon D60 Project: Ingliston Farm Viewpoint No: Camera: Viewpoint Location: E343377 N751564 Drawing no: ING075 Effective Focal Length: 50 mm Field of View: 80° Viewing Distance: 23.8 cm Drawing by: Bojan Jevtic Locogen Ltd, 44 Constitution St, Edinburgh, EH6 6RS View direction: 75° (top), 165° (middle), Elevation: 1.8 m Approved by: Andy Lowe 300° (bottom)

Dist to turbine:

Title:

11.5 km

A 926 near Padanaram

Tel: +44(0)131 555 4745; Email: info@locogen.com Company Number: SC370060

OS Licence N°:

100050069

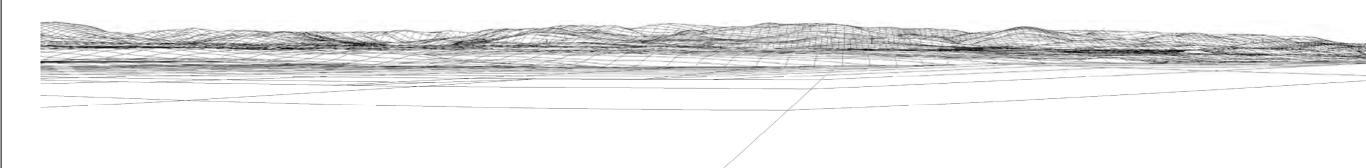
19/08/2013

09:16

Date taken:

Time taken:

EAST MEMUS
WHITE TOP GALLOW HILL AFFLOCHIE FARM BROOM FARM



Computer generated wireframe showing cumulative development



Locogen Ltd, 44 Constitution St, Edinburgh, EH6 6RS Tel:+44(0)131 555 4745; Email: info@locogen.com Company Number: SC370060

Project: Ingliston Farm ING076 Drawing no: Bojan Jevtic Drawing by: Approved by: Andy Lowe

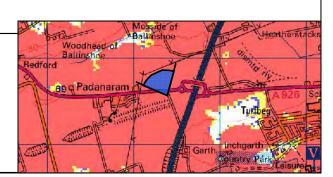
100050069

OS Licence N°:

Viewpoint No: VP13 Viewpoint Location: E343377 N751564 Field of View: 80° View direction: 355° Dist to turbine: 11.5 km

Title: A 926 near Padanaram

Camera: Nikon D60 Effective Focal Length: 50 mm Viewing Distance: 23.8 cm Elevation: 1.8 m Date taken: 19/08/2013 Time taken: 09:16





Photomontage showing proposed development



Locogen Ltd, 44 Constitution St, Edinburgh, EH6 6RS Tel:+44(0)131 555 4745; Email: info@locogen.com Company Number: SC370060 Project: Ingliston Farm
Drawing no: ING077
Drawing by: Bojan Jevtic
Approved by: Andy Lowe
OS Licence N°: 100050069

Viewpoint No: VP13
Viewpoint Location: E343377 N751564
Field of View: 45°
View direction: 231°

Dist to turbine: 11.5 km
Title: A 926 near Padanaram

Camera: Nikon D60

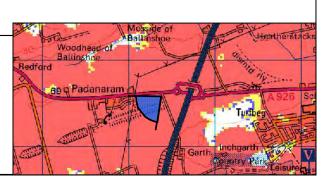
Effective Focal Length: 50 mm

Viewing Distance: 48.3 cm

Elevation: 1.8 m

Date taken: 19/08/2013

Time taken: 09:16





Existing view from A 923 near Coupar Angus

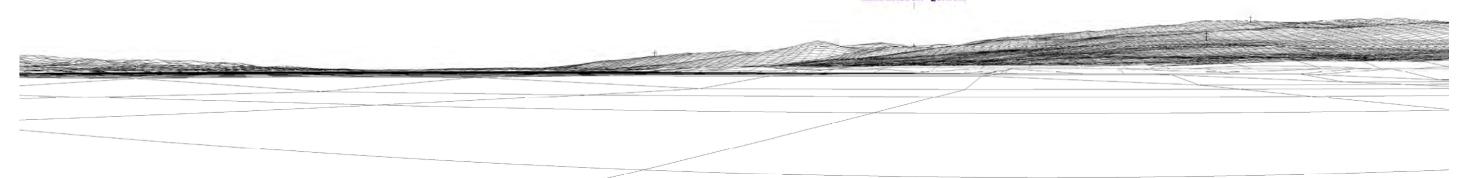
AFFLOCHIE FARM BROOM FARM EAST MEMUS REEDIE FARM WHITE TOP

INGLISTON FARM

ARKHILL

HOUSE ON THE HILL KETTINS HOUSE ON THE HILL

HENDERSTON QUARRY



Computer generated wireframe showing proposed turbine in blue



Photomontage showing proposed development



Locogen Ltd, 44 Constitution St, Edinburgh, EH6 6RS
Tel:+44(0)131 555 4745;
Email: info@locogen.com
Company Number: SC370060

Project: Ingliston Farm Drawing no: ING078 Drawing by: Bojan Jevtic Approved by: Andy Lowe

100050069

OS Licence N°:

Viewpoint No: VP14 Viewpoint Location: E322483 N739568 Field of View: 80° View direction: 73°

Dist to turbine: 12.8 km

Title: A 923 near Coupar Angus Camera: Nikon D60

Effective Focal Length: 50 mm Viewing Distance: 23.8 cm Elevation: 1.8 m Date taken: 19/08/2013 Time taken: 17:08



HILL OF LETHENDY FARM EAST GORMACK FARM

EASTER LOGIE

NETHERAIRD OF GLASCLUNE

DRUMDERG

BAMFF

Computer generated wireframe showing cumulative development

Loco, gen

Locogen Ltd, 44 Constitution St, Edinburgh, EH6 6RS Tel:+44(0)131 555 4745; Email: info@locogen.com Company Number: SC370060

Project: Drawing no: Drawing by:

Approved by:

OS Licence N°:

Ingliston Farm ING079 Bojan Jevtic

Andy Lowe 100050069 Viewpoint No: VP14

Viewpoint Location: E322483 N739568

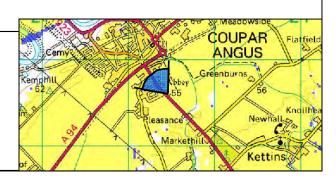
Field of View: 80° View direction: 322° Dist to turbine: 12.8 km

Title: A 923 near Coupar Angus Camera:

Nikon D60 50 mm

Effective Focal Length: Viewing Distance: 23.8 cm Elevation: 1.8 m Date taken: 19/08/2013

Time taken: 17:08





Photomontage showing proposed development



Locogen Ltd, 44 Constitution St, Edinburgh, EH6 6RS Tel:+44(0)131 555 4745; Email: info@locogen.com Company Number: SC370060 Project: Ingliston Farm
Drawing no: ING080
Drawing by: Bojan Jevtic
Approved by: Andy Lowe
OS Licence N°: 100050069

Viewpoint No: VP14
Viewpoint Location: E322483 N739568

Field of View: 45°
View direction: 68°
Dist to turbine: 12.8 km

Title: A 923 near Coupar Angus

Camera: Nikon D60

Effective Focal Length: 50 mm

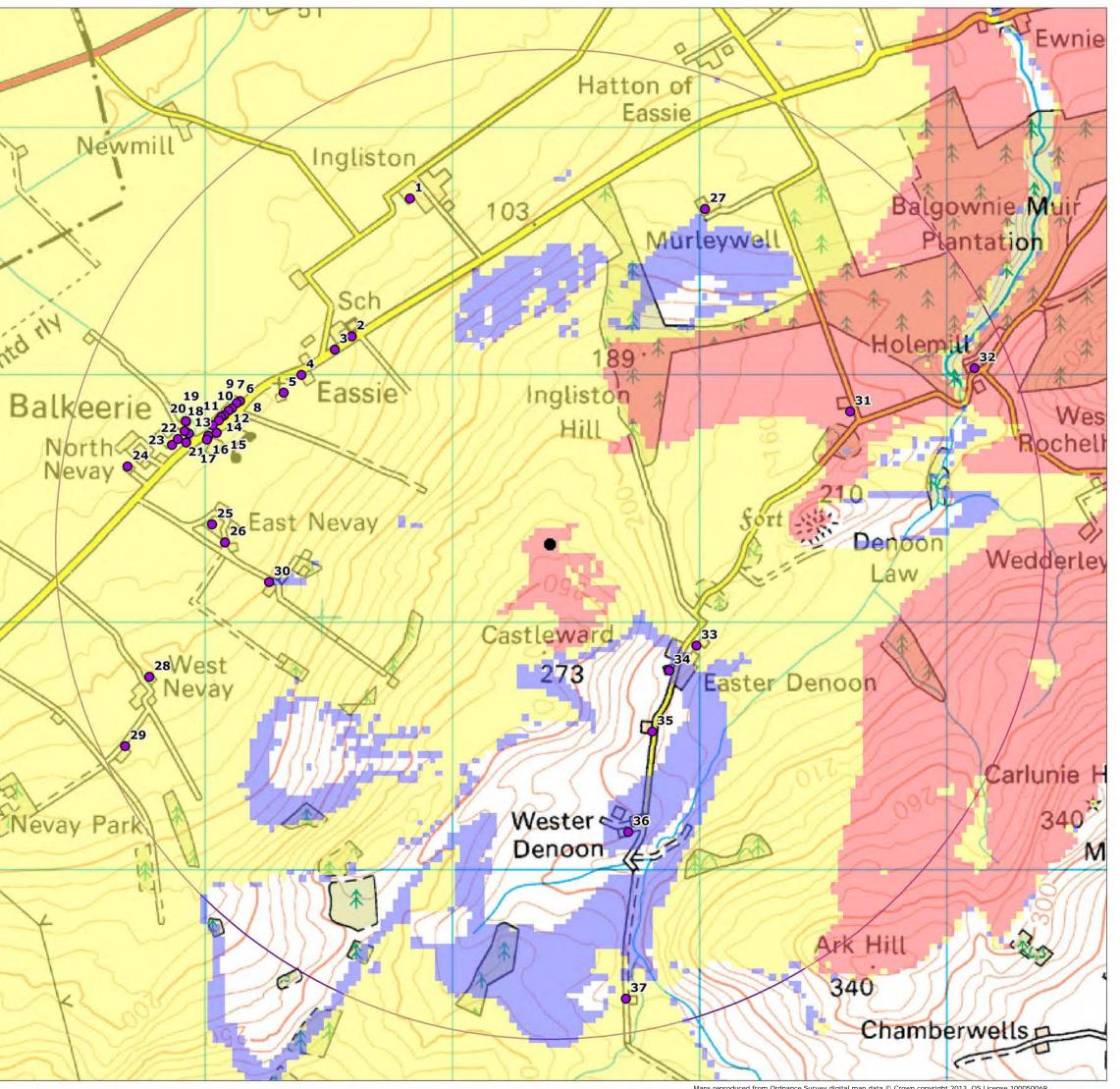
Viewing Distance: 48.3 cm

Elevation: 1.8 m

Date taken: 19/08/2013

Time taken: 17:08







Locogen Ltd, 44 Constitution St, Edinburgh, EH6 6RS Tel: +44 (0) 131 555 4745; Email: info@locogen.com Company Number: SC370060; VAT Number: 983 3836 77

Project Description

Number of Turbine(s): 1

Turbine Model: EWT Directwind 54

Hub Height: 50m
Blade diameter: 54m
Total height to blade tip: 77m

Turbine location: 334397 744313

Notes

This map shows the dwellings within 2km of the proposed wind turhine site

Radius: 2km

Legend

Turbine Location

Dwellings

This theoretical visibility map is based on a receptor viewing height of 1.8m AGL. The levels of theoretical visibility are based on the following colouring scheme:

Blue: Only the blades are theoretically visible from these areas

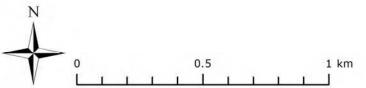
Yellow: At least the nacelle and blades are theoretically visible in

these areas

ed: The blades, nacelle and tower down to a point at least

1m AGL are theoretically visible in these areas

PROJECT:	Ingliston Farm	
DRAWING TITLE:	Dwellings and ZTV	
DRAWING NO:	ING081	
DOCUMENT SIZE:	A3	
SCALE:	1:15,000	
DATE:	04/09/2013	
DRAWING BY:	Bojan Jevtic	
APPROVED BY:	Andy Lowe	



ID	Dwelling	Easting	Northing	Distance from tur- bine (km)	Level of Theoretical Visibility
1	Ingliston	333831	745710	1.5	Nacelle
2	School	333595	745152	1.2	Nacelle
3	Old School House	333526	745100	1.2	Nacelle
4	Eassie	333391	744996	1.2	Nacelle
5	Kirkgate	333320	744925	1.2	Nacelle
6	Unknown	333143	744891	1.4	Nacelle
7	Unknown	333130	744882	1.4	Nacelle
8	Unknown	333111	744862	1.4	Nacelle
9	Unknown	333097	744852	1.4	Nacelle
10	Unknown	333079	744833	1.4	Nacelle
11	Unknown	333067	744826	1.4	Nacelle
12	Unknown	333057	744813	1.4	Nacelle
13	Unknown	333057	744813	1.4	Nacelle
14	Unknown	333032	744793	1.4	Nacelle
15	Balkeerie Farm	333049	744763	1.4	Nacelle
16	The Old Hayloft	333015	744751	1.5	Nacelle
17	Unknown	333009	744735	1.5	Nacelle
18	Calliscolia	332925	744809	1.6	Nacelle
19	Unknown	332936	744759	1.5	Nacelle
20	Unknown	332919	744770	1.5	Nacelle
21	Unknown	332926	744723	1.5	Nacelle
22	Unknown	332868	744714	1.6	Nacelle
23	Unknown	332892	744738	1.6	Nacelle
24	North Nevay	332688	744627	1.7	Nacelle
25	East Nevay	333030	744393	1.4	Nacelle
26	Unknown	333082	744320	1.3	Nacelle
27	Murleywell	335024	745668	1.5	Nacelle
28	West Nevay	332776	743777	1.7	Nacelle
29	Unknown	332678	743498	1.9	Nacelle
30	Unknown	333261	744160	1.1	Blades
31	Muircroft	335611	744848	1.3	Full
32	Unknown	336114	745024	1.9	Full
33	Easter Denoon	334989	743904	0.7	Nacelle
34	Unknown	334879	743803	0.7	Blades
35	Derelict Property	334810	743556	0.9	None
36	Wester Denoon	334714	743150	1.2	Blades
37	Unknown	334703	742477	1.9	Nacelle



Locogen Ltd, 44 Constitution St, Edinburgh, EH6 6RS Tel: +44 (0) 131 555 4745; Email: info@locogen.com Company Number: SC370060; VAT Number: 983 3836 77

Project Description

Number of Turbine(s): 1

Turbine Model: EWT Directwind 54

Hub Height: 50m
Blade diameter: 54m
Total height to blade tip: 77m

Turbine location: 334397 744313

Notes

APPROVED BY:

This table provides a list of dwellings shown in the Dwellings and ZTV drawing ING081.

PROJECT: Ingliston Farm

DRAWING TITLE: List of Dwellings
DRAWING NO: ING082

DOCUMENT SIZE: A3

SCALE: n/a
DATE: 04/09/2013

DRAWING BY: Bojan Jevtic

Andy Lowe



Locogen Ltd 44 Constitution Street Edinburgh EH6 6RS

Mr David Gray Angus Council County Buildings Market Street Forfar Angus DD8 3LG

7th October 2013

By email (grayrd@angus.gov.uk) only

Dear Mr Gray,

Re: 13/00865/FULL: Single Wind Turbine on Land at Ingliston Farm, Angus

As per previous correspondence with members of your department, I note that comments have been made by two local residents regarding the information within the application form which accompanied the above application to Angus Council. I hope that the below notes offer some clarity.

Land ownership certificate

Mr Shaw is one of the shareholders of R and W Whitton Ltd, who own the land at Ingliston Farm. The other shareholders are all members of the Shaw family and the Limited Company has been structured in a way which best suits the farming business. It is not considered that this should be viewed as misleading, especially as the Supporting Environmental Document (see page 5) outlines that Ingliston Farm has been in Mr Shaw's family's ownership for over 70 years. If required the 'Company/Organisation' under 'Applicant Details' in the application form can be amended to R and W Whitton Ltd.

There is no tenancy in place at Ingliston Farm, and the Title Deeds are in the name of R and W Whitton Ltd. I can therefore confirm that no part of the application site sits within an agricultural holding.

Access to or from a public road

A suitable sized bell-mouth junction has been included within the application boundary, as we are aware that this may be required following more detailed assessment. Detail of the proposed access route is included within the submission. However, as outlined within the Supporting Environmental Document (page 13), if consented a full Transport Assessment can be provided to Angus Council's Roads Department for discussion and approval. We would be happy to amend the application form if this is deemed necessary at this stage.

Proximity to trees

Although a small proportion of the proposed access track will follow close to a field boundary which lies adjacent to an area of woodland, it is considered that to state that there are trees adjacent to the application site could be very easily misinterpreted to be a declaration that the proposed wind turbine is adjacent to an area of woodland. As such, the application form was completed accordingly. The wind turbine is located over



400m away from the woodland in question, and the Phase 1 Habitat Survey which has been submitted alongside the application (see Appendix B of the Supporting Environmental Document) has concluded that this distance is sufficient for the proposed turbine to not impact upon any species currently inhabiting the woodland.

I trust the above suitably addresses the comments raised. If following a review of this information you feel that changes to the application form would be suitable I would be happy to discuss making any modifications you deem appropriate.

Yours sincerely,

Α

Andy Lowe

E: andy.lowe@locogen.com



Locogen Ltd 44 Constitution Street Edinburgh EH6 6RS

Mr David Gray Angus Council County Buildings Forfar, Angus DD8 3LG

15th November 2013

By email (grayrd@angus.gov.uk) only

Dear Mr Gray,

Re: 13/00865/FULL: Single Wind Turbine on Land at Ingliston Farm, Angus

I note that comments from the residents of Easter Denoon have recently been submitted to Angus Council regarding the above application. I feel that the majority of these comments have been addressed in the original application and in the letter to Angus Council dated 7th October. However, there are a number of these observations which may raise unnecessary concern with other nearby residents and as such I would like to provide further clarity.

There are a small number of comments raised which I have not addressed. Some of these can be addressed by further review of the Supporting Environmental Document and some appear to be directed elsewhere. Some of the comments are also considered irrelevant to the determination of this planning application, for example questions regarding the performance of the Ark Hill Wind Farm.

The comments and my responses are set out below:

Comment: The Implementation Guide for Renewable Energy Proposals, Angus Council 2012, includes an outline of where turbines could be sited. For the local area in which Ingliston Farm lies, it says there is no scope for ridge line developments.

Response: The aforementioned guidance highlights that the Igneous Hills landscape type (LT) is "considered to have scope for turbines circa 80m in height which do not disrupt the principle ridgelines or adversely affect the setting of important landscape features monuments such as Kinpurney Monument and Auchterhouse hillfort". This does not state that there is no scope for ridgeline developments.

Comments: The information provided in relation to the Application Form (Full) is incorrect in at least six places (followed by several bullet points).

Response: It is considered that the letter submitted to Angus Council on 7^{th} October addressed the majority of these comments.

Regarding the reference to SEPA's Guidance Notes 8 and 9, it is considered that the Local Planning Authority will consult with SEPA, if they deem necessary, following review of this guidance. Notes 8 and 9 are guidance documents, so claims that the developer is in breach of Environmental Legislation are unfounded. It is understood that provision of a comprehensive Construction Method Statement would be a condition of any future planning permission. Within said document, full details of site drainage measures would be provided for approval by the Council and SEPA prior to any construction works commencing and in accordance with all relevant environmental legislation and guidance.



In any case, as outlined within Chapter 6 of the Supporting Environmental Document, due to the small increase in permanent hardstanding there are not considered likely to be any significant increases in flooding risk.

It is considered that the above response is sufficient to provide clarity on the wider comments raised regarding flooding, drainage and hydrology.

Comment: The applicant claims there are 51 houses within the 2km radius. This figure is incorrect. At least 12 houses found to date have been omitted.

Response: A desk-based assessment to determine the residential dwellings within 2km of the proposed development was completed using GIS and online mapping tools. This methodology was agreed with Angus Council prior to submission as it was considered sufficient to provide an overview of the impact on local residents. There are obviously limitations to these tools. To respond to this comment we have purchased AddressBase $^{T\tilde{M}}$ Plus data from Ordnance Survey. This data uses the Royal Mail Postcode Address File (PAF) to pinpoint individual dwellings. This data highlights 57 dwellings listed under the 'Residential' category. After a cross-referencing exercise it is apparent that only one of these is an outlier which has not been recognised by the original assessment. The dwelling in question is Newhouse of Eassie, at grid reference 334603, 745739. The remaining dwellings are considered to be included within the clusters that have already been assessed. As such, the conclusions within Chapter 5 of the Supporting Environmental Document will not change. Newhouse of Eassie is located approximately 1.5km to the north of the proposed turbine. The dwelling is surrounded by trees to the south, east and west. This will provide significant screening and any potential visual impact caused by the proposed development is therefore considered to be negligible.

Comment: The turbines already built in Strathmore (Arnbog, Agrico & Sprottie) have been excluded from the Cumulative Visual Impact Study.

Response: At the time of submission, all turbines (over 30m in height) in planning, consented and operational have been included within a detailed Cumulative Landscape and Visual Impact Assessment. Any turbines excluded from the written assessment do not fit these parameters. As the three developments mentioned above are commissioned they will however be included in the photomontages, where visible.

Comment: The Drawings ING001-038 relating to 'Zones of Theoretical Visibility' are based on 1m or 1.8m AGL (above ground level). This means that no consideration has been given to visual impact from a property above a height of 1.8m.

Response: Within the supporting information submitted to Angus Council, the references to 1m AGL clearly state "the blades, nacelle and tower down to a point at least 1m AGL are theoretically visible in these areas". This is not therefore a reference to a receptor viewer height. The viewer height at 1.8m AGL is used to allow for easier cross-referencing between the ZTVs and the photomontages, for which the viewer height is the same, as defined by the height of the camera when the photographs are taken. This also sets the parameters for anyone using the photomontages in their assessments.

To confirm, the impact on residential dwellings is assessed in Table 16 of the Supporting Environmental Document.

Comment: The viewpoints chosen are probably the most obscure that could be chosen.

Response: Before completing the photography visit the viewpoints were chosen in consultation with Angus Council. 14 viewpoints were initially submitted, which is considered to be more than sufficient to demonstrate the visual impact of the proposed development on the surrounding area and its inhabitants.



Comment: No wind monitoring data has been provided to assess the suitability of the site ... Until a robust and accurate 12 month wind assessment is carried out for SE Ingliston claims from the developer regarding revenue from the turbine and the benefits to the applicant must be disregarded.

Response: There is no requirement to complete wind monitoring at the site. The figures included within the Supporting Environmental Document are based on a detailed desk-based assessment purchased by the applicant. No claims regarding revenue generation from the proposed development have been made.

Comment: Noise monitoring/modelling (several bullet points).

Response: Chapter 11 and Appendix C within the Supporting Environmental Document confirm that the limits set by the ETSU-R-97 regulations will not be exceeded at any properties. A Cumulative Noise Assessment has also been recently submitted to Angus Council's Environmental Health Department. This assessment concludes that there will be no significant cumulative noise impact, and that the noise levels at nearby receptors are not predicted to increase above the permitted levels as outlined within the conditions attached to the planning permission for the Ark Hill Wind Farm. It is not considered that any omissions have been made in the submitted Noise Assessments. A circa 700m residential separation distance is relatively large for a single turbine scheme, and our assessments have concluded this will be sufficient to remove the risk of unacceptable noise impact on nearby dwellings.

Comment: Shadow flicker (several comments).

Response: Given that there are no properties within 540m of the proposed development, there will be no significant impact on nearby dwellings resulting from shadow flicker. A full Shadow Flicker Assessment is included in Chapter 10 of the Supporting Environmental Document.

Comment: Total disregard is given to Balgownie, Eassie and Castleton settlements.

Response: Individual dwellings within 2km have been included in Table 16 of the Supporting Environmental Document, at the request of Angus Council. Any omissions are outlined above. Villages and Towns within 15km are included in the same table. The settlements mentioned above are not included due to their size and proximity to the turbine.

Comment: Scant regard is given to Balkeerie Village and no mention is made of Ingliston Farm Cottages (five properties).

Response: Seven dwellings at Ingliston Farm Cottages and several properties at Belkeerie are included in Table 16 of the Supporting Environmental Document. These can also be seen in Drawings ING081-082.

Comment: TV/Radio/Phone signal (two comments).

Response: No objections were raised by telecommunication link operators during preapplication consultation. This is addressed in Chapter 12 of the Supporting Environmental Document.

Comment: There is no evidence available to show that there has been consultation with the MoD.

Response: It is noted in Chapter 13 of the Supporting Environmental Document that "it is understood that the Ministry of Defence (MoD) can no longer resource the provision of



pre-application consultation advice. As such, no consultation has been initiated with the MoD. The site lies within a low priority military low flying zone and therefore should not raise concerns in relations to low flying military aircraft. Based on desk-based GIS modelling, it is also considered that the Ingliston Farm site will not be visible to MoD radar at RAF Leuchars, which is located approximately 27km south south east of the proposed turbine location. It is therefore considered unlikely that the MoD will raise concerns over the radar visibility of the Ingliston Farm wind turbine." Whereas it is understood that Angus Council have not received a consultation response from the MoD, it is not expected that there will be any significant concerns raised. It is noted that neither NATS En Route Ltd nor Dundee Airport have objected to the proposal.

Comment: Archaeology and Cultural Heritage (several comments).

Response: The Council's Archaeologist has not objected to the proposal. Historic Scotland have been consulted throughout the application and a Heritage Setting Assessment has been completed by AOC Archaeology to provide further information, following comments raised in Historic Scotland's response dated 17/10/2013. It is considered there will not be a significant level of impact, given the scale of the proposed turbine and its classification as non-EIA development. The Heritage Setting Assessment has been submitted to Historic Scotland for review.

Comment: I am concerned about the credibility of the information provided. The cavalier attitude of the developer's representatives does not bode well to complying to any mitigation measures or planning conditions imposed if this application is approved.

Response: A thorough assessment has been carried out to determine the likely impact and acceptability of a single turbine scheme at the selected location. Standard methodologies have been utilised in desk-based assessments, coupled with site visits to assess potential impacts on landscape, visual and residential amenity, ecology, cultural heritage and access. Conditions attached to a planning permission must be discharged prior to development works commencing, and/or adhered to for the duration of the project. This is a legal requirement.

Comment: No permission was sought by the developer (as required under the Land Reform Access Code) ... to carry out survey work on Easter Denoon Farm which includes the land pertaining to Denoon Law and the Castleward and Carlunie Hills.

Response: The Land Reform (Scotland) Act 2003 outlines statutory rights to most land and inland water. The Scottish Outdoor Access Code "provides detailed guidance on the responsibilities of those exercising access rights and of those managing land and water. By doing so, the Code provides a practical guide to help everyone make informed decisions about what best to do in everyday situations".

Relating to accessing land for survey work, the guidance includes the following:

- "2.8: People carrying out field surveys of the natural or cultural heritage, such as of birds or plants, as a recreational activity or for educational purposes, are covered by access rights (see paragraph 3.64).
- 2.9: Access rights extend to activities carried out commercially or for profit, provided that these activities could also be carried on other than commercially or for profit (i.e. by the general public for recreational purposes or for educational activities or for crossing land) ... Other examples would be a commercial writer or photographer writing about or taking photographs of the natural or cultural heritage.
- 3.64: Access rights extend to individuals undertaking surveys of the natural or cultural heritage where these surveys have a recreational or educational purpose within the



meaning of the legislation. A small survey done by a few individuals is unlikely to cause any problems or concerns, provided that people living or working nearby are not alarmed by your presence. If you are organising a survey which is intensive over a small area or requires frequent repeat visits, or a survey that will require observation over a few days in the same place, consult the relevant land manager(s) about any concerns they might have and tell them about what you are surveying, for what purpose and for how long. If the survey requires any equipment or instruments to be installed, seek the permission of the relevant land managers."

It is not considered that the survey work required for a single wind turbine application constitutes classification as 'intensive' or 'frequent', nor has any equipment been installed. As such, permission was not sought for the short amount of time we and other sub-consultants were present on the aforementioned land. It is considered that our access rights were exercised responsibly, in line with the current guidance.

Comment: The negative impact on our community and county is too great for a desktop study riddled with omissions and inaccuracies to be deemed acceptable.

Response: We consider that the above responses demonstrate that this application is not 'riddled' with omissions and inaccuracies. As outlined above, site work has also accompanied the desk-based assessments which we have completed in our preparation of the application. As such, the supporting information submitted to Angus Council is not solely a 'desktop study'.

As outlined above, I feel that the majority of these comments have been addressed in the original application and through consultation with Angus Council. However, I am pleased to have the opportunity to provide the above clarity.

I would also like to clarify that through formal screening with Angus Council it was deemed that this application does not constitute EIA development. Also, Locogen Ltd are not the developer. Rather, we are acting on behalf of the applicant who is a Director and shareholder of R and W Whitton Ltd.

I would also like to confirm that in the preparation of the application we have followed Local and National good-practice guidance as highlighted within the methodology sections of the Supporting Environmental Document. We have been in consultation with Angus Council since project inception and are confident that the level of assessment completed and detail submitted is acceptable, as it has been for a number of previous applications for similar scaled developments in Angus and elsewhere in the UK. We have also demonstrated that we are happy to submit additional information, if requested by Angus Council and its statutory consultees. I therefore do not feel that the credibility of the work submitted should be brought into question.

I look forward to receiving the remainder of the statutory consultee responses and will be happy to hold further discussions with Angus Council, as necessary.

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Andy Lowe

E: andy.lowe@locogen.com



Locogen Ltd 44 Constitution Street Edinburgh EH6 6RS

30/10/2013

Alan Milne
Environmental Protection Officer
Angus Council
County Buildings
Market Street
Forfar
DD8 3WE

13/00865/FULL - Cumulative Noise Information

Dear Alan.

Thank you for taking the time to discuss the requirements for additional information to outline cumulative noise effects resulting from the proposed wind turbine at Ingliston Farm (13/00865/FULL) and the consented Ark Hill wind farm (03/00831/FUL).

Regarding the noise limits set for Ark Hill, I note the below extract from Condition 10 of the planning Decision Notice dated 24th February 2009:

That at Chamberwells, Nether Handwick and Western Denoon the wind turbine noise level, measured and rated in accordance with clauses a, b, & c below shall not exceed the noise limits delineated by the appropriate criterion curve for each property in the RES Supplement to Environmental Statement October 2005. At Upper Handwick and Ryehill the criterion curves for Chamberwells shall be used. At Easter Denoon the criterion curves for Wester Denoon shall be used. Noise levels at any other property, existing at the date of this permission shall not exceed an L_{A90} of 35 dB(A) for wind speeds up to 10 m/s at 10 metres height.

Part C of the Supplementary Environmental Information (RES, October 2005) includes details of background and predicted L_{A90} noise levels at 11 properties. The criterion curves for Chamberwells, Nether Handwick and Wester Denoon are also included in this document, for both daytime and night-time scenarios. This document is attached to this letter.

To provide a comprehensive overview of the cumulative effects of the addition of the proposed wind turbine at Ingliston Farm, the following works have been completed:

- 1. A detailed review of the Ark Hill Decision Notice and Part C of the Supplementary Environmental Information (RES, 2005);
- 2. Desk-based ReSoft Windfarm modelling of the Ark Hill wind farm using the ISO 9613 (1 and 2) standard, applying parameters as outlined in the Institute of Acoustics 'Good Practice Guide to the Application of ETSU-R-97 for the Assessment and Rating of Wind Turbine Noise' (2013). This will provide a comparison between the software used by RES in 2005 and by Locogen in 2013;
- 3. Desk-based cumulative ReSoft Windfarm modelling for Ingliston Farm and Ark Hill using the same standard and guidelines as above;

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- 4. An assessment of whether the cumulative predicted noise levels will increase above the criterion limits for those properties specifically mentioned in Condition 10 of the Ark Hill Decision Notice (see above); and
- 5. An assessment of whether the cumulative predicted noise levels will exceed the 35dB limit for the remaining properties from the assessments completed in 2005 as stated in Condition 10.

Desk based noise modelling

Noise predictions were carried out for a wind speed of 10m/s at 10m height. The results are plotted in the form of noise contours shown in Figure 1 below (darkest blue contour being 35dB). It should be noted that this represents downwind propagation in all directions simultaneously, which clearly cannot happen in practice. The predicted turbine noise data has been calculated for the proposed Ingliston Farm development as outlined within the submitted Supporting Environmental Document. The atmospheric absorption and ground factor parameters set out within the Supporting Environmental Document have also been used. The octave data supplied in Part C of the Supplementary Environmental Information has been used for the Ark Hill turbines.

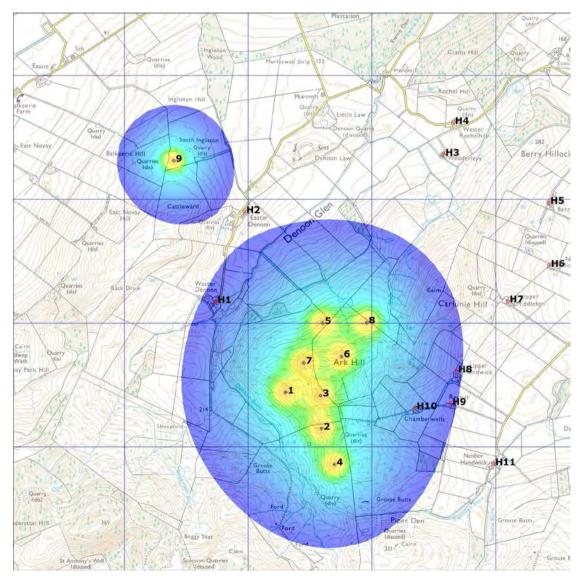


Figure 1: Predicted cumulative noise model (using ReSoft Windfarm and LA90 data)



Tables 1 and 2 below outline the daytime and night-time criterion limits for each of the 11 properties from Part C of the Supplementary Environmental Information submitted for the Ark Hill wind farm (RES, 2005), respectively. These can be viewed against the predicted noise for Ark Hill as a standalone development (based on both RES and Locogen models) and the predicted cumulative noise, which includes the proposed development at Ingliston Farm. The final column outlines the difference between the predicted cumulative noise levels and the approved maximum criterion limits included within Condition 10 of the Ark Hill Decision Notice. Predicted noise levels are based on $L_{\rm A90}$ data.

No.	Name	Daytime Criterion Limit	Ark Hill Predicted Noise – 10m @ 10 m/s (dB) (RES, 2005)	Ark Hill Predicted Noise – 10m @ 10 m/s (dB) (Locogen, 2013)	Cumulative Predicted Noise - 10m @ 10 m/s (dB)	Difference between Cumulative Predicted and Daytime Criterion Limit (dB)
H1	Wester Denoon	47.8	36.3	35.61	35.92	-11.88
H2	Easter Denoon	47.8	33.5	32.41	34.32	-13.48
НЗ	Wedderleys	47.8	25.4	29.04	29.36	-18.44
H4	Wester Rochelhill	47.8	28.7	27.61	28.00	-19.80
H5	Berryhillock	46.6	23.5	27.54	27.73	-18.87
Н6	Nether Middleton	46.6	24.5	28.82	28.95	-17.65
Н7	Upper Middleton	46.6	28.0	31.45	31.54	-15.06
Н8	Upper Handwick	46.6	34.3	35.43	35.47	-11.13
Н9	Ryehill	46.6	35.4	35.47	35.50	-11.10
H10	Chamberwells	46.6	37.5	38.19	38.21	-8.39
H11	Nether Handwick	40.9	31.9	31.65	31.70	-9.20

Table 1: Daytime noise information

No.	Name	Night- time Criterion Limit	Ark Hill Predicted Noise – 10m @ 10 m/s (dB) (RES, 2005)	Ark Hill Predicted Noise - 10m @ 10 m/s (dB) (Locogen, 2013)	Cumulative Predicted Noise - 10m @ 10 m/s (dB)	Difference between Cumulative Predicted and Night-time Criterion Limit (dB)
H1	Wester Denoon	47.6	36.3	35.61	35.92	-11.68
H2	Easter Denoon	47.6	33.5	32.41	34.32	-13.28
НЗ	Wedderleys	47.6	25.4	29.04	29.36	-18.24
H4	Wester Rochelhill	47.6	28.7	27.61	28.00	-19.60
H5	Berryhillock	44.3	23.5	27.54	27.73	-16.57
Н6	Nether Middleton	44.3	24.5	28.82	28.95	-15.35
Н7	Upper Middleton	44.3	28.0	31.45	31.54	-12.76
Н8	Upper Handwick	44.3	34.3	35.43	35.47	-8.83
Н9	Ryehill	44.3	35.4	35.47	35.50	-8.80
H10	Chamberwells	44.3	37.5	38.19	38.21	-6.09
H11	Nether Handwick	43.0	31.9	31.65	31.70	-11.30

Table 2: Night-time noise information



As can be seen in the tables above, predicted cumulative noise levels at dwellings Chamberwells, Nether Handwick, Wester Denoon, Upper Handwick, Ryehill and Easter Denoon will remain significantly below the criterion limits. These properties are specifically mentioned in the Ark Hill planning condition outlined above.

For Wedderleys, Wester Rochelhill, Berryhillock, Nether Middleton and Upper Middleton, the predicted cumulative noise levels will remain significantly below the 35dB limit at 10m and at 10 m/s, as outlined in Condition 10 of the Ark Hill Decision Notice.

For all properties the increase between predicted Ark Hill noise levels and cumulative noise levels, based on the Locogen 2013 assessment, demonstrates that there will be a maximum of a 1.91dB increase at Easter Denoon. However, the predicted cumulative noise level remains 13.48dB (daytime) and 13.28dB (night-time) below the criterion limit set for the property. After Easter Denoon, the largest increase is predicted to be at Wester Rochelhill, however this will only receive a 0.39dB increase in noise levels.

There are no additional properties within our standalone assessment for the proposed development at Ingliston Farm for which any significant increase in noise is expected.

You will note that there are some minor discrepancies with predicted Ark Hill noise levels, between the RES (2005) and the above assessments. It is considered that one of the below reasons will have led to this discrepancy:

- The Ark Hill Noise Assessment (Part C of the Supplementary Environmental Information) was completed using the CadnaA Commercial Noise Propagation Software. Although the ISO-9613 model was used, it is possible that minor differences between this software and the ReSoft Windfarm Software, which has been utilised to complete the above assessment, could lead to a minor discrepancy;
- 2. The octave data provided within the Ark Hill Noise Assessment is for 10m height and at 8m/s wind speed. The extrapolation of this to determine predicted noise levels for 10m at 10m/s, which has been utilised to complete the above assessment, could have led to minor discrepancies; or
- 3. As per the Institute of Acoustics 'Good Practice Guide to the Application of ETSU-R-97 for the Assessment and Rating of Wind Turbine Noise' (2013), the above assessment has included a ground factor of 0.5, a receiver height of 4.0m, a temperature of 10°C and 70% humidity. Although the Working Group on Noise from Wind Turbines guidance 'The Assessment and Rating of Noise from Wind farms', ETSU Report ETSU-R-97 (1996) is referenced in the 2005 RES assessment, it is not confirmed within the document whether ground factor, humidity and temperature parameters have been set to the same levels.

In any case, the discrepancies are small and I am confident that the information above demonstrates that the installation of a wind turbine at the location proposed at Ingliston Farm will not increase the noise levels for nearby dwellings beyond the maximum levels included within Condition 10 of the Decision Notice for the Ark Hill wind farm. Indeed, it is expected the cumulative noise levels will be significantly below the maximum limits for all dwellings.

I trust that this letter suitably address your comments.

Please let me know if you require any further information.

Yours sincerely,



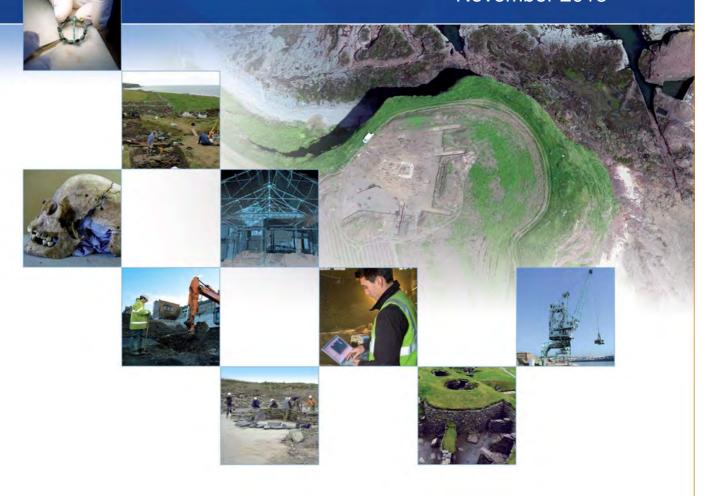
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Ingliston Farm Turbine Angus Assessment of Impacts upon Setting

AOC project 22580 November 2013





Ingliston Farm, Angus Assessment of Impacts upon Setting

On Behalf of: Locogen Ltd

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Edinburgh EH6 6RS

National Grid Reference (NGR): NO 34397 44313

AOC Project No: 22580

Prepared by: Vicky Oleksy

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Date of Report: November 2013

This document has been prepared in accordance with AOC standard operating procedures.

Author: Vicky Oleksy Date: November 2013

Approved by: Mike Roy Date: November 2013

Draft/Final Report Stage: Final Date: November 2013

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Appendix 1: Assessment Methodology

1 Introduction

- 1.1 AOC Archaeology Group was commissioned by Locogen Ltd to undertake an assessment of impacts upon the settings of a number of Scheduled prehistoric monuments in close proximity to the proposed turbine at Ingliston Farm, near Glamis, Angus. The assessment is required following a request by Historic Scotland for further information subsequent to their review of the planning application.
- 1.2 This report assesses the potential impacts upon the settings of burial mounds at Wester Denoon (HS Index 4764), Castleward (HS Index 4742) and Carlunie Hill (HS Index 6449) and the fort at Denoon Law (HS Index 138) (See Figure 1). Throughout the assessment, the report will also consider the visual relationship between these monuments, making note also of the fort at Kinpurney Hill (HS Index 3219) where relevant, and how the proposed turbine may affect visual relationships with that monument.

2 Methodology

- 2.1 The assessment aims to establish the cultural significance and visual sensitivity of the Scheduled Monuments in question and establish the magnitude of impact upon said monuments by the proposed turbine at Ingliston Farm. The assessment of such factors has been informed by desk-based study, GIS analysis, site visits and visualisations.
- 2.2 Cultural significance, visual sensitivity and magnitude of impact having thus been established, a matrix, presented in Table 1 below, will be used to inform conclusions regarding the significance of these impacts:

TABLE 1: SIGNIFICANCE OF IMPACT ON THE SETTING OF CULTURAL HERITAGE FEATURES

Impact	Relative Visual Sensitivity				
magnitude	Marginal	Low	Medium	High	
High	Minor	Minor	Moderate	Major	
Medium	Negligible	Minor	Minor	Moderate	
Low	None/Negligible	Negligible	Minor	Minor	
Marginal	None	None	Negligible	Minor	
The impacts assembled in highlighted calls are friendfigured in terms of the Environmental Impact					

The impacts recorded in highlighted cells are 'significant' in terms of the Environmental Impact Assessment (Scotland) Regulations 2011

2.3 A detailed methodology is presented in Appendix 1 of this report.

3 Site Visits

- 3.1 Site visits were undertaken on Thursday 31st October 2013 in variable weather ranging during the day from partly overcast to sunny and clear. Records made in the field were guided by the methodology presented in Appendix 1 and in particular by the Aesthetic Appraisal forms as presented in Table 3 of the appendix. In general, factors such as condition, orientation, visual relationships with nearby sites and about the nature of the current settings of the monuments were made.
- 3.2 A brief discussion of each site is outlined below.

Castlward, burial mound

- 3.3 The monument at Castleward comprises a burial mound measuring 6 m in diameter with a maximum height of c. 0.4 m (Plate 1). It is surrounded by a 2 m ditch and is slightly dished on its top (RCAHMS 1983). The monument is extremely denuded and only clearly legible as a cairn once one is within c. 20 m of it. The cairn is located near the northeastern summit of Castleward Hill which lies along the ridge line which runs between Kinpurney Hill and Denoon Law. Views to the north-east, east and south are primarily of adjacent hill tops and ridges which mask valleys and lower hills. Views to the west are expansive as the land drops away to the Dean Water.
- 3.4 Denoon Law is obscured by the actual northeastern summit of Castleward Hill, the cairn itself lying slightly off this to the southwest. Looking southwest, the burial mound at Western Denoon is visible but only to the trained eye (and even then with the assistance of an existing fencepost located at the centre of the cairn). Carlunie Hill is clearly visible to the west-southwest.

Wester Denoon, burial mound

- 3.5 Wester Denoon burial mound is located at the southwestern summit of Castleward Hill. It measures c. 13 m in diameter and survives to a height of c. 2 m, and is visible as an earthen and stone mound (Plate 2). A modern fenceline bisects the cairn. Views across lower lying to land to the northwest, towards the Dean Water, are expansive. Unlike views from Castleward, views from Wester Denoon include views along the valley to the east created by Ewnie Burn and to the summits of Carlunie Hill and Ark Hill beyond.
- 3.6 Views of Denoon Law are obscured by intervening topography. The cairn on Carlunie Hill is readily discernable. The location of Castleward can be seen, though the cairn is not recognisable.

Denoon Law, fort

- 3.7 Denoon Law, fort is a well-preserved fort, surviving as well-defined earthwork ramparts and retaining visible foundations of internal structures (Plate 3). The entrances to the fort are clearly visible to the east and west, though the former may be a later insertion. From the eastern entrance there are extensive views along the Ewnie Burn Valley which is aligned northeast to southwest to the south of the fort. There are also extensive views from the fort to the north where land dips from Castleward Hill eastward towards the Ewnie Burn. Views beyond Castleward Hill to the west and Carlunie Hill, and its associated ridge, to the southeast and east are limited by these topographical features.
- 3.8 While the landform of Castleward Hill is clearly visible from Denoon Law, the cairns at Castleward and Wester Denoon are not clearly visible. This is a result of the current condition of the cairns (e.g. their reduced height) and the positions of the cairns along a linear hilltop that sees undulations of the ridge obscuring views. Kinpurney Hill, fort is visible from some, but by no means all, locations within

Denoon Law Fort, most clearly from the southern ramparts of the monument. The cairn at Carlunie Hill is clearly visible breaking the skyline to the southeast.

Carlunie Hill, cairn

- 3.9 The cairn at Carlunie Hill comprises a grass-covered mound measuring c. 14 m in diameter and 2 m high. The cairn has been bisected by two post and wire fence lines (Plate 4). The cairn is set on a prominent hill with commanding views across Strathmore to the north and more locally along the Ewnie Burn valley to the west and Glen Oglivie to the east. Views to the south are of higher hilltops such as Auchterhouse Hill and Craigowl Hill, which stand to heights of 426 m and 455 m respectively.
- 3.10 Views of the other monuments in question here are generally possible. However, the existing Arkhill Wind Farm distracts in views towards Wester Denoon burial mound. The location of the cairn at Castleward is visible but the monument itself is not legible.

4 Impact Assessment

Castleward, burial mound

- 4.1 As noted above, the low height of the burial mound at Castleward, which appears to be greatly denuded, makes it difficult to identify or understand from any great distance. While views from the cairn into the surrounding landscape are clearly expansive, particularly views to the north-west, the cairn itself can no longer be understood as a feature when viewed from the wider landscape. Given the current condition of the monument, the visual sensitivity of the cairn is judged to be Medium.
- 4.2 The proposed turbine at Ingliston Farm is located in close proximity to the cairn, c. 500 m to its north. As such, the turbine will appear quite prominent in views towards the north (Viewpoint 15). However, given the condition of the cairn the turbine cannot be said to challenge the cairn for dominance in the landscape. Furthermore, the significant sight line to the cairn is along the ridge of Castleward Hill and from the cairn itself the most important view is likely southwest towards the cairn at Wester Denoon. The proposed turbine is not located directly along this primary access, being set off to the north c. 15°. Additionally, the turbine will be located behind the viewer when looking towards the cairn at Wester Denoon. Given this, an impact of Medium magnitude is predicted upon the setting of the cairn. This will result in an impact of *Minor* significance.

Wester Denoon, burial mound

- 4.3 Wester Denoon burial mound is clearly discernable as a cairn. It commands views along the Ewnie Burn valley to the east and across Strathmore to the northwest. Additionally, it can be seen and is legible as a burial monument from a number of locations in the landscape. As such, its visual sensitivity to change is judged to be High.
- 4.4 The proposed turbine is located c. 1.3 km from the cairn (Viewpoint 16). The turbine will form a significant new feature within the wider landscape setting of the cairn. This is deemed to be an impact of Medium Magnitude and *Moderate* significance. However, the turbine will be located off the alignment of monuments extending along the ridge of Castleward Hill from Kinpurney Hill to Denoon Law. It will not affect views from the cairn along the Ewnie Burn valley and will form a single feature in expansive panoramic views across low-lying land to the north and west towards the Dean Water. It will not interrupt views to Carlunie Hill. As has already been noted above, the cairn at Castleward is not clearly visible from Wester Denoon and neither is the fort at Denoon Law. As such, while the

turbine will be visible in views in this direction it will not affect the visibility of these features nor challenge them for dominance.

Denoon Law, fort

- 4.5 Denoon Law is a well-preserved fort which has clearly been placed in a commanding and strategic position. Its visual sensitivity is judged to be High.
- The proposed turbine is located c. 1.1 km to the west of Denoon Law on the opposite side of Castleward Hill (Viewpoint 2). The turbine is predicted to form a significant alteration to the wider landscape setting of the monument. This is an impact of Medium magnitude and *Moderate* significance. However, the turbine will be located beyond those elements of the setting which directly contribute to the understanding of the cultural significance of the monument. While historically there may have been visual links between the fort and the two burial mounds on Castleward Hill these no longer exist as the cairns (the northernmost apparently no longer surviving to its full height), are not visible from the fort. As such, the turbine will not interrupt an extant visual link. Furthermore, the turbine will not be located on land clearly commanded by the fort e.g. the lower-lying land between Castleward Hill and Denoon Law to the west and north and land along the Ewnie Burn valley to the south. It will therefore not directly affect those elements of setting which contribute most to the understanding and appreciation of the fort.

Carlunie Hill, cairn

- 4.6 Carlunie Hill is a well preserved cairn which retains its overtly intended relationship with its visual setting. Its location on top of Carlunie Hill affords expansive views both from and to it. Its placement at the summit of the hill means that it breaks the skyline and is conspicuous when viewed from the surrounding landscape. Its relative visual sensitivity is judged to be High.
- 4.7 The proposed turbine at Ingliston Farm is located c. 2.4 km from the cairn (Viewpoint 5). It will feature perphipherally in the expansive views of Strathmore, being located to the west while the most spectacular views of Strathmore are to the north. It will not intrude upon the more local elements of the cairn's setting, e.g. along the Ewnie Burn valley or Glen Oglivie. As has been noted above, while there may have been a visual link between Carlunie and the Castleward burial monuments in the past, that link has been significantly diminished as a result of the condition of the Castleward burial mound. As such, the turbine cannot be seen to be challenging Castleward for dominance in views from Carlunie. In any case the turbine would be set off the theoretical sightline by some 20° and viewed further to the right/north than the location of Castleward. In views towards Wester Denoon from Carlunie the turbine will be located some 55° off the sightline to the right, making it largely peripheral. It is judged that the impact upon the setting of Carlunie Hill will be of Low magnitude and therefore *Minor* significance.

5 Summary

- 5.1 This assessment of impact upon the settings of the Castleward, Wester Denoon and Carlunie burial monuments and Denoon Law, fort has been undertaken at the request of Locogen Ltd. It has indicated that the proposed wind turbine at Ingliston Farm will have impacts of *Minor* significance upon the settings of Castleward burial mound and Carlunie Hill cairn. Impacts of *Moderate* significance are predicted upon the settings of Wester Denoon burial mound and Denoon Law fort
- 5.2 The impacts of *Minor* significance upon the settings of Castleward and Carlunie Hill are not considered to be significant in terms of EIA regulations. The impacts of *Moderate* significance

INGLISTON FARM TURBINE, ANGUS: ASSESSMENT OF IMPACTS UPON SETTING

predicted upon the setting of the Wester Denoon and Denoon Law are significant in terms of EIA regulations and, while the turbine does not constitute an EIA development, will require consideration in the planning decision. Despite these assessments of significance, it is not considered that the placement of the Ingliston Farm turbine in the proposed location will impede the ability to understand the monuments or their ability to inform, in which their cultural value lies.

5 References

Bergh, S 1995, Landscape of the Monuments

Bradley, R; The Good Stones, 2000, Society of Antiquaries of Scotland

Burra Charter (AUS ICOMOS, 1999) http://www.icomos.org/australia/burra.html

Scottish Executive 2002 PAN 45 Renewable Energy Technologies and Annex 2 Spatial Frameworks and Supplementary Planning Guidance for Wind Farms

Thom, Alexander 1967 Megalithic sites in Britain University Press, Oxford

Thom, Alexander 1971 *Megalithic Lunar Observations* University Press, Oxford Historic Scotland 2011 *Scottish Historic Environment Policy (SHEP)*

Historic Scotland 2010 Managing Change in the Historic Environment: Setting

Lambrick, G 2008 Setting Standards: A Review prepared on behalf of the IFA http://www.archaeologists.net/modules/icontent/inPages/docs/Setting.pdf

ICOMOS, 2005 Xi'an Declaration on the Conservation of the Setting of Heritage Structures, Sites and Areas Adopted Xi'an, China by the 15th General Assembly of ICOMOS on 21 October 2005 http://www.international.icomos.org/charters/xian-declaration.pdf

RCAHMS 1983 The Royal Commission on the Ancient and Historical Monuments of Scotland. The archaeological sites and monuments of Central Angus, Angus District, Tayside Region, The archaeological sites and monuments of Scotland series no 18 Edinburgh

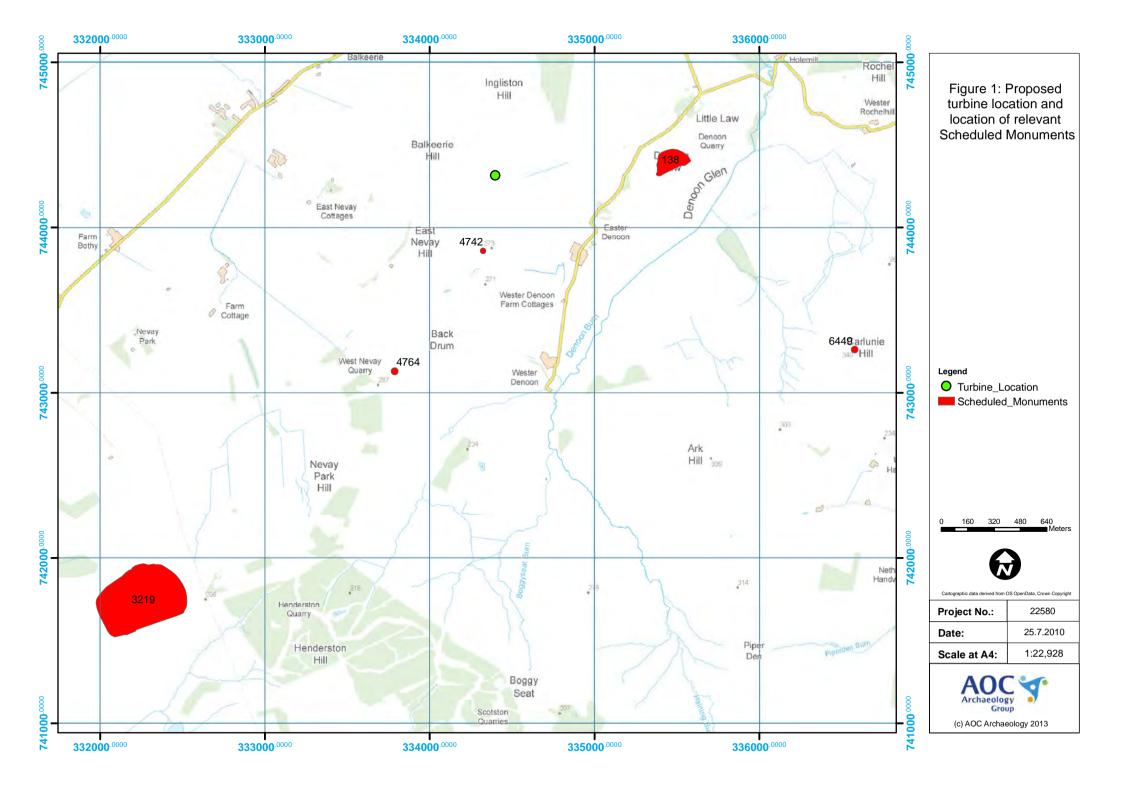




Plate 1: Castleward, burial mound from the northeast



Plate 2: Wester Denoon, burial mound from southwest



Plate 3: Denoon Law, fort from east



Plate 4: Carlunie Hill, cairn from southeast

A	pendix	1:	Assessment	Met	hodol	ogy
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Setting

The X'ian Declaration on the Conservation of the Setting of Heritage Structures, Sites and Areas adopted by the 15th General Assembly of ICOMOS in October 2005 (ICOMOS 2005) states that:

'The setting of a heritage structure, site or area is defined as the immediate and extended environment that is part of, or contributes to, its significance and distinctive character'

In October 2010, Historic Scotland published a guidance document on setting as part of their *Managing Change in the Historic Environment* series of guidance notes intended to explain how to apply the policies contained in the *Scottish Historic Environment Policy* (SHEP). This document defines setting thus:

Setting should be thought of as the way in which the surroundings of a historic asset or place contribute to how it is experienced, understood and appreciated.

Monuments, buildings, gardens and settlements were not constructed in isolation. They were often deliberately positioned with reference to the surrounding topography, resources, landscape and other monuments or buildings. These relationships will often have changed through the life of a historic asset or place

Setting often extends beyond the immediate property boundary of a historic structure into the broader landscape' (Historic Scotland 2010).

It also states that:

'The setting of a historic structure can incorporate a range of factors, not all of which will apply to every case. These include:

current landscape or townscape context;

visual envelope, incorporating views to, from and across the historic asset or place;

key vistas, framed by rows of trees, buildings, or natural features that give a an asset or place a context, whether intentional or not;

the prominence of the historic asset or place in views throughout the surrounding area;

character of the surrounding landscape;

general and specific views including foregrounds and backdrops;

relationships between both built and natural features;

aesthetic qualities;

other non-visual factors such as historical, artistic, literary, linguistic, or scenic associations, intellectual relationships (e.g. to a theory, plan or design), or sensory factors;

a 'Sense of Place': the overall effect formed by the above factors' (Historic Scotland, 2010).

Assessing Cultural Value

The methodology used regards all heritage or archaeological remains as being sensitive to some degree and is also guided by local, regional, national and international heritage policy (e.g. various charters including the Burra Charter (Aus ICOMOS, 1999)), which defines sites and monuments as potentially comprising a very wide variety of heritage remains. In some cases a site or building which does not have a protective designation assigned to it could nonetheless still be rated as having the same significance as another one which *is* protected. This is because the selection of items for listing and scheduling is an ongoing national activity. Generally, the criteria for judging archaeological significance are gradually evolving, with an increasing trend towards including more recent types of structures. In some cases, important buildings or monuments may have been overlooked during listing, or could now be judged worthy of listing, whereas they were not previously.

The criteria used to rate cultural heritage value in the assessment area are presented in Table 1 below:

TABLE 1: CRITERIA FOR ESTABLISHING RELATIVE CULTURAL VALUE

Cultural Value	Criteria
International and National	World Heritage Sites or Iconic Sites and Monuments; or Scheduled Ancient Monuments (Actual and Potential); or Category A Listed Buildings; or
	Inventory Gardens & Designed Landscapes or Inventory Battlefields Remains of national or international importance, or fine,
Regional	little-altered examples of some particular period, style or type Category B Listed Buildings; Remains of regional or more than local importance, or major examples of some period, style or type, which may have been altered.
Local	Remains of national importance that have been partially damaged. Category C Listed Buildings Remains of local importance, lesser examples of any period, style or type, as originally constructed or altered, and simple, traditional sites, which group well with other significant remains, or are part of a planned group such as an estate or an industrial complex; Cropmarks of indeterminate origin.
Naglicible	Remains of regional importance that have been partially damaged or remains of national importance that have been largely damaged.
Negligible	Relatively numerous types of remains, of some local importance; findspots of artefacts that have no definite archaeological remains known in their context. Remains of local importance that have been largely damaged;
	Isolated findspots; Undesignated structures

Whilst the relative cultural value of site or monument is important for establishing the importance of a monument, it is widely recognised (see Lambrick 2008) that the importance of an asset is not the same as its sensitivity to change. Thus in determining visual effects by the proposed wind farm on the setting of monuments, both importance and sensitivity to visual change need to be considered.

Assessing Visual Sensitivity

Setting is a key issue in the case of some, but by no means all monuments. A nationally important site with high cultural value does not necessarily have high visual sensitivity. Our evaluation of the visual sensitivity of a given monument and the subsequent significance of impact on its setting takes cognisance of the four principal heritage values which closely resemble those laid down in the Burra Charter (AUS ICOMOS 1999, 2.1) and can be summarised as follows:

- Evidential Value: the potential to yield primary evidence about past human activity
- **Historical Value:** the ways in which the present can be connected through a place¹ to past people, events and aspects of life
- Aesthetic Value: the ways in which people derive sensory and intellectual stimulation from a place
- Communal Value: the meanings of a place for the people who relate to it, and whose collective experience or memory it holds.

The assessment of the scale of any impact on a given monument is based on the magnitude of proposed change to a monument and the extent to which that change would compromise or reduce the monument's cultural value i.e. its ability to inform this and future generations about humanity's past. The 'ability-to-demonstrate' is the key criterion used in establishing the cultural value of a monument or place as defined within the Burra Charter (AUS ICOMOS 1999). A direct impact on cultural value will occur if, and only if, views to or from the object of cultural value form an essential part of the information content of the monument.

Certain sites and monuments exist, for which it is generally accepted that their builders designed the monuments with particular intentional vistas or sightlines, perhaps incorporating or sighting across other monuments or natural features (see Renfrew & Bahn, 2001, 397; Bergh 1995; Bradley 2000). Amongst these we may include burial monuments and stone circles. Some scholars (e.g. Bergh 1995) have argued that some monuments have been sited in order that sightlines between them would have a particular significance, or that their intervisibility was a factor in the original selection of their locations. It has been argued that even single monuments could have significant relationships with the physical landform. Professor Alexander Thom (1967 & 1971) argued that sightlines projected from stone circles utilised features on the distant horizon to calculate the precise determination of significant astronomical events. In such instances the sightline between the monument and its horizon is arguably a characteristic of the monument itself. Thus, the positioning of a structure that caused an interruption to that sightline would clearly reduce the information content of the monument by removing or compromising one of its fundamental characteristics. This amounts to a reduction of its information content and in consequence an impact of this type would significantly reduce the cultural value of the site or monument.

The criteria for establishing a monument's relative visual sensitivity are outlined in Table 2 below.

TABLE 2: CRITERIA FOR ESTABLISHING RELATIVE VISUAL SENSITIVITY

Sensitivity*	Definition
High	A monument which retains an overtly intended or authentic relationship within its visual setting and the surrounding landscape. In particular ritual monuments which have constructed sightlines to and/or from them or structures intended to be visually dominant within a wide landscape area i.e. castles, tower houses, prominent forts etc.

¹ The term 'place' is used throughout the Burra Charter to describe a site, monument or landascape of cultural value

	A monument, the current understanding of which, relies heavily on its modern					
	aesthetic setting regardless of whether or not this was intended by the					
	original constructors or authentic users of the monument.					
	A monument which had an overtly intended authentic relationship with its visual					
	setting and the surrounding landscape but where that relationship has been					
	moderately compromised either by previous modern intrusion to the setting					
Medium	or landscape or where the monument itself is in such a state of disrepair					
Wicalam	that the relationship cannot be fully determined.					
	A monument, the current understanding of which, relies partially on its modern					
	aesthetic setting regardless of whether or not this was intended by the					
	original constructors or authentic users of the monument.					
	A monument which had an overtly intended authentic relationship with its visual					
	setting and the surrounding landscape but where that relationship has been					
	significantly compromised either by previous modern intrusion to the setting					
1.	or landscape or whereby the monument itself is in such a state of disrepair					
Low	that the relationship cannot be determined.					
	A monument whose placement within the landscape was not determined by					
	visual setting but by some other factor whether that be industrial,					
	agricultural or simply functional etc.**					
	A monument whose placement within the landscape was not determined by					
	visual setting but by some other factor whether that be industrial,					
Marginal	agricultural or simply functional etc; and is additionally in such a state of					
	disrepair that its relationship to its setting cannot be determined.					
	A site whose remains are located fully below the current ground surface (i.e. crop					
	mark sites), and subsequently for which neither the full extent nor					
None	significance of the site itself nor it setting can be determined without					
* Note that th	archaeological investigation.					
	e determination of a monument's sensitivity is first and foremost reliant upon the					

^{*} Note that the determination of a monument's sensitivity is first and foremost reliant upon the determination of its setting; i.e. a country house may have a high sensitivity within its own landscaped park or garden but its level of sensitivity may be less when considered within the wider landscape area.

In establishing the relative visual sensitivity of a monument we must first come to have an aesthetic appreciation of a monument and its setting. Table 3 below outlines the factors which must be considered when establishing an aesthetic appreciation and therefore determining visual sensitivity. These have been used as a guide in assessing each monument from known records and in the field. In defining these criteria, emphasis has been placed on establishing the current setting of each monument and how the proposed turbine will affect it.

TABLE 3: ESTABLISHING AN AESTHETIC APPRECIATION OF A MONUMENT AND ITS SETTING

Site Details	
1) Site No. /Name.	Unique number for each monument and name as shown in the
	National Monuments Record Scotland
2) Site type	Brief description of the monument type as defined in the National
	Monuments Record Scotland
3) Site visit	Conditions on day of survey with particular reference to visibility

^{**}While the immediate setting of such monuments is clearly significant, their relationship to the wider landscape is less sensitive to visual change. Where the immediate setting of such sites is to be impacted by development this will be taken into consideration.

conditions	
4) Orientation of	Direction in which Wind Farm lies measured from the monument.
proposed wind farm	
site	
5) Distance from	Distance to nearest turbines measured from the monument.
proposed	
wind farm	
6) Designation	Scheduled Ancient Monument Number or Historic Building Number if
o) Boolgnation	applicable
7) Horizon angle	Angle of elevation of the horizon in direction of wind farm as
, , , , , , , , , , , , , , , , , , ,	measured from the monument
Scientific Detail	model of non-the monament
8) Monument form	The form of a monument, together with its size as it survives in the
	landscape.
9)Current	The current state of survival of a monument with reference to its
Monument	location in the modern landscape. Alterations to the physical
Condition	condition may already have severed or impaired attempts at
Condition	, , , , , , , , , , , , , , , , , , , ,
	understanding its original function and its relationship to the
	physical landform in which it occurs.
40) Deletionahin	This includes how view points to from and source the patting of a
10) Relationship	This includes key viewpoints to, from and across the setting of a
and	monument. Depending on the monument in question these
intervisibility	could include: entrances, specific points on approaches,
with other key	routeways, farmlands, other related buildings, monuments or
sites.	natural features.
	Some sites and monuments exist, where modern scholars argue that
	intervisibility with other monuments in a given landscape was/is
	an integral part of the function of the monument. For example,
	the intervisibility of a number of cairns on the skyline of a
	monument may be understood as a key function of these ritual
	sites linking the separate sites across the landscape. The
	impact of the proposed development may be considered to be
	higher if the intervisibility between such sites is interrupted by
	the placing of a modern turbine and as such the key
	relationships between monuments is of relevance to this
	assessment.
11) Economic	What was the economic function of the monument in the past and
Function	how does it function economically in the current landscape?
12) Evidence for	What evidence remains for internal architecture, evidence for the
technology	skills of its builders? How was it constructed?
engineering	
13)	What is the likely palaeoenvironmental potential of the monument? Is
Palaeoenviro	it likely to preserve significant evidence for past environments?
nment	, and a significant control page 3
potential	
Historic Detail	1
14) Chronology of	What evidence does the monument contain for activity from specific
monument	archaeological periods?
15) Chronology of	What evidence exists in the surrounding landscape for time depth and
, ,	
landscape	use through history and prehistory?

16)Landform	How has the surrounding physical landform evolved and how does it
Evolution	relate to the monument in its current setting?
17) Archaeological	Has the monument been the subject of previous archaeological
Study	study? What did it reveal about the monument in its current
Conial Datail	setting? What is the potential for future archaeological study?
Social Detail	When the historic etrusture was developed at in use, was it leasted to
18) Nature of original and	When the historic structure was developed or in use, was it located to be seen from a distance, perhaps from other sites or buildings?
authentic	Was it intended to have wide views over the landscape?
uses	Generally the role of site and setting was potentially of higher
	importance in the case of ritual monuments (e.g. barrow
	cemeteries), strategic and defensive monuments, and
	monuments designed to convey power or high status (e.g.
	hillforts and castles). Conversely, the setting of farms and
	industrial buildings was usually less important than their
	primary economic functions. Typically, their location would be strongly influenced by economics, e.g. emphasising proximity
	to raw materials, markets, etc). Similarly, commercial premises
	were sited according to demographics and economics, with
	setting being less relevant. Therefore the uses of a monument
	and whether views to and from it were relevant to its function
	are factors in this assessment.
40) Informed	The importance of the cetting refere to the continue of
19)Inferred Importance of	The importance of the setting refers, as above, to our conception of the importance of a monument's setting and orientation to its
setting	builders and users. Some scholars argue that monuments
	interacted as part of a system with other contemporary
	elements (man-made or natural) in the landscape. In some
	cases, setting was thus a significant element in the siting of
	monuments.
	The importance of this original setting thus partially reflects how sensitive a monument is to changes to that setting.
20) Inferred	The importance of views towards the proposed development area
importance of	from the monument either in the past or present is a key factor
view towards	in understanding how changes in these views will affect the
proposed	overall appropriateness of monument setting. For example, a
wind farm site	monument with open and extensive views across the proposed
	wind farm will be more sensitive to the development than one
	with restricted views towards the development and open views
21) Geographical	focused away from the proposed wind farm. The geographical remoteness of a monument can affect how
remoteness	frequently it is visited by either professionals or members of the
	public. For example, how close is the monument to modern
	population centres? Are there any public amenities or
	population centres? Are there any public amenities or interpretation centres nearby? Is the monument close to public
	1

Assessing Magnitude of Impact

The magnitude of impact by the proposed development is an assessment of the magnitude of change at any given monument. Table 4 below outlines the main factors affecting magnitude of impact:

TABLE 4: FACTORS AFFECTING MAGNITUDE OF IMPACT

Site Details	Importance of detail for assessing magnitude impact
1) Proximity to	The greater the distance a cultural heritage feature is from the proposed
centre of	development, the more diminished the visual effects will be. With
development	regard to the now revoked PAN45 (2002) the Scottish Executive
	issued the following guidance on visibility of towers with a tower height
	of >70m and rotor diameters of >80m: at <2 km towers are likely to be
	a prominent feature; at 2-5 km towers are relatively prominent; at 5-15
	km towers are only prominent in clear visibility – seen as part of the
	wider landscape; at 15-30 km towers are only seen in very clear
	visibility – a minor element in the landscape. The new guidance does
	not offer any indication of prominence of towers and as such we
	continue to refer to that offered in PAN45.
2) Number of	The number and proportion of the full height of the turbines that will be visible
turbines visible	will directly affect the magnitude of impact on setting on any given
based on ZTV	cultural heritage feature.
model and	
wireframes	
3) Complexity of	The more visually complex a landscape is, the less prominent the new
landscape	development will seem within it. This is because where a landscape is
	visually complex; the eye can be distracted by other features and will
	not focus exclusively on the wind farm. Visual complexity describes
	the extent to which a landscape varies visually and the extent to which
	there are various land types, land uses, and built features producing
	variety in the landscape.
4) Visual	This refers to the existence of features (e.g. tree belts, forestry, landscaping
obstructions	or built features) that could partially or wholly obscure the wind farm
	from view. The form of mapping called ZTV always presents a worst
	case scenario for visibility precisely because the readily accessible
	digital mapping does not take cognisance of vegetation, structures and
	local micro-topography. Ground truthing is always necessary for a real
	appraisal of the magnitude of visual impacts.

Once the above has been considered the magnitude of impact will be classified based upon the criteria set out below in Table 5.

TABLE 5 CRITERIA FOR CLASSIFYING MAGNITUDE OF VISUAL IMPACT

Visual	Criteria
Impact	
High	Direct and substantial visual impact on a significant sightline to or
	from a ritual monument or prominent fort;
	Direct severance of the relationship between a monument and its
	setting where that monument has a Low, Medium or High visual
	sensitivity;
	Major alteration to elements of setting which directly and demonstrably
	contribute to the cultural value of a Designated Heritage Asset

INGLISTON FARM TURBINE, ANGUS: ASSESSMENT OF IMPACTS UPON SETTING

	with Low to High visual sensitivity;
	Major visual imposition within a Cultural Landscape;
	Major visual imposition within or affecting an Iconic Site or Monument
Medium	Oblique visual impact on an axis adjacent to a significant sightline to or from a ritual monument but where the significant sightline of the monument is not obscured; Glacis of a prominent fort (based on the proportion of the glacis that would be obscured);
	Partial severance of the relationship between a monument and its setting where that monument has a Low, Medium or High visual sensitivity;
	Significant alteration to the setting a SM (or asset of comparable importance) of Medium to High visual sensitivity or significant alteration to the setting of a Category A, B or C Listed Building (or asset of comparable importance) of Medium to High visual sensitivity beyond those elements of the setting which directly contribute to the understanding of the cultural significance of the monument;
	Significant but not major visual imposition within a Cultural Landscape.
Low	Peripheral visual impact on a significant sightline to or from a ritual monument;
	Insignificant alteration to the setting of a SM of Medium to High visual sensitivity or insignificant alteration to the setting of a Category A, B or C Listed Building (or asset of comparable importance) of Medium to High visual sensitivity beyond those elements of the setting which directly contribute to the understanding of the cultural significance of the monument; Minor visual imposition with a Cultural Landscape.
Marginal	All other visual impacts
None	No intervisibility.

Assessing Significance of Impact

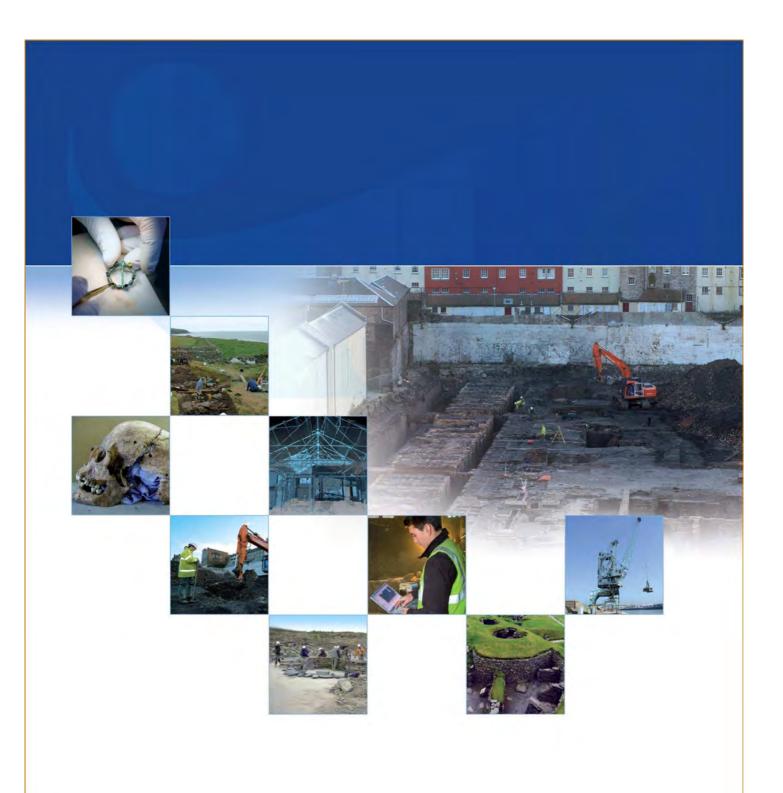
The significance of impacts on the setting of cultural heritage features is judged to be the interaction of the monument's visual sensitivity (Table 2) and the magnitude of the impact (Table 5) and also takes into consideration the cultural value of the monument (Table 1). In order to provide a level of consistency the assessment of sensitivity, the prediction of magnitude of impact and the assessment of significance of impact have been guided by pre-defined criteria. A short descriptive narrative is also provided for each monument to summarise and explain each of the value judgements that have been made.

The interactions determining significance of impact on settings of the monuments in question is shown in Table 6.

TABLE 6: SIGNIFICANCE OF IMPACT ON THE SETTING OF CULTURAL HERITAGE FEATURES

Impact	Relative Visual Sensitivity			
magnitude	Marginal	Low	Medium	High
High	Minor	Minor	Moderate	Major
Medium	Negligible	Minor	Minor	Moderate
Low	None/Negligible	Negligible	Minor	Minor
Marginal	None	None	Negligible	Minor

The impacts recorded in highlighted cells are 'significant' in terms of the Environmental Impact Assessment (Scotland) Regulations 2011

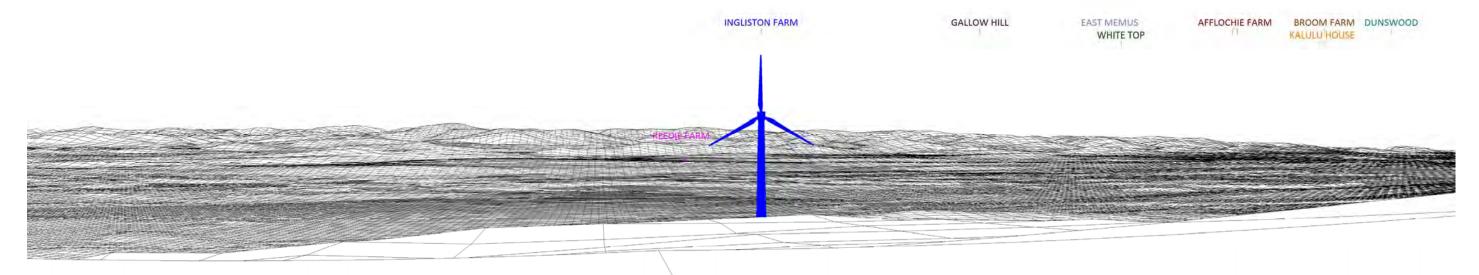




AOC Archaeology Group, Edgefield Industrial Estate, Edgefield Road, Loanhead EH20 9SY tel: 0131 440 3593 fax: 0131 440 3422 e-mail: edinburgh@aocarchaeology.com



Existing view from Castleward



Computer generated wireframe showing proposed turbine in blue



Photomontage showing proposed development



Locogen Ltd, 44 Constitution St, Edinburgh, EH6 6RS Tel:+44(0)131 555 4745; Email: info@locogen.com Company Number: SC370060

Drawing no: Drawing by:

Project:

Ingliston Farm ING081

Drawing by: Franco Giovanetti
Approved by: Andy Lowe
OS Licence N°: 100050069

Viewpoint No: VP15

Viewpoint Location: E334324 N743858
Field of View: 80°
View direction: 7.2°

Dist to turbine: 0.5 km
Title: Castleward

Camera:

Nikon D60

Effective Focal Length: 50 mm

Viewing Distance: 23.8 cm

Elevation: 1.8 m

Date taken: 22/10/2013

Time taken: 14:03





Photomontage showing proposed development



Locogen Ltd, 44 Constitution St, Edinburgh, EH6 6RS Tel:+44(0)131 555 4745; Email: info@locogen.com Company Number: SC370060 Project: Ingliston Farm
Drawing no: ING082

Drawing by: Franco Giovanetti
Approved by: Andy Lowe
OS Licence N°: 100050069

Viewpoint No: VP15
Viewpoint Location: E334324 N743858

Field of View: 45°
View direction: 7.2°
Dist to turbine: 0.5km
Title: Castleward

Camera: Nikon D60

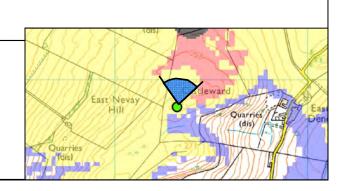
Effective Focal Length: 50 mm

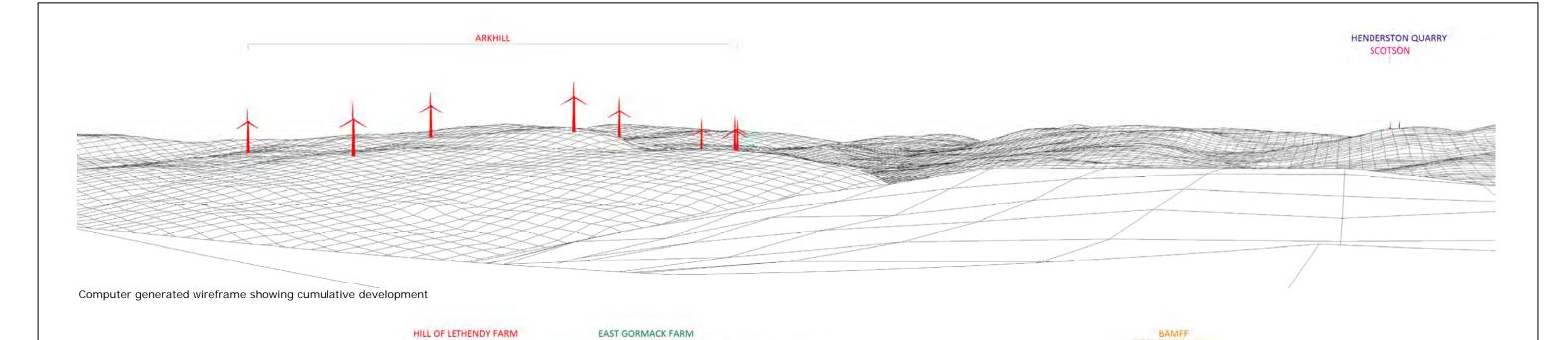
Viewing Distance: 48.3 cm

Elevation: 1.8 m

Date taken: 22/10/2013

Time taken: 14:03





NETHERAIRD OF GLASCLUNE

EASTER LOGIE

Computer generated wireframe showing cumulative development



Locogen Ltd, 44 Constitution St, Edinburgh, EH6 6RS Tel:+44(0)131 555 4745; Email: info@locogen.com Company Number: SC370060

Project: Ingliston Farm ING083 Drawing no:

Franco Giovanetti Drawing by: Approved by: Andy Lowe OS Licence N°: 100050069

Viewpoint No: VP15 Viewpoint Location: E334324 N743858

Field of View: 80°

View direction: 148.2° (top), 284.1°(bottom)

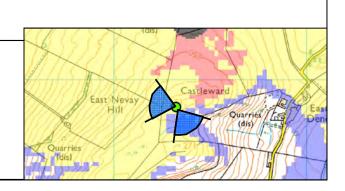
Dist to turbine: 0.5 km Title: Castleward Camera:

Nikon D60 Effective Focal Length: 50 mm Viewing Distance: 23.8 cm 1.8 m

DRUMDERG

THE CORB BRIDGE

Elevation: Date taken: 22/10/2013 Time taken: 14:03





Existing view from Wester Denoon

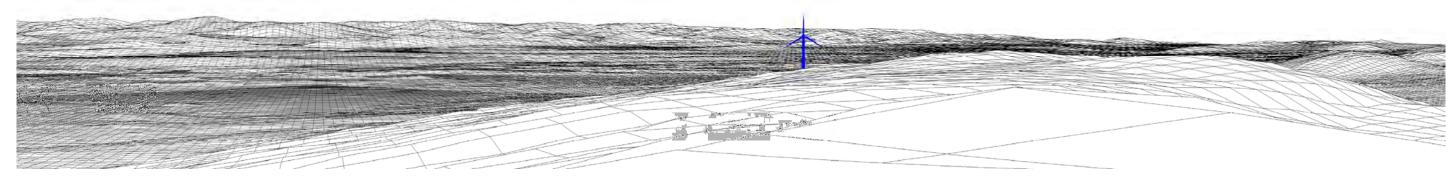
REEDIE FARM

GALLOW HILL

INGLISTON FARM EAST MEMUS WHITE TOP

BROOM FARM DUNSWOOD KALULU HOUSE

WEST MAINS OF TURIN



Computer generated wireframe showing proposed turbine in blue



Photomontage showing proposed development



Locogen Ltd, 44 Constitution St, Edinburgh, EH6 6RS Tel:+44(0)131 555 4745; Email: info@locogen.com Company Number: SC370060

Project: Drawing no: Drawing by:

Ingliston Farm ING084

Franco Giovanetti Andy Lowe

Approved by: OS Licence N°: 100050069

VP16 Viewpoint No:

Viewpoint Location: E333792 N743128

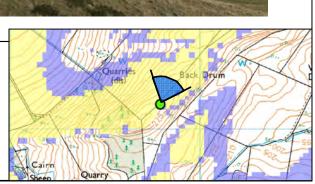
Field of View: 80° View direction: 23° Dist to turbine: 1.3 km

Title: Wester Denoon

Nikon D60 Camera:

Effective Focal Length: 50 mm Viewing Distance: 23.8 cm Elevation: 1.8 m 22/10/2013 Date taken:

Time taken: 14:24





Photomontage showing proposed development



Locogen Ltd, 44 Constitution St, Edinburgh, EH6 6RS Tel:+44(0)131 555 4745; Email: info@locogen.com Company Number: SC370060 Project: Ingliston Farm
Drawing no: ING085

Drawing by: Franco Giovanetti
Approved by: Andy Lowe
OS Licence N°: 100050069

Viewpoint No: VP16
Viewpoint Location: E333792 N743128

Field of View: 45°
View direction: 23°
Dist to turbine: 1.3 km
Title: Wester Denoon

Camera: Nikon D60

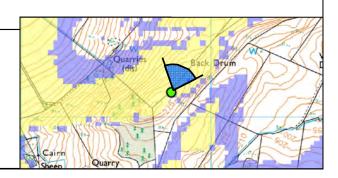
Effective Focal Length: 50 mm

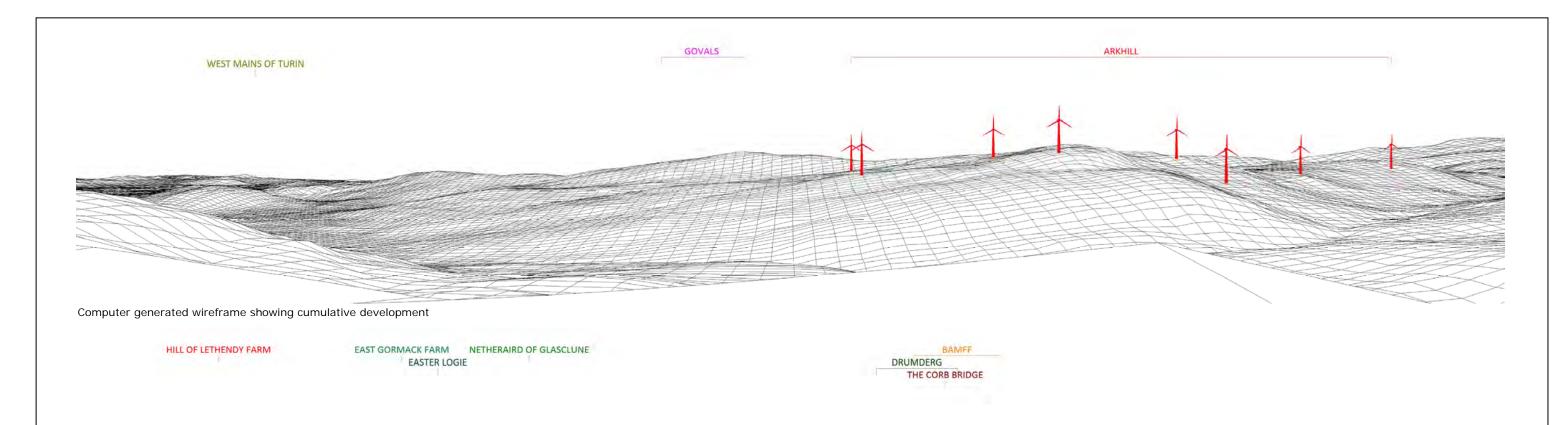
Viewing Distance: 48.3 cm

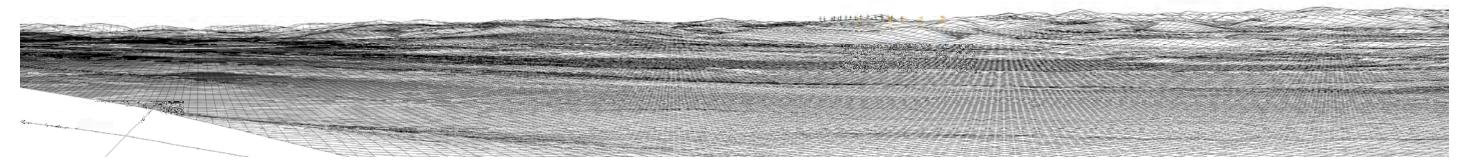
Elevation: 1.8 m

Date taken: 22/10/2013

Time taken: 14:24







Computer generated wireframe showing cumulative development



Locogen Ltd, 44 Constitution St, Edinburgh, EH6 6RS Tel:+44(0)131 555 4745; Email: info@locogen.com Company Number: SC370060

Project: Ingliston Farm ING086 Drawing no:

Franco Giovanetti Drawing by: Approved by: Andy Lowe OS Licence N°: 100050069

Viewpoint No: VP16

Viewpoint Location: E333792 N743128

Field of View: 80°

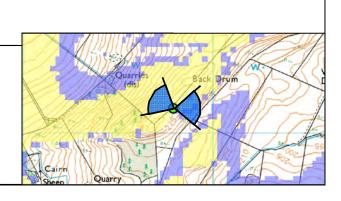
View direction: 90° (top),300° (bottom)

Dist to turbine: 1.3 km Title: Wester Denoon Camera:

Nikon D60 Effective Focal Length: 50 mm 23.8 cm

Viewing Distance: Elevation: 1.8 m 22/10/2013 Date taken:

Time taken: 14:24



Ingliston Farm Turbine Angus Response to Historic Scotland Objection

AOC Project Number 22580 February 2014





Introduction

This documents sets out AOC Archaeology's (AOC) comments on the proposed turbine at Ingliston Farm, Angus. It is intended that it will act as a discussion document at a meeting between the applicants, their agents, Locogen, and Historic Scotland on the 11th February 2014. The document sets out AOC's involvement in the project, summarising the results of our assessment and addressing Historic Scotland comments on the adequacy of that assessment.

This response will also provide comment on Historic Scotland's letters of objection (dated 16 December 2013 and 4 February 2014). We note from these consultation responses that Historic Scotland's main concern is impacts upon the burial cairns at Castleward (HS Index 4742) and Wester Denoon (HS Index 4764). We note also that Historic Scotland consider that there is the potential for adverse affects upon the setting of Denoon Law Hillfort (HS Index 138) but that they do not believe such impacts would raise issues of National Importance. Given this understanding our comments will focus on the burial cairns alone.

This document also sets out AOC's comments upon the revised proposal and will note Historic Scotland responses to applications which we believe are comparable to the Ingliston Farm proposal.

AOC Assesment

AOC Archaeology was commissioned by Locogen, on behalf of their client, to provide an assessment of the potential impacts upon the settings of a number of scheduled monuments in the vicinity of the proposed turbine at Ingliston Farm, Angus. This commission followed Historic Scotland's request for further information in a letter dated 17 October 2013. AOC's assessment was informed by desk-based research, site visits (undertaken 31 October 2013) and visualisations provided by Locogen.

AOC's assessment concluded that the turbine, in its originally proposed location, had the potential to have impacts of *Minor* and *Moderate* significance, respectively, upon the burial cairns at Castleward and Wester Denoon.

Burial cairns, as a monument type, are generally deemed to have high visual sensitivity. This is because it is commonly accepted that such cairns were constructed in locations from which they could be seen from the surrounding landscape. Their positions also often afforded wide views of the that landscape. They are furthermore often known to be placed sequentially along ridgelines or routeways. In the specific cases of Wester Denoon and Castleward, AOC judged the cairns to be of High and Medium visual sensitivity respectively. The visual sensitivity of Castleward was reduced due to its particularly denuded nature. It survives to a maximum height of 40cm and the site visit indicated that, as a result of its reduced field characteristics, the monument was difficult to discern unless one was in close proximity to it. While it is clear when standing at the cairn that views from it are expansive, it is AOC's view that the cairn can no longer be said to be a dominant feature in the landscape. As such the ability to understand its relationship to its setting has been moderately compromised (see Table 2 of Appendix 1 of the AOC's assessment).

^{*} As per the methodology set out in Appendix 1 of our assessment, visual sensitivity refers to the monument's sensitivity to changes to its setting.

The assessment judged that the turbine had the potential to form a significant new feature in the landscape setting of the cairns and noted that the turbine would be located in views along the ridgeline upon which the cairns are located. While this sightline was accepted to be an important element of the cairns' setting, the turbine would not be located directly along this alignment, and therefore would not sever the sightline between the cairns or appear directly behind Castleward when viewed from Wester Denoon. As per the methodology set out in Appendix 1 (see Table 5) of our assessment this was classified as an impact of Medium magnitude for both cairns. The resulting Significance of the impacts, noted above, were the results of the matrix set out in Table 1 of the assessment (also Table 6 in Appendix 1).

Qualitative assessment considered that while the turbine, in its originally proposed position, would be a prominent new feature in views to the north from the cairns, the ability to understand and appreciate the monuments and their relationship with each other and the surrounding landscape would not be materially compromised. The significant alignment along the ridgeline would not be severed and views along Denoon Glen (Ewnie Burn) would be largely unaffected. Expansive views to the west and northwest across the Strathmore and Dean Water would still be possible, albeit with the inclusion of the turbine in views to the north. The monument's ability to inform[†], in which its cultural value lies, would not be impeded.

AOC stand by their assessment both of the visual sensitivity of the monuments and of the magnitude and significance of impact upon the setting of the burial cairns by the original proposal.

Historic Scotland Response to AOC Assessment

In an email to Locogen on the 15 November 2013, Historic Scotland noted that they had '...some reservations...' about the AOC Assessment, characterising it as a visual assessment rather than an assessment of the potential impacts upon the setting of the monuments. AOC asked for clarification on this statement from Rory McDonald during a telephone conversation on the 19th November 2013. Mr McDonald indicated that he had re-read the assessment since providing feedback to Locogen and was content that the assessment was a setting assessment, though he noted he would be undertaking a site visit to inform his own assessment of impacts upon setting.

We would note that our assessment of impact upon setting takes cognisance of the Historic Scotland guidance on setting (2010). As per that guidance we have identified the assets which could be affected, defined their setting (including those elements of setting which contribute most to significance of the monuments) and assessed how the new development would impact upon that setting. In making that assessment we have considered how setting contributes to the ability to understand, appreciate and experience the assets and how the proposed turbine may affect these abilities.

scotland.gov.uk/pls/htmldb/f?p=2300:35:1047654111002192::NO::P35_SELECTED_MONUMENT:4742). For Wester Denoon the description notes that the monument is of national importance because of its potential ability to inform this and future generations about prehistoric burial and ceremonial practices (including the relationship of contemporary and proximate monuments to one another) and prehistoric landuse. These reasons are quoted in HS's response letters to this application.

[†] Note in Historic Scotland's online search for Scheduled Monuments for Castleward no reasons for its National Importance are given (http://data.historic-

INGLISTON FARM TURBINE: RESPONSE TO HISTORIC SCOTLAND OBJECTION

Furthermore we would note that, it is primarily the visual setting with which we have to be concerned for this proposal. Indeed Historic Scotland's response of the 17 October 2013 referenced 'visual links' between the cairns, the 'prominent locations' of the cairns, and the potential for the turbine to 'challenge the cairns for dominance in views' when discussing potential impacts upon setting. All of these elements of setting were considered in the AOC assessment. No comment on our assessment is made in the objection letters from Historic Scotland.

Revised Proposal

Following Historic Scotland's site visit, and subsequent objection, the applicant suggested a number of mitigation measures to reduce the impact upon the setting of the burial cairns at Castleward and Wester Denoon. In the first instance the applicant suggested a 20% reduction in the height of the turbine. This reduction in height meant that the turbine no longer broke the skyline in views from Castleward and resulted in a reduction in the impact upon the setting of the cairns. Following submission of revised visualisations Historic Scotland maintained their objection.

The applicant has since suggested a revised location for the proposed turbine: the proposed turbine location has been moved c. 300 m to the north of the position originally proposed. This would place the turbine c. 750 m from Castleward burial cairn and 1.3 km from Wester Denoon. It would also lower the tip of the turbine by c. 25 m in relation to the originally proposed location. This would have the effect of reducing the prominence of the turbine in views north from Castleward. In addition it would set the turbine further off the significant alignment/sightline along the ridge from Wester Denoon to Castleward. As such the proposed revision in location would result in yet further reductions in the impact upon the setting of the assets in question, when compared with the original proposed location at a height of either 77 m or 67 m to tip.

Historic Scotland Objection

Historic Scotland provided letters of objection to the amended proposal on 16 December 2013 and 4 February 2014. In these responses Historic Scotland identify the assets which will be potentially impacted by the development, they define the setting of these assets and they assess the potential impacts upon them by the proposal. We agree with the descriptions of the monuments and their settings which are not dissimilar from our own.

With regard to the assessment of impact we have a number of observations and gueries.

The letters note that Castleward burial cairn is located prominently '...between the upland and Strathmore.' While we would agree that the cairn is located on a prominent ridge (e.g. landform), it can no longer be said that the cairn itself is prominent. This is important because, as is argued in paragraph 4.4 of our report, the cairn at Castleward does not form a prominent feature in views from Wester Denoon or in when viewed from the wider landscape. The angle off which the turbine is set from the ridge means that it cannot be said that turbine will replace Castleward cairn as a prominent feature in the view along the ridgeline from Wester Denoon, nor can it be said for any other view.

Both objection letters noted that the turbine would '...reduce the monument's elevated location in the landscape'. It is unclear what is meant by this and we would ask for clarification.

The letters note that:

'Due to its dominance and location, the turbine would become the main feature in this surrounding area, altering the balance between the relationship of the local landscape agricultural setting and the elevated position of the monuments, and its key visual relationship along the ridge line'

The letters go on to say that this would reduce the ability to appreciate the monument and its setting. However the letters also acknowledge expansive views across the Strathmore which effectively form a 180° view from southwest to northeast. Therefore it is unlikely that an observer would have difficulty understanding the elevated location of the cairns above the extensive Strathmore plain and agricultural land below. Our comments on impacts upon the visual relationship between the cairns along the ridge line are addressed throughout this response and so not reiterated here.

HS Response to Similar Applications

Whilst we would acknowledge the idiosyncrasies of each case we would offer the following examples (in addition to the mention of West Mains, Auchterhouse by Locogen in an email of 5 February) of Historic Scotland's responses to one turbine developments in the vicinity of prehistoric burial cairns. In both cases, AOC acted as the heritage consultant for the applicant and predicted impacts of moderate significance (and therefore of significance in terms of EIA regulations) upon the setting of the burial cairns. While Historic Scotland acknowledged significant adverse affects, and in both cases indicated they felt impacts would be slightly greater than the impacts of Moderate significance predicted by AOC, they did not consider that the impacts warranted objection.

Greens Farm, South Lanarkshire (CL/13/0026)

The application at Greens Farm was for a single turbine of a maximum height of 87 m to tip. The turbine was located within 1 km of five scheduled monuments which comprised a total of seven burial cairns. It was these cairns which were the main concern for Historic Scotland, though a number of other scheduled cairns were also located within 2 km of the proposal. One of Historic Scotland concerns was that the turbine would be juxtaposed with two round cairns when these were viewed from a nearby long cairn (e.g. a concern similar in nature to that expressed in this case with regard to view of Castleward from Wester Denoon). The dominance and/or prominence of the turbine in a number of other views was also a concern. In initial pre-application advice Historic Scotland indicated they would object to the proposal. However, following assessment by AOC, a joint site visit and submission of the application, Historic Scotland did not object to the application but rather advised the council that they should consider requesting that the applicant reduce the height of the turbine and/or consider other locations within the land holding.

Lessendrum Home Farm, Aberdeenshire (APP/2013/1103)

The application at Lessendrum Home Farm was for a single turbine of a maximum height of 77 m to tip. The turbine was located between c. 590 m and c. 672 m from Gerrieswells scheduled monument which comprised a long barrow and a round cairn set atop a prominent hill. The turbine was proposed to the north of the monuments. The monuments were aligned northeast to southwest and the turbine would have appeared prominent in the view to the north from the long

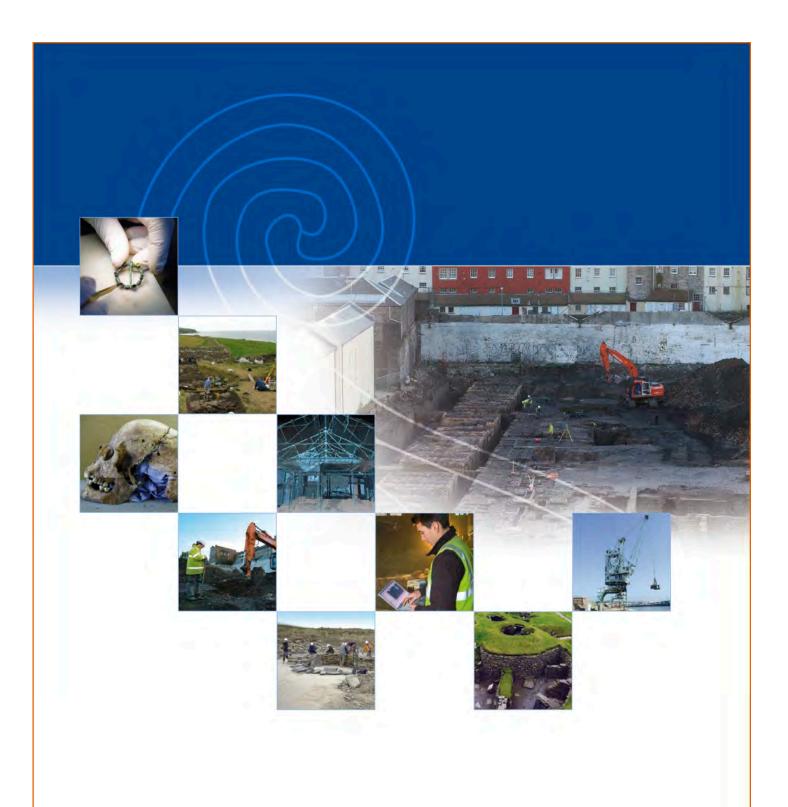
INGLISTON FARM TURBINE: RESPONSE TO HISTORIC SCOTLAND OBJECTION

barrow across the round cairn. The turbine was set off slightly from the alignment and did not appear directly behind the round cairn in views. While the hill on which the cairns were located was sparsely surround by mature deciduous trees which partially screened the turbine; the turbine could be glimpsed through the trees and the tip of the blade over topped the trees. While Historic Scotland didn't object they considered the impact was of slightly more than Moderate significance, as predicted by AOC, and they indicated they would welcome mitigation measures such as relocation or height reduction.

Conclusion

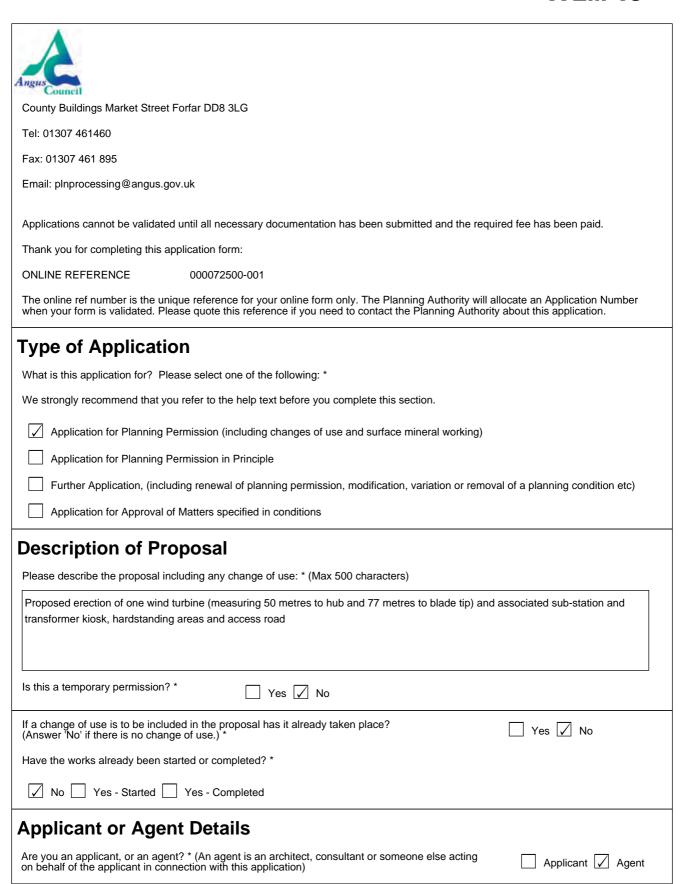
This discussion document has set out AOC's comments on the application for a single turbine proposed at Ingliston Farm, Angus. We stand by our assessment of the original proposal which indicated impacts of *Minor* and *Moderate* significance, respectively, upon the setting of the scheduled burial cairns at Castleward and Wester Denoon. We note that the applicant's proposals to shorten, and later to relocate, the proposed turbine would lessen the impact upon the setting of these heritage assets.

Our comments on Historic Scotland's objection letters are set out above and we consider that further comment and/or clarification from them on points of prominence, key visual relationships and reduction of elevated location is necessary and would be helpful. This is especially true given that from Historic Scotland has not objected to a number of similar single turbine proposals, as set out above.





AOC Archaeology Group, Edgefield Industrial Estate, Edgefield Road, Loanhead EH20 9SY tel: 0131 555 4425 | fax: 0131 555 4426 | e-mail: admin@aocarchaeology.com



Agent Details			
Please enter Agent details			
Company/Organisation:	Locogen	You must enter a Building Naboth:*	ame or Number, or
Ref. Number:		Building Name:	Locogen
First Name: *	lan	Building Number:	
Last Name: *	McLean	Address 1 (Street): *	44 Constitution Street
Telephone Number: *	01315554745	Address 2:	
Extension Number:		Town/City: *	Edinburgh
Mobile Number:		Country: *	UK
Fax Number:		Postcode: *	EH6 6RS
Email Address: *	ian.mclean@locogen.com		
Is the applicant an individual o	r an organisation/corporate entity?	•	
☐ Individual ☑ Organisa	ation/Corporate entity		
Applicant Details	3		
Please enter Applicant details			
Title:	Mr	You must enter a Building Naboth:*	ame or Number, or
Other Title:		Building Name:	Ingliston Farm
First Name:	William	Building Number:	
Last Name:	Shaw	Address 1 (Street): *	Eassie
Company/Organisation: *	Ingliston Farm	Address 2:	
Telephone Number:		Town/City: *	Forfar
Extension Number:		Country: *	UK
Mobile Number:		Postcode: *	DD8 1SP
Fax Number:			
Email Address:			

Site Address De	etails		
Planning Authority:	Angus Council		
Full postal address of the si	e (including postcode where availa	able):	
Address 1:		Address 5:	
Address 2:		Town/City/Settlement	:
Address 3:		Post Code:	
Address 4:			
Please identify/describe the	location of the site or sites.	-	
Ingliston Farm Wind Turbin	e		
Northing 7443	13	Easting	334397
Pre-Application	Discussion		
Have you discussed your pr	oposal with the planning authority?	*	Yes No
Pre-Application	Discussion Detail	ls	
In what format was the feed	oack given? *		
Meeting Tele	ohone 🗸 Letter 🗌 Ema	ail	
agreement [note 1] is curren	of the feedback you were given ar tly in place or if you are currently d will help the authority to deal with t	iscussing a processing agreer	provided this feedback. If a processing ment with the planning authority, please (.) * (Max 500 characters)
EIA Screening Opinion conf	irmed that no EIA was necessary.		
Title:	Mr	Other title:	
First Name:	Neil	Last Name:	Duthie
Correspondence Reference Number:	13/00581/EIASCR	Date (dd/mm/yyyy):	29/07/13
Note 1. A processing agree information is required and f	ment involves setting out the key s rom whom and setting timescales f	tages involved in determining for the delivery of various stag	a planning application, identifying what es of the process.
Site Area			
Please state the site area:	1370	07.00	
Please state the measurement	ent type used:	Hectares (ha) 🔽 Square M	Metres (sq.m)

Existing Use
Please describe the current or most recent use: (Max 500 characters)
Agricultural pasture land
Access and Parking
Are you proposing a new or altered vehicle access to or from a public road? *
If Yes please describe and show on your drawings the position of any existing, altered or new access points, highlighting the changes you propose to make. You should also show existing footpaths and note if there will be any impact on these.
Are you proposing any changes to public paths, public rights of way or affecting any public rights of access? * Yes 🔽 No
If Yes please show on your drawings the position of any affected areas highlighting the changes you propose to make, including arrangements for continuing or alternative public access.
How many vehicle parking spaces (garaging and open parking) currently exist on the application of the applic
How many vehicle parking spaces (garaging and open parking) do you propose on the site (i.e. the total of existing and any new spaces or a reduced number of spaces)? *
Please show on your drawings the position of existing and proposed parking spaces and identify if these are for the use of particular types of vehicles (e.g. parking for disabled people, coaches, HGV vehicles, cycle spaces).
Water Supply and Drainage Arrangements
Will your proposal require new or altered water supply or drainage arrangements? *
Do your proposals make provision for sustainable drainage of surface water? (e.g. SUDS arrangements) *
Note: -
Please include details of SUDS arrangements on your plans
Selecting 'No' to the above question means that you could be in breach of Environmental legislation.
Are you proposing to connect to the public water supply network? *
Yes
No, using a private water supply
✓ No connection required
If No, using a private water supply, please show on plans the supply and all works needed to provide it (on or off site).
Assessment of Flood Risk
Is the site within an area of known risk of flooding? *
If the site is within an area of known risk of flooding you may need to submit a Flood Risk Assessment before your application can be determined. You may wish to contact your Planning Authority or SEPA for advice on what information may be required.
Do you think your proposal may increase the flood risk elsewhere? *

Trees	
Are there any trees on or adjacent to the application site? *	es 🔽 No
If Yes, please mark on your drawings any trees, known protected trees and their canopy spread close to the proposal site a if any are to be cut back or felled.	and indicate
Waste Storage and Collection	
Do the plans incorporate areas to store and aid the collection of waste (including recycling)? *	Yes 🔽 No
If Yes or No, please provide further details:(Max 500 characters)	
No necessary given the nature of the development proposed	
Residential Units Including Conversion	
Does your proposal include new or additional houses and/or flats? *	
All Types of Non Housing Development - Proposed New Floorspace	се
Does your proposal alter or create non-residential floorspace? *	
Schedule 3 Development	
Does the proposal involve a form of development listed in Schedule 3 of the Town and Country Planning (Development Management Procedure (Scotland) Regulations 2008 *	Don't Know
If yes, your proposal will additionally have to be advertised in a newspaper circulating in the area of the development. You authority will do this on your behalf but will charge you a fee. Please check the planning authority's website for advice on additional fee and add this to your planning fee.	
If you are unsure whether your proposal involves a form of development listed in Schedule 3, please check the Help Text a Guidance notes before contacting your planning authority.	nd
Planning Service Employee/Elected Member Interest	
Is the applicant, or the applicant's spouse/partner, either a member of staff within the planning service or an elected member of the planning authority? *	es 🔽 No
Certificates and Notices	
Certificate and Notice under Regulation 15 8 – Town and Country Planning (General Development Management Procedure Order 1992 (GDPO 1992) Regulations 2008	e) (Scotland)
One Certificate must be completed and submitted along with this application form. This is most usually Certificate A, Form Certificate B, Certificate C or Certificate E.	1,
Are you/the applicant the sole owner of ALL the land ? *	es No
Is any of the land part of an agricultural holding? *	es 🔽 No
Certificate Required	
The following Land Ownership Certificate is required to complete this section of the proposal:	
Certificate A	

Land Ownership Certificate				
Certificate and Notice Regulations 2008	e under Regulation 15 of the Town and Country Planning (Development Management Procedure) (Scotland)			
Certificate A				
I hereby certify that -				
lessee under a lease	than myself/the applicant was an owner (Any person who, in respect of any part of the land, is the owner or is the thereof of which not less than 7 years remain unexpired.) of any part of the land to which the application relates e period of 21 days ending with the date of the accompanying application.			
(2) - None of the land to which the application relates constitutes or forms part of an agricultural holding.				
Signed:	lan McLean			
On behalf of:	Ingliston Farm			
Date:	18/09/2013			
	✓ Please tick here to certify this Certificate. *			
Checklist - Application for Planning Permission				
Town and County Planning (Scotland) Act 1997				
The Town and Country Planning (Development Management Procedure) (Scotland) Regulations 2008				
Please take a few moments to complete the following checklist in order to ensure that you have provided all the necessary information in support of your application. Failure to submit sufficient information with your application may result in your application being deemed invalid. The planning authority will not start processing your application until it is valid.				
a) If this is a further application where there is a variation of conditions attached to a previous consent, have you provided a statement to that effect? *				
Yes No V Not applicable to this application				
b) If this is an application for planning permission, planning permission in principle or a further application and the application is for development belonging to the categories of national or major developments (other than one under Section 42 of the planning Act), have you provided a Pre-Application Consultation Report? *				
Yes No V Not applicable to this application				
Town and County Planning (Scotland) Act 1997				
The Town and Country Planning (Development Management Procedure) (Scotland) Regulations 2008				
c) If this is an application for planning permission and the application relates to development belonging to the categories of national or major developments and you do not benefit from exemption under Regulation 13 of The Town and Country Planning (Development Management Procedure) (Scotland) Regulations 2008, have you provided a Design and Access Statement? *				
Yes No V Not applicable to this application				
d) If this is an application for planning permission and relates to development belonging to the category of local developments (subject to regulation 13. (2) and (3) of the Development Management Procedure (Scotland) Regulations 2008) have you provided a Design Statement? *				
Yes No V Not applicable to this application				
e) If your application relates to installation of an antenna to be employed in an electronic communication network, have you provided an ICNIRP Declaration? *				
Yes No V Not applicable to this application				

f) If this is an application for planning permission, planning permission in principle, an application for approval of matters specified in conditions or an application for mineral development, have you provided any other plans or drawings as necessary:					
Site Layout Plan or Block p	olan.				
☑ Elevations.					
Floor plans.	Floor plans.				
Cross sections.					
Roof plan.					
Master Plan/Framework Plan.					
Landscape plan.					
Photographs and/or photomontages.					
Other.					
Provide copies of the following do	ocuments if applicable:				
A copy of an Environmental Statement. *		☐ Yes ✓ N/A			
A Design Statement or Design and Access Statement. *		Yes N/A			
A Flood Risk Assessment. *		Yes N/A			
A Drainage Impact Assessment (including proposals for Sustainable Drainage Systems). *		Yes N/A			
Drainage/SUDS layout. *		Yes N/A			
A Transport Assessment or Travel Plan. *		Yes N/A			
Contaminated Land Assessment. *		Yes N/A			
Habitat Survey. *		✓ Yes N/A			
A Processing Agreement *		☐ Yes ✓ N/A			
Other Statements (please specify	y). (Max 500 characters)				
Various assessments (including ecology, ornithology and landscape and visual) are included within the Supporting Environmental Document					
Boodinone					
Declare - For Application to Planning Authority					
I, the applicant/agent certify that to plans/drawings and additional info	this is an application to the planning authority as described in this for ormation are provided as a part of this application.	m. The accompanying			
Declaration Name:	Ian McLean				
Declaration Date:	18/09/2013				
Submission Date:	18/09/2013				
Payment Details					
Cheque: IFWT LTD, 000005					
Created: 18/09/2013 12:01					

R. & W. Whitton Ltd

Ingliston - Eassie - Angus - DD8 1SP Telephone - **01828 627353**

Mr David Gray Development Standards Angus Council County Buildings Market Street Forfar DD8 3LG

22 May 2014

Dear Mr Gray

13/00865/FULL. Erection Of Wind Turbine Of 50 Metres To Hub Height And 77 Metres To Blade Tip And Ancillary Development, Field 1500M South East Of Ingliston Farm, Eassie.

I am the applicant for the above turbine and would be grateful if you would add this letter to the documentation from my agents Locogen Limited in support of this application.

I am a director and shareholder of the family business of R & W Whitton Ltd. We as a family have farmed Ingliston Farm for 70 years and currently employ four full time staff and several season workers.

We are currently investing in our business by building a potato cold store and a grain drier which is a combined seven figure investment. The construction of these buildings is being carried out by local tradesmen. I applied for the turbine to help offset the electricity usage as well as diversifying the business into another income stream. This will assist in the continued viability of my company.

I note that there has been an objection by Historic Scotland (HS) to the turbine on the grounds that the turbine would have an adverse effect on the setting of a scheduled monument. The scheduled monument in question is a burial mound on Castleward Hill approximately 500m to the South of the proposed turbine site. This is described as being of "national importance" by Historic Scotland.

This conclusion is at odds with an independent report on the burial mound's setting by AOC of Edinburgh. Their archeologist concluded that:

The proposed turbine at Ingliston Farm is located in close proximity to the cairn, c. 500 m to its north. As such, the turbine will appear quite prominent in views towards the north (Viewpoint 15). However, given the condition of the cairn the turbine cannot be said to challenge the cairn for dominance in the landscape. Furthermore, the significant sight line to the cairn is along the ridge of Castleward Hill and from the cairn itself the most important view is likely southwest towards the cairn at Wester Denoon. The proposed turbine is not located directly along this primary access, being set off to the north c. 15°. Additionally, the turbine will be located behind the viewer when looking towards the cairn at Wester Denoon. Given this, an impact of Medium magnitude is predicated upon the setting of the cairn. This will result in an impact of Minor significance.

Whilst this is what Historic Scotland concluded which is the complete opposite of above:

We also noted the position of the existing windfarm of Castleward, burial cairn is prominently located at the interface between the upland and Strathmore. The cairn has a western aspect, facing the open agricultural land of the Strathmore plain. The introduction of a wind turbine at this location will appear at the same height or taller than the monument. Due to the dominance and location of the turbine, we consider

the turbine will become the dominant feature in this landscape setting and will significantly reduce the monument's elevated location in the landscape. The turbine will also be prominent in views along the ridge line from other cairns (Wester Denoon) to the south west. On viewing Castleward burial cairn from these points, the turbine will be at almost full height. Due to its dominance and location, the turbine would become the main feature in this surrounding area, altering the balance between the relationship of the local landscape agricultural setting and the elevated position of the monuments, and its key visual relationship along the ridge line. As this would significantly reduce our appreciation of the relationship of the monument and this setting, we consider the setting of the monument is adversely affected by this development.

Although clearly not an archeologist, I would like to think I have more than a modicum of common sense and would like to make the following comments.

I can safely say that despite living and farming Ingliston for 50 years I was completely unaware of this "nationally significant" monument in the next field from my land boundary. This is perhaps not surprising when it is not even marked on the Ordnance Survey Explorer map 1:25,000 scale.

It is also to the untrained eye barely a mound at all, in a rough grass field, resembling any other undulation on the hill. It is not fenced off and livestock freely graze all over it. It is certainly not prominent in the landscape as HS suggest as it is only 40 cm at its very highest and is not visible until you are within 20 meters of it and only then if you know what you were looking for. I would therefore suggest that very few people know that it is there and even fewer people visit it.

I would also dispute that it is an example of a well preserved burial mound for the reasons mentioned above. This is further demonstrated in the attached photographs which clearly show that there is nothing of significance or prominence at this location.

When on top of the hill you are afforded a huge vista over the Strathmore Valley, so much so that the turbine would be swallowed up in this vista and not become as HS suggest the "dominant" feature of the landscape.

Historic Scotland also incorrectly state that the turbine location is on the ridge line. This is incorrect as the turbine is some 500m below the ridge line

I also think it is worth pointing out that on the next ridge to the South of the Castleward Burial mound are the 8 turbines of Ark Hill Wind Farm which apparently according to Historic Scotland do not adversely effect the setting of the Castleward Burial mound. I therefore do not see what a single turbine could adversely effect any more than the Ark Hill Turbines do already.

I note that in the HS objection that they state that "the excavation of the buried lands surface could increase our knowledge of prehistoric land use". Despite stating that excavation of the buried land could increase their knowledge HS rejected my offer of funding a professional archeology dig also involving the local primary school should the turbine be granted permission. This would have meant that an additional benefit would have been gained from the turbine.

The proposed turbine site is some 500m away from the burial mound and I am aware that turbines have been passed a similar distance from houses. I therefore feel that common sense would suggest that if houses containing the living are accepted at this distance surely it stands to reason that a burial mound containing possibly the remains of the deceased should be acceptable as well.

HS also seem to be inconsistent in their response to a turbine of a similar size that was consented at West Mains of Auchterhouse. I have attached the description from the applicant's agent and Historic Scotland's response. In summary the Cairn was considerably higher and therefore more prominent, and was closer to the turbine than Ingliston as well as sitting below the Cairn yet this was deemed acceptable by HS. There are also two other examples of this inconsistency contained in the AOC response to Historic Scotland's comments.

I feel that the Ingliston turbine is extremely similar in position and characteristics to the one at West Mains of Auchterhouse and that HS should have come to the same conclusion and not raised an objection.

I feel that in trying to safeguard and preserve the viability of my business for the future it is being hampered by the possible preserved remains from the past. I believe Angus Council should be looking to the future and not dwelling on the past, that way I can continue to invest in not only my business but in the Angus economy as well.

I hope that common sense will prevail and that you can pass this application.

Yours sincerely

William Shaw

Director

Please find below comments on archaeology from this and other applications, site photographs, an independently completed Setting Assessment and comments from an independent Archaeologist regarding the comments raised by Historic Scotland.

Details of the West Mains of Auchterhouse turbine's location and the Historic Scotland response to the turbine and a prominent burial mound.

The agent's description of the turbine location

The SAM occupies a prominent and elevated position on the top of West Mains Hill, from where there are extensive and panoramic views to the surrounding landscape, including the proposed turbine site.

The setting of the SAM is therefore considered to extend to the turbine site. Figure 1.17 conveys that there would be an indirect visual impact on the setting of the SAM as a result of the proposed development.

The SAM which comprises the remains of a burial cairn is not considered to be rare or unique within the Scottish context. It is also considered that the immediate setting of the SAM has been impacted upon by the Ordnance Survey trig point and the modern cairn monument.

The proposed wind turbine would be an obvious and at times moving presence in views from the SAM to the south. However, any reasonable observer would clearly recognise the wind turbine as a modern, functional imposition designed to capture energy from the wind and not as a feature that would provide a confusing juxtaposition between the SAM and the wider landscape. There would be no confusion about the origins, or purpose of either, or both.

The proposed turbine would be a visual distraction but would not detract to any great extent from an understanding or significance of the SAM as a heritage asset. This is because the turbine would only occupy a limited arch of view to the south from the SAM. The proposed turbine would be located at a lower elevation and as such would not occupy a skyline or prominent position in relation to West Mains Hill. It is therefore considered because the proposed turbine would only occupy a limited arch and extent of view, it would not be dominate or overbearing.

On this basis, the presence of a single turbine would not be so distracting that it would prevent or make unduly difficult, an understanding appreciation or interpretation of the SAM. As a consequence, the effect on the setting of the designated SAM, whilst adverse would not reach the level of significant, resulting in substantial harm.

AOC's assessments of Ingliston Farm draw similar conclusions. However, for the West Mains application, HS respond:

The cairn's immediate setting is on a rounded summit which drops away steeply to the south east giving the cairn strong topographical links with the valleys to the south and east. The cairn is a prominent feature in the local landscape, as indicated by its use as a location for a trig point. The monument has extensive views out over the valleys to both south and east, dominating its surroundings and can be seen and identified in views to West Mains Hill from the south and east.

We consider that as the proposed turbine will not break the skyline in front of the monument and there will be a degree of separation between the turbine and the monument it will not impede understanding of the dominance of the cairn in its landscape. In views out from the monument the turbine will be an obvious distraction as a large upright moving industrial element in an otherwise open agricultural landscape. We consider that the location of the turbine, downslope and 360m to the south of the cairn means that the turbine will not dominate the cairn nor impede our understanding of the dominance of the cairn over its surrounding landscape.

While the proposed location and scale of the turbine will have an adverse impact on the setting of the monument, we do not consider that impact to be of such significance as to impact on the qualities that contributes towards the national importance of the monument.

Site Photos

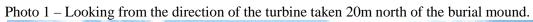




Photo 2 - Photograph of burial mound.



Photo 3 - Taken looking from the turbine location approx 250m away from the mound.

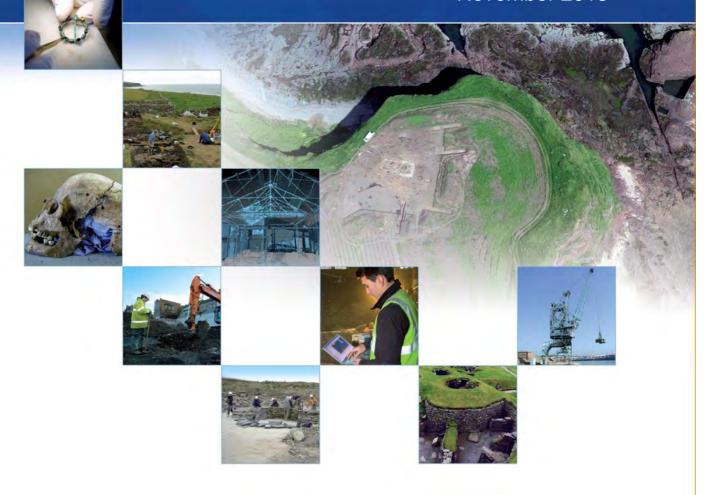


Photo 4 - Looking up towards the mound from the turbine location.



Ingliston Farm Turbine Angus Assessment of Impacts upon Setting

AOC project 22580 November 2013





Ingliston Farm, Angus Assessment of Impacts upon Setting

On Behalf of: Locogen Ltd

44 Constitution Street

Edinburgh EH6 6RS

National Grid Reference (NGR): NO 34397 44313

AOC Project No: 22580

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This document has been prepared in accordance with AOC standard operating procedures.

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Appendix 1: Assessment Methodology

1 Introduction

- 1.1 AOC Archaeology Group was commissioned by Locogen Ltd to undertake an assessment of impacts upon the settings of a number of Scheduled prehistoric monuments in close proximity to the proposed turbine at Ingliston Farm, near Glamis, Angus. The assessment is required following a request by Historic Scotland for further information subsequent to their review of the planning application.
- 1.2 This report assesses the potential impacts upon the settings of burial mounds at Wester Denoon (HS Index 4764), Castleward (HS Index 4742) and Carlunie Hill (HS Index 6449) and the fort at Denoon Law (HS Index 138) (See Figure 1). Throughout the assessment, the report will also consider the visual relationship between these monuments, making note also of the fort at Kinpurney Hill (HS Index 3219) where relevant, and how the proposed turbine may affect visual relationships with that monument.

2 Methodology

- 2.1 The assessment aims to establish the cultural significance and visual sensitivity of the Scheduled Monuments in question and establish the magnitude of impact upon said monuments by the proposed turbine at Ingliston Farm. The assessment of such factors has been informed by desk-based study, GIS analysis, site visits and visualisations.
- 2.2 Cultural significance, visual sensitivity and magnitude of impact having thus been established, a matrix, presented in Table 1 below, will be used to inform conclusions regarding the significance of these impacts:

TABLE 1: SIGNIFICANCE OF IMPACT ON THE SETTING OF CULTURAL HERITAGE FEATURES

Impact	Relative Visual Se	ensitivity		
magnitude	Marginal	Low	Medium	High
High	Minor	Minor	Moderate	Major
Medium	Negligible	Minor	Minor	Moderate
Low	None/Negligible	Negligible	Minor	Minor
Marginal	None	None	Negligible	Minor
				of the Carine are ented large

The impacts recorded in highlighted cells are 'significant' in terms of the Environmental Impact Assessment (Scotland) Regulations 2011

2.3 A detailed methodology is presented in Appendix 1 of this report.

3 Site Visits

- 3.1 Site visits were undertaken on Thursday 31st October 2013 in variable weather ranging during the day from partly overcast to sunny and clear. Records made in the field were guided by the methodology presented in Appendix 1 and in particular by the Aesthetic Appraisal forms as presented in Table 3 of the appendix. In general, factors such as condition, orientation, visual relationships with nearby sites and about the nature of the current settings of the monuments were made.
- 3.2 A brief discussion of each site is outlined below.

Castlward, burial mound

- 3.3 The monument at Castleward comprises a burial mound measuring 6 m in diameter with a maximum height of c. 0.4 m (Plate 1). It is surrounded by a 2 m ditch and is slightly dished on its top (RCAHMS 1983). The monument is extremely denuded and only clearly legible as a cairn once one is within c. 20 m of it. The cairn is located near the northeastern summit of Castleward Hill which lies along the ridge line which runs between Kinpurney Hill and Denoon Law. Views to the north-east, east and south are primarily of adjacent hill tops and ridges which mask valleys and lower hills. Views to the west are expansive as the land drops away to the Dean Water.
- 3.4 Denoon Law is obscured by the actual northeastern summit of Castleward Hill, the cairn itself lying slightly off this to the southwest. Looking southwest, the burial mound at Western Denoon is visible but only to the trained eye (and even then with the assistance of an existing fencepost located at the centre of the cairn). Carlunie Hill is clearly visible to the west-southwest.

Wester Denoon, burial mound

- 3.5 Wester Denoon burial mound is located at the southwestern summit of Castleward Hill. It measures c. 13 m in diameter and survives to a height of c. 2 m, and is visible as an earthen and stone mound (Plate 2). A modern fenceline bisects the cairn. Views across lower lying to land to the northwest, towards the Dean Water, are expansive. Unlike views from Castleward, views from Wester Denoon include views along the valley to the east created by Ewnie Burn and to the summits of Carlunie Hill and Ark Hill beyond.
- 3.6 Views of Denoon Law are obscured by intervening topography. The cairn on Carlunie Hill is readily discernable. The location of Castleward can be seen, though the cairn is not recognisable.

Denoon Law, fort

- 3.7 Denoon Law, fort is a well-preserved fort, surviving as well-defined earthwork ramparts and retaining visible foundations of internal structures (Plate 3). The entrances to the fort are clearly visible to the east and west, though the former may be a later insertion. From the eastern entrance there are extensive views along the Ewnie Burn Valley which is aligned northeast to southwest to the south of the fort. There are also extensive views from the fort to the north where land dips from Castleward Hill eastward towards the Ewnie Burn. Views beyond Castleward Hill to the west and Carlunie Hill, and its associated ridge, to the southeast and east are limited by these topographical features.
- 3.8 While the landform of Castleward Hill is clearly visible from Denoon Law, the cairns at Castleward and Wester Denoon are not clearly visible. This is a result of the current condition of the cairns (e.g. their reduced height) and the positions of the cairns along a linear hilltop that sees undulations of the ridge obscuring views. Kinpurney Hill, fort is visible from some, but by no means all, locations within

Denoon Law Fort, most clearly from the southern ramparts of the monument. The cairn at Carlunie Hill is clearly visible breaking the skyline to the southeast.

Carlunie Hill, cairn

- 3.9 The cairn at Carlunie Hill comprises a grass-covered mound measuring c. 14 m in diameter and 2 m high. The cairn has been bisected by two post and wire fence lines (Plate 4). The cairn is set on a prominent hill with commanding views across Strathmore to the north and more locally along the Ewnie Burn valley to the west and Glen Oglivie to the east. Views to the south are of higher hilltops such as Auchterhouse Hill and Craigowl Hill, which stand to heights of 426 m and 455 m respectively.
- 3.10 Views of the other monuments in question here are generally possible. However, the existing Arkhill Wind Farm distracts in views towards Wester Denoon burial mound. The location of the cairn at Castleward is visible but the monument itself is not legible.

4 Impact Assessment

Castleward, burial mound

- 4.1 As noted above, the low height of the burial mound at Castleward, which appears to be greatly denuded, makes it difficult to identify or understand from any great distance. While views from the cairn into the surrounding landscape are clearly expansive, particularly views to the north-west, the cairn itself can no longer be understood as a feature when viewed from the wider landscape. Given the current condition of the monument, the visual sensitivity of the cairn is judged to be Medium.
- 4.2 The proposed turbine at Ingliston Farm is located in close proximity to the cairn, c. 500 m to its north. As such, the turbine will appear quite prominent in views towards the north (Viewpoint 15). However, given the condition of the cairn the turbine cannot be said to challenge the cairn for dominance in the landscape. Furthermore, the significant sight line to the cairn is along the ridge of Castleward Hill and from the cairn itself the most important view is likely southwest towards the cairn at Wester Denoon. The proposed turbine is not located directly along this primary access, being set off to the north c. 15°. Additionally, the turbine will be located behind the viewer when looking towards the cairn at Wester Denoon. Given this, an impact of Medium magnitude is predicted upon the setting of the cairn. This will result in an impact of *Minor* significance.

Wester Denoon, burial mound

- 4.3 Wester Denoon burial mound is clearly discernable as a cairn. It commands views along the Ewnie Burn valley to the east and across Strathmore to the northwest. Additionally, it can be seen and is legible as a burial monument from a number of locations in the landscape. As such, its visual sensitivity to change is judged to be High.
- 4.4 The proposed turbine is located c. 1.3 km from the cairn (Viewpoint 16). The turbine will form a significant new feature within the wider landscape setting of the cairn. This is deemed to be an impact of Medium Magnitude and *Moderate* significance. However, the turbine will be located off the alignment of monuments extending along the ridge of Castleward Hill from Kinpurney Hill to Denoon Law. It will not affect views from the cairn along the Ewnie Burn valley and will form a single feature in expansive panoramic views across low-lying land to the north and west towards the Dean Water. It will not interrupt views to Carlunie Hill. As has already been noted above, the cairn at Castleward is not clearly visible from Wester Denoon and neither is the fort at Denoon Law. As such, while the

turbine will be visible in views in this direction it will not affect the visibility of these features nor challenge them for dominance.

Denoon Law, fort

- 4.5 Denoon Law is a well-preserved fort which has clearly been placed in a commanding and strategic position. Its visual sensitivity is judged to be High.
- The proposed turbine is located c. 1.1 km to the west of Denoon Law on the opposite side of Castleward Hill (Viewpoint 2). The turbine is predicted to form a significant alteration to the wider landscape setting of the monument. This is an impact of Medium magnitude and *Moderate* significance. However, the turbine will be located beyond those elements of the setting which directly contribute to the understanding of the cultural significance of the monument. While historically there may have been visual links between the fort and the two burial mounds on Castleward Hill these no longer exist as the cairns (the northernmost apparently no longer surviving to its full height), are not visible from the fort. As such, the turbine will not interrupt an extant visual link. Furthermore, the turbine will not be located on land clearly commanded by the fort e.g. the lower-lying land between Castleward Hill and Denoon Law to the west and north and land along the Ewnie Burn valley to the south. It will therefore not directly affect those elements of setting which contribute most to the understanding and appreciation of the fort.

Carlunie Hill, cairn

- 4.6 Carlunie Hill is a well preserved cairn which retains its overtly intended relationship with its visual setting. Its location on top of Carlunie Hill affords expansive views both from and to it. Its placement at the summit of the hill means that it breaks the skyline and is conspicuous when viewed from the surrounding landscape. Its relative visual sensitivity is judged to be High.
- 4.7 The proposed turbine at Ingliston Farm is located c. 2.4 km from the cairn (Viewpoint 5). It will feature perphipherally in the expansive views of Strathmore, being located to the west while the most spectacular views of Strathmore are to the north. It will not intrude upon the more local elements of the cairn's setting, e.g. along the Ewnie Burn valley or Glen Oglivie. As has been noted above, while there may have been a visual link between Carlunie and the Castleward burial monuments in the past, that link has been significantly diminished as a result of the condition of the Castleward burial mound. As such, the turbine cannot be seen to be challenging Castleward for dominance in views from Carlunie. In any case the turbine would be set off the theoretical sightline by some 20° and viewed further to the right/north than the location of Castleward. In views towards Wester Denoon from Carlunie the turbine will be located some 55° off the sightline to the right, making it largely peripheral. It is judged that the impact upon the setting of Carlunie Hill will be of Low magnitude and therefore *Minor* significance.

5 Summary

- 5.1 This assessment of impact upon the settings of the Castleward, Wester Denoon and Carlunie burial monuments and Denoon Law, fort has been undertaken at the request of Locogen Ltd. It has indicated that the proposed wind turbine at Ingliston Farm will have impacts of *Minor* significance upon the settings of Castleward burial mound and Carlunie Hill cairn. Impacts of *Moderate* significance are predicted upon the settings of Wester Denoon burial mound and Denoon Law fort
- 5.2 The impacts of *Minor* significance upon the settings of Castleward and Carlunie Hill are not considered to be significant in terms of EIA regulations. The impacts of *Moderate* significance

INGLISTON FARM TURBINE, ANGUS: ASSESSMENT OF IMPACTS UPON SETTING

predicted upon the setting of the Wester Denoon and Denoon Law are significant in terms of EIA regulations and, while the turbine does not constitute an EIA development, will require consideration in the planning decision. Despite these assessments of significance, it is not considered that the placement of the Ingliston Farm turbine in the proposed location will impede the ability to understand the monuments or their ability to inform, in which their cultural value lies.

5 References

Bergh, S 1995, Landscape of the Monuments

Bradley, R; The Good Stones, 2000, Society of Antiquaries of Scotland

Burra Charter (AUS ICOMOS, 1999) http://www.icomos.org/australia/burra.html

Scottish Executive 2002 PAN 45 Renewable Energy Technologies and Annex 2 Spatial Frameworks and Supplementary Planning Guidance for Wind Farms

Thom, Alexander 1967 Megalithic sites in Britain University Press, Oxford

Thom, Alexander 1971 *Megalithic Lunar Observations* University Press, Oxford Historic Scotland 2011 *Scottish Historic Environment Policy (SHEP)*

Historic Scotland 2010 Managing Change in the Historic Environment: Setting

Lambrick, G 2008 Setting Standards: A Review prepared on behalf of the IFA http://www.archaeologists.net/modules/icontent/inPages/docs/Setting.pdf

ICOMOS, 2005 Xi'an Declaration on the Conservation of the Setting of Heritage Structures, Sites and Areas Adopted Xi'an, China by the 15th General Assembly of ICOMOS on 21 October 2005 http://www.international.icomos.org/charters/xian-declaration.pdf

RCAHMS 1983 The Royal Commission on the Ancient and Historical Monuments of Scotland. The archaeological sites and monuments of Central Angus, Angus District, Tayside Region, The archaeological sites and monuments of Scotland series no 18 Edinburgh

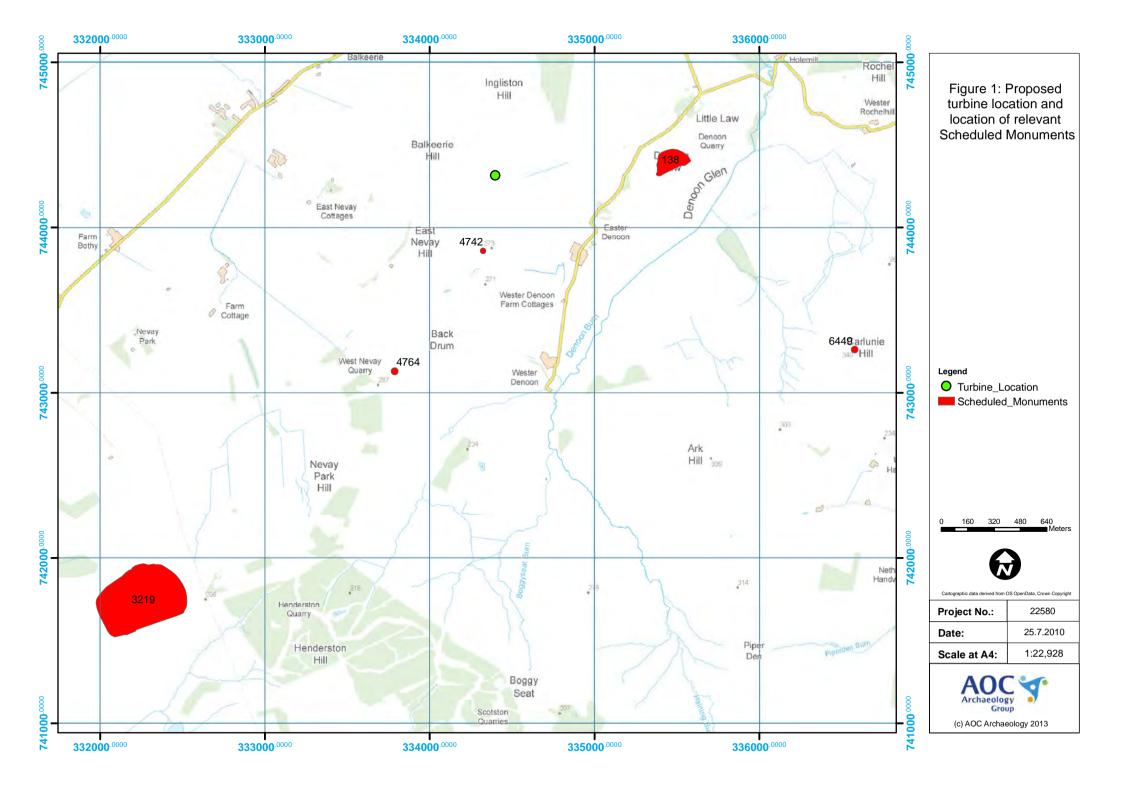




Plate 1: Castleward, burial mound from the northeast



Plate 2: Wester Denoon, burial mound from southwest



Plate 3: Denoon Law, fort from east



Plate 4: Carlunie Hill, cairn from southeast

A	pendix	1:	Assessment	Metl	hodol	ogy
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Setting

The X'ian Declaration on the Conservation of the Setting of Heritage Structures, Sites and Areas adopted by the 15th General Assembly of ICOMOS in October 2005 (ICOMOS 2005) states that:

'The setting of a heritage structure, site or area is defined as the immediate and extended environment that is part of, or contributes to, its significance and distinctive character'

In October 2010, Historic Scotland published a guidance document on setting as part of their *Managing Change in the Historic Environment* series of guidance notes intended to explain how to apply the policies contained in the *Scottish Historic Environment Policy* (SHEP). This document defines setting thus:

Setting should be thought of as the way in which the surroundings of a historic asset or place contribute to how it is experienced, understood and appreciated.

Monuments, buildings, gardens and settlements were not constructed in isolation. They were often deliberately positioned with reference to the surrounding topography, resources, landscape and other monuments or buildings. These relationships will often have changed through the life of a historic asset or place

Setting often extends beyond the immediate property boundary of a historic structure into the broader landscape' (Historic Scotland 2010).

It also states that:

'The setting of a historic structure can incorporate a range of factors, not all of which will apply to every case. These include:

current landscape or townscape context;

visual envelope, incorporating views to, from and across the historic asset or place;

key vistas, framed by rows of trees, buildings, or natural features that give a an asset or place a context, whether intentional or not;

the prominence of the historic asset or place in views throughout the surrounding area;

character of the surrounding landscape;

general and specific views including foregrounds and backdrops;

relationships between both built and natural features;

aesthetic qualities;

other non-visual factors such as historical, artistic, literary, linguistic, or scenic associations, intellectual relationships (e.g. to a theory, plan or design), or sensory factors;

a 'Sense of Place': the overall effect formed by the above factors' (Historic Scotland, 2010).

Assessing Cultural Value

The methodology used regards all heritage or archaeological remains as being sensitive to some degree and is also guided by local, regional, national and international heritage policy (e.g. various charters including the Burra Charter (Aus ICOMOS, 1999)), which defines sites and monuments as potentially comprising a very wide variety of heritage remains. In some cases a site or building which does not have a protective designation assigned to it could nonetheless still be rated as having the same significance as another one which *is* protected. This is because the selection of items for listing and scheduling is an ongoing national activity. Generally, the criteria for judging archaeological significance are gradually evolving, with an increasing trend towards including more recent types of structures. In some cases, important buildings or monuments may have been overlooked during listing, or could now be judged worthy of listing, whereas they were not previously.

The criteria used to rate cultural heritage value in the assessment area are presented in Table 1 below:

TABLE 1: CRITERIA FOR ESTABLISHING RELATIVE CULTURAL VALUE

Cultural Value	Criteria
International and National	World Heritage Sites or Iconic Sites and Monuments; or Scheduled Ancient Monuments (Actual and Potential); or Category A Listed Buildings; or
	Inventory Gardens & Designed Landscapes or Inventory Battlefields Remains of national or international importance, or fine,
Regional	little-altered examples of some particular period, style or type Category B Listed Buildings; Remains of regional or more than local importance, or major examples of some period, style or type, which may have been altered.
Local	Remains of national importance that have been partially damaged. Category C Listed Buildings Remains of local importance, lesser examples of any period, style or type, as originally constructed or altered, and simple, traditional sites, which group well with other significant remains, or are part of a planned group such as an estate or an industrial complex; Cropmarks of indeterminate origin.
Naglicible	Remains of regional importance that have been partially damaged or remains of national importance that have been largely damaged.
Negligible	Relatively numerous types of remains, of some local importance; findspots of artefacts that have no definite archaeological remains known in their context. Remains of local importance that have been largely damaged;
	Isolated findspots; Undesignated structures

Whilst the relative cultural value of site or monument is important for establishing the importance of a monument, it is widely recognised (see Lambrick 2008) that the importance of an asset is not the same as its sensitivity to change. Thus in determining visual effects by the proposed wind farm on the setting of monuments, both importance and sensitivity to visual change need to be considered.

Assessing Visual Sensitivity

Setting is a key issue in the case of some, but by no means all monuments. A nationally important site with high cultural value does not necessarily have high visual sensitivity. Our evaluation of the visual sensitivity of a given monument and the subsequent significance of impact on its setting takes cognisance of the four principal heritage values which closely resemble those laid down in the Burra Charter (AUS ICOMOS 1999, 2.1) and can be summarised as follows:

- Evidential Value: the potential to yield primary evidence about past human activity
- **Historical Value:** the ways in which the present can be connected through a place¹ to past people, events and aspects of life
- Aesthetic Value: the ways in which people derive sensory and intellectual stimulation from a place
- **Communal Value:** the meanings of a place for the people who relate to it, and whose collective experience or memory it holds.

The assessment of the scale of any impact on a given monument is based on the magnitude of proposed change to a monument and the extent to which that change would compromise or reduce the monument's cultural value i.e. its ability to inform this and future generations about humanity's past. The 'ability-to-demonstrate' is the key criterion used in establishing the cultural value of a monument or place as defined within the Burra Charter (AUS ICOMOS 1999). A direct impact on cultural value will occur if, and only if, views to or from the object of cultural value form an essential part of the information content of the monument.

Certain sites and monuments exist, for which it is generally accepted that their builders designed the monuments with particular intentional vistas or sightlines, perhaps incorporating or sighting across other monuments or natural features (see Renfrew & Bahn, 2001, 397; Bergh 1995; Bradley 2000). Amongst these we may include burial monuments and stone circles. Some scholars (e.g. Bergh 1995) have argued that some monuments have been sited in order that sightlines between them would have a particular significance, or that their intervisibility was a factor in the original selection of their locations. It has been argued that even single monuments could have significant relationships with the physical landform. Professor Alexander Thom (1967 & 1971) argued that sightlines projected from stone circles utilised features on the distant horizon to calculate the precise determination of significant astronomical events. In such instances the sightline between the monument and its horizon is arguably a characteristic of the monument itself. Thus, the positioning of a structure that caused an interruption to that sightline would clearly reduce the information content of the monument by removing or compromising one of its fundamental characteristics. This amounts to a reduction of its information content and in consequence an impact of this type would significantly reduce the cultural value of the site or monument.

The criteria for establishing a monument's relative visual sensitivity are outlined in Table 2 below.

TABLE 2: CRITERIA FOR ESTABLISHING RELATIVE VISUAL SENSITIVITY

Sensitivity*	Definition
High	A monument which retains an overtly intended or authentic relationship within its visual setting and the surrounding landscape. In particular ritual monuments which have constructed sightlines to and/or from them or structures intended to be visually dominant within a wide landscape area i.e. castles, tower houses, prominent forts etc.

¹ The term 'place' is used throughout the Burra Charter to describe a site, monument or landascape of cultural value

	A monument, the current understanding of which, relies heavily on its modern
	aesthetic setting regardless of whether or not this was intended by the
	original constructors or authentic users of the monument.
	A monument which had an overtly intended authentic relationship with its visual
	setting and the surrounding landscape but where that relationship has been
	moderately compromised either by previous modern intrusion to the setting
Medium	or landscape or where the monument itself is in such a state of disrepair
Wicalam	that the relationship cannot be fully determined.
	A monument, the current understanding of which, relies partially on its modern
	aesthetic setting regardless of whether or not this was intended by the
	original constructors or authentic users of the monument.
	A monument which had an overtly intended authentic relationship with its visual
	setting and the surrounding landscape but where that relationship has been
	significantly compromised either by previous modern intrusion to the setting
1.	or landscape or whereby the monument itself is in such a state of disrepair
Low	that the relationship cannot be determined.
	A monument whose placement within the landscape was not determined by
	visual setting but by some other factor whether that be industrial,
	agricultural or simply functional etc.**
	A monument whose placement within the landscape was not determined by
	visual setting but by some other factor whether that be industrial,
Marginal	agricultural or simply functional etc; and is additionally in such a state of
	disrepair that its relationship to its setting cannot be determined.
	A site whose remains are located fully below the current ground surface (i.e. crop
	mark sites), and subsequently for which neither the full extent nor
None	significance of the site itself nor it setting can be determined without
* Note that th	archaeological investigation.
	e determination of a monument's sensitivity is first and foremost reliant upon the

^{*} Note that the determination of a monument's sensitivity is first and foremost reliant upon the determination of its setting; i.e. a country house may have a high sensitivity within its own landscaped park or garden but its level of sensitivity may be less when considered within the wider landscape area.

In establishing the relative visual sensitivity of a monument we must first come to have an aesthetic appreciation of a monument and its setting. Table 3 below outlines the factors which must be considered when establishing an aesthetic appreciation and therefore determining visual sensitivity. These have been used as a guide in assessing each monument from known records and in the field. In defining these criteria, emphasis has been placed on establishing the current setting of each monument and how the proposed turbine will affect it.

TABLE 3: ESTABLISHING AN AESTHETIC APPRECIATION OF A MONUMENT AND ITS SETTING

Site Details	
1) Site No. /Name.	Unique number for each monument and name as shown in the
	National Monuments Record Scotland
2) Site type	Brief description of the monument type as defined in the National
	Monuments Record Scotland
3) Site visit	Conditions on day of survey with particular reference to visibility

^{**}While the immediate setting of such monuments is clearly significant, their relationship to the wider landscape is less sensitive to visual change. Where the immediate setting of such sites is to be impacted by development this will be taken into consideration.

conditions	
4) Orientation of	Direction in which Wind Farm lies measured from the monument.
proposed wind farm	
site	
5) Distance from	Distance to nearest turbines measured from the monument.
proposed	
wind farm	
6) Designation	Scheduled Ancient Monument Number or Historic Building Number if
o) Boolgnation	applicable
7) Horizon angle	Angle of elevation of the horizon in direction of wind farm as
, , , , , , , , , , , , , , , , , , ,	measured from the monument
Scientific Detail	model of non-the monament
8) Monument form	The form of a monument, together with its size as it survives in the
	landscape.
9)Current	The current state of survival of a monument with reference to its
Monument	location in the modern landscape. Alterations to the physical
Condition	condition may already have severed or impaired attempts at
Condition	, , , , , , , , , , , , , , , , , , , ,
	understanding its original function and its relationship to the
	physical landform in which it occurs.
40) Deletionahin	This includes how view points to from and source the patting of a
10) Relationship	This includes key viewpoints to, from and across the setting of a
and	monument. Depending on the monument in question these
intervisibility	could include: entrances, specific points on approaches,
with other key	routeways, farmlands, other related buildings, monuments or
sites.	natural features.
	Some sites and monuments exist, where modern scholars argue that
	intervisibility with other monuments in a given landscape was/is
	an integral part of the function of the monument. For example,
	the intervisibility of a number of cairns on the skyline of a
	monument may be understood as a key function of these ritual
	sites linking the separate sites across the landscape. The
	impact of the proposed development may be considered to be
	higher if the intervisibility between such sites is interrupted by
	the placing of a modern turbine and as such the key
	relationships between monuments is of relevance to this
	assessment.
11) Economic	What was the economic function of the monument in the past and
Function	how does it function economically in the current landscape?
12) Evidence for	What evidence remains for internal architecture, evidence for the
technology	skills of its builders? How was it constructed?
engineering	
13)	What is the likely palaeoenvironmental potential of the monument? Is
Palaeoenviro	it likely to preserve significant evidence for past environments?
nment	, and a significant control page 3
potential	
Historic Detail	1
14) Chronology of	What evidence does the monument contain for activity from specific
monument	archaeological periods?
15) Chronology of	What evidence exists in the surrounding landscape for time depth and
, ,	
landscape	use through history and prehistory?

16)Landform	How has the surrounding physical landform evolved and how does it
Evolution	relate to the monument in its current setting?
17) Archaeological	Has the monument been the subject of previous archaeological
Study	study? What did it reveal about the monument in its current
Conial Datail	setting? What is the potential for future archaeological study?
Social Detail	When the historic etrusture was developed at in use, was it leasted to
18) Nature of original and	When the historic structure was developed or in use, was it located to be seen from a distance, perhaps from other sites or buildings?
authentic	Was it intended to have wide views over the landscape?
uses	Generally the role of site and setting was potentially of higher
	importance in the case of ritual monuments (e.g. barrow
	cemeteries), strategic and defensive monuments, and
	monuments designed to convey power or high status (e.g.
	hillforts and castles). Conversely, the setting of farms and
	industrial buildings was usually less important than their
	primary economic functions. Typically, their location would be strongly influenced by economics, e.g. emphasising proximity
	to raw materials, markets, etc). Similarly, commercial premises
	were sited according to demographics and economics, with
	setting being less relevant. Therefore the uses of a monument
	and whether views to and from it were relevant to its function
	are factors in this assessment.
40) Informed	The importance of the cetting refere to the continue of
19)Inferred Importance of	The importance of the setting refers, as above, to our conception of the importance of a monument's setting and orientation to its
setting	builders and users. Some scholars argue that monuments
	interacted as part of a system with other contemporary
	elements (man-made or natural) in the landscape. In some
	cases, setting was thus a significant element in the siting of
	monuments.
	The importance of this original setting thus partially reflects how sensitive a monument is to changes to that setting.
20) Inferred	The importance of views towards the proposed development area
importance of	from the monument either in the past or present is a key factor
view towards	in understanding how changes in these views will affect the
proposed	overall appropriateness of monument setting. For example, a
wind farm site	monument with open and extensive views across the proposed
	wind farm will be more sensitive to the development than one
	with restricted views towards the development and open views
21) Geographical	focused away from the proposed wind farm. The geographical remoteness of a monument can affect how
remoteness	frequently it is visited by either professionals or members of the
	public. For example, how close is the monument to modern
	population centres? Are there any public amenities or
	population centres? Are there any public amenities or interpretation centres nearby? Is the monument close to public
	1

Assessing Magnitude of Impact

The magnitude of impact by the proposed development is an assessment of the magnitude of change at any given monument. Table 4 below outlines the main factors affecting magnitude of impact:

TABLE 4: FACTORS AFFECTING MAGNITUDE OF IMPACT

Site Details	Importance of detail for assessing magnitude impact
1) Proximity to	The greater the distance a cultural heritage feature is from the proposed
centre of	development, the more diminished the visual effects will be. With
development	regard to the now revoked PAN45 (2002) the Scottish Executive
	issued the following guidance on visibility of towers with a tower height
	of >70m and rotor diameters of >80m: at <2 km towers are likely to be
	a prominent feature; at 2-5 km towers are relatively prominent; at 5-15
	km towers are only prominent in clear visibility – seen as part of the
	wider landscape; at 15-30 km towers are only seen in very clear
	visibility – a minor element in the landscape. The new guidance does
	not offer any indication of prominence of towers and as such we
	continue to refer to that offered in PAN45.
2) Number of	The number and proportion of the full height of the turbines that will be visible
turbines visible	will directly affect the magnitude of impact on setting on any given
based on ZTV	cultural heritage feature.
model and	
wireframes	
3) Complexity of	The more visually complex a landscape is, the less prominent the new
landscape	development will seem within it. This is because where a landscape is
	visually complex; the eye can be distracted by other features and will
	not focus exclusively on the wind farm. Visual complexity describes
	the extent to which a landscape varies visually and the extent to which
	there are various land types, land uses, and built features producing
	variety in the landscape.
4) Visual	This refers to the existence of features (e.g. tree belts, forestry, landscaping
obstructions	or built features) that could partially or wholly obscure the wind farm
	from view. The form of mapping called ZTV always presents a worst
	case scenario for visibility precisely because the readily accessible
	digital mapping does not take cognisance of vegetation, structures and
	local micro-topography. Ground truthing is always necessary for a real
	appraisal of the magnitude of visual impacts.

Once the above has been considered the magnitude of impact will be classified based upon the criteria set out below in Table 5.

TABLE 5 CRITERIA FOR CLASSIFYING MAGNITUDE OF VISUAL IMPACT

Visual	Criteria
Impact	
High	Direct and substantial visual impact on a significant sightline to or
	from a ritual monument or prominent fort;
	Direct severance of the relationship between a monument and its
	setting where that monument has a Low, Medium or High visual
	sensitivity;
	Major alteration to elements of setting which directly and demonstrably
	contribute to the cultural value of a Designated Heritage Asset

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	with Low to High visual sensitivity;
	Major visual imposition within a Cultural Landscape;
	Major visual imposition within or affecting an Iconic Site or Monument
Medium	Oblique visual impact on an axis adjacent to a significant sightline to or from a ritual monument but where the significant sightline of the monument is not obscured; Glacis of a prominent fort (based on the proportion of the glacis that would be obscured); Partial severance of the relationship between a monument and its setting where that monument has a Low, Medium or High visual sensitivity; Significant alteration to the setting a SM (or asset of comparable importance) of Medium to High visual sensitivity or significant
	alteration to the setting of a Category A, B or C Listed Building (or asset of comparable importance) of Medium to High visual sensitivity beyond those elements of the setting which directly contribute to the understanding of the cultural significance of the monument; Significant but not major visual imposition within a Cultural Landscape.
Low	Peripheral visual impact on a significant sightline to or from a ritual monument; Insignificant alteration to the setting of a SM of Medium to High visual
	sensitivity or insignificant alteration to the setting of a Category A, B or C Listed Building (or asset of comparable importance) of Medium to High visual sensitivity beyond those elements of the setting which directly contribute to the understanding of the cultural significance of the monument; Minor visual imposition with a Cultural Landscape.
Marginal	All other visual impacts
None	No intervisibility.

Assessing Significance of Impact

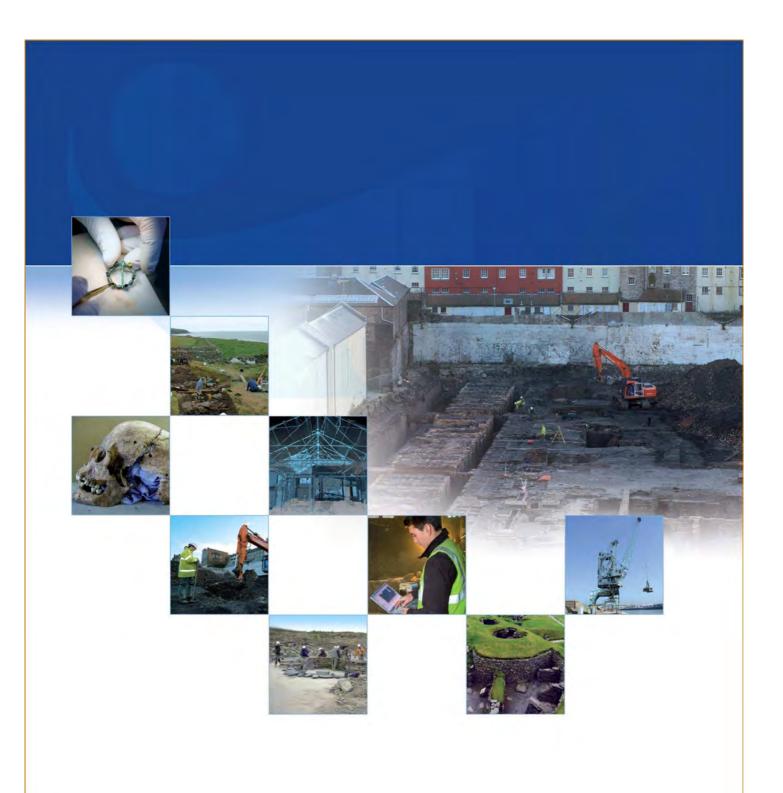
The significance of impacts on the setting of cultural heritage features is judged to be the interaction of the monument's visual sensitivity (Table 2) and the magnitude of the impact (Table 5) and also takes into consideration the cultural value of the monument (Table 1). In order to provide a level of consistency the assessment of sensitivity, the prediction of magnitude of impact and the assessment of significance of impact have been guided by pre-defined criteria. A short descriptive narrative is also provided for each monument to summarise and explain each of the value judgements that have been made.

The interactions determining significance of impact on settings of the monuments in question is shown in Table 6.

TABLE 6: SIGNIFICANCE OF IMPACT ON THE SETTING OF CULTURAL HERITAGE FEATURES

Impact magnitude	Relative Visual Sensitivity			
	Marginal	Low	Medium	High
High	Minor	Minor	Moderate	Major
Medium	Negligible	Minor	Minor	Moderate
Low	None/Negligible	Negligible	Minor	Minor
Marginal	None	None	Negligible	Minor

The impacts recorded in highlighted cells are 'significant' in terms of the Environmental Impact Assessment (Scotland) Regulations 2011

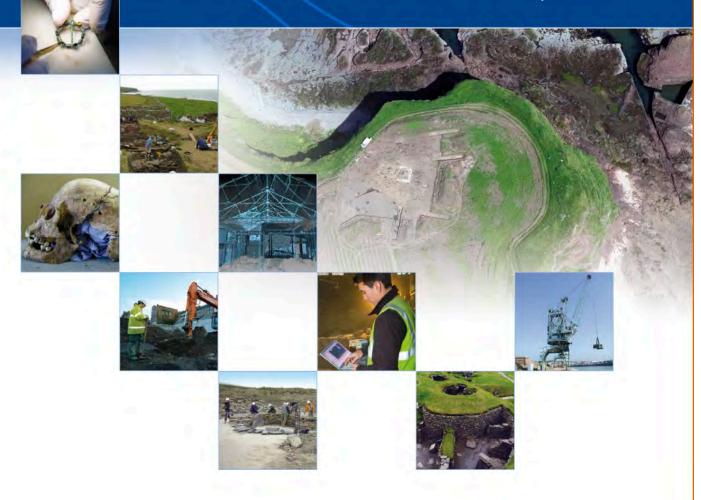




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Ingliston Farm Turbine Angus Response to Historic Scotland Objection

AOC Project Number 22580 February 2014





Introduction

This documents sets out AOC Archaeology's (AOC) comments on the proposed turbine at Ingliston Farm, Angus. It is intended that it will act as a discussion document at a meeting between the applicants, their agents, Locogen, and Historic Scotland on the 11th February 2014. The document sets out AOC's involvement in the project, summarising the results of our assessment and addressing Historic Scotland comments on the adequacy of that assessment.

This response will also provide comment on Historic Scotland's letters of objection (dated 16 December 2013 and 4 February 2014). We note from these consultation responses that Historic Scotland's main concern is impacts upon the burial cairns at Castleward (HS Index 4742) and Wester Denoon (HS Index 4764). We note also that Historic Scotland consider that there is the potential for adverse affects upon the setting of Denoon Law Hillfort (HS Index 138) but that they do not believe such impacts would raise issues of National Importance. Given this understanding our comments will focus on the burial cairns alone.

This document also sets out AOC's comments upon the revised proposal for a lower turbine and will note Historic Scotland responses to applications which we believe are comparable to the Ingliston Farm proposal.

AOC Assesment

AOC Archaeology was commissioned by Locogen, on behalf of their client, to provide an assessment of the potential impacts upon the settings of a number of scheduled monuments in the vicinity of the proposed turbine at Ingliston Farm, Angus. This commission followed Historic Scotland's request for further information in a letter dated 17 October 2013. AOC's assessment was informed by desk-based research, site visits (undertaken 31 October 2013) and visualisations provided by Locogen.

AOC's assessment concluded that the turbine, in its originally proposed location, had the potential to have impacts of *Minor* and *Moderate* significance, respectively, upon the burial cairns at Castleward and Wester Denoon.

Burial cairns, as a monument type, are generally deemed to have high visual sensitivity. This is because it is commonly accepted that such cairns were constructed in locations from which they could be seen from the surrounding landscape. Their positions also often afforded wide views of the that landscape. They are furthermore often known to be placed sequentially along ridgelines or routeways. In the specific cases of Wester Denoon and Castleward, AOC judged the cairns to be of High and Medium visual sensitivity respectively. The visual sensitivity of Castleward was reduced due to its particularly denuded nature. It survives to a maximum height of 40cm and the site visit indicated that, as a result of its reduced field characteristics, the monument was difficult to discern unless one was in close proximity to it. While it is clear when standing at the cairn that views from it are expansive, it is AOC's view that the cairn can no longer be said to be a dominant feature in the landscape. As such the ability to understand its relationship to its setting has been moderately compromised (see Table 2 of Appendix 1 of the AOC's assessment).

^{*} As per the methodology set out in Appendix 1 of our assessment, visual sensitivity refers to the monument's sensitivity to changes to its setting.

The assessment judged that the turbine had the potential to form a significant new feature in the landscape setting of the cairns and noted that the turbine would be located in views along the ridgeline upon which the cairns are located. While this sightline was accepted to be an important element of the cairns' setting, the turbine would not be located directly along this alignment, and therefore would not sever the sightline between the cairns or appear directly behind Castleward when viewed from Wester Denoon. As per the methodology set out in Appendix 1 (see Table 5) of our assessment this was classified as an impact of Medium magnitude for both cairns. The resulting Significance of the impacts, noted above, were the results of the matrix set out in Table 1 of the assessment (also Table 6 in Appendix 1).

Qualitative assessment considered that while the turbine, in its originally proposed position, would be a prominent new feature in views to the north from the cairns, the ability to understand and appreciate the monuments and their relationship with each other and the surrounding landscape would not be materially compromised. The significant alignment along the ridgeline would not be severed and views along Denoon Glen (Ewnie Burn) would be largely unaffected. Expansive views to the west and northwest across the Strathmore and Dean Water would still be possible, albeit with the inclusion of the turbine in views to the north. The monument's ability to inform[†], in which its cultural value lies, would not be impeded.

AOC stand by their assessment both of the visual sensitivity of the monuments and of the magnitude and significance of impact upon the setting of the burial cairns by the original proposal.

Historic Scotland Response to AOC Assessment

In an email to Locogen on the 15 November 2013, Historic Scotland noted that they had '...some reservations...' about the AOC Assessment, characterising it as a visual assessment rather than an assessment of the potential impacts upon the setting of the monuments. AOC asked for clarification on this statement from Rory McDonald during a telephone conversation on the 19th November 2013. Mr McDonald indicated that he had re-read the assessment since providing feedback to Locogen and was content that the assessment was a setting assessment, though he noted he would be undertaking a site visit to inform his own assessment of impacts upon setting.

We would note that our assessment of impact upon setting takes cognisance of the Historic Scotland guidance on setting (2010). As per that guidance we have identified the assets which could be affected, defined their setting (including those elements of setting which contribute most to significance of the monuments) and assessed how the new development would impact upon that setting. In making that assessment we have considered how setting contributes to the ability to understand, appreciate and experience the assets and how the proposed turbine may affect these abilities.

scotland.gov.uk/pls/htmldb/f?p=2300:35:1047654111002192::NO::P35_SELECTED_MONUMENT:4742). For Wester Denoon the description notes that the monument is of national importance because of its potential ability to inform this and future generations about prehistoric burial and ceremonial practices (including the relationship of contemporary and proximate monuments to one another) and prehistoric landuse. These reasons are quoted in HS's response letters to this application.

[†] Note in Historic Scotland's online search for Scheduled Monuments for Castleward no reasons for its National Importance are given (http://data.historic-

INGLISTON FARM TURBINE: RESPONSE TO HISTORIC SCOTLAND OBJECTION

Furthermore we would note that, it is primarily the visual setting with which we have to be concerned for this proposal. Indeed Historic Scotland's response of the 17 October 2013 referenced 'visual links' between the cairns, the 'prominent locations' of the cairns, and the potential for the turbine to 'challenge the cairns for dominance in views' when discussing potential impacts upon setting. All of these elements of setting were considered in the AOC assessment. No comment on our assessment is made in the objection letters from Historic Scotland.

Revised Proposal

Following Historic Scotland's site visit, and subsequent objection, the applicant suggested a mitigation measure to reduce the impact upon the setting of the burial cairns at Castleward and Wester Denoon. The applicant suggested a 20% reduction in the height of the turbine. This reduction in height meant that the turbine no longer broke the skyline in views from Castleward and resulted in a reduction in the impact upon the setting of the cairns. Following submission of revised visualisations Historic Scotland maintained their objection.

Historic Scotland Objection

Historic Scotland provided letters of objection to the amended proposal on 16 December 2013 and 4 February 2014. In these responses Historic Scotland identify the assets which will be potentially impacted by the development, they define the setting of these assets and they assess the potential impacts upon them by the proposal. We agree with the descriptions of the monuments and their settings which are not dissimilar from our own.

With regard to the assessment of impact we have a number of observations and queries.

The letters note that Castleward burial cairn is located prominently '...between the upland and Strathmore.' While we would agree that the cairn is located on a prominent ridge (e.g. landform), it can no longer be said that the cairn itself is prominent. This is important because, as is argued in paragraph 4.4 of our report, the cairn at Castleward does not form a prominent feature in views from Wester Denoon or in when viewed from the wider landscape. The angle off which the turbine is set from the ridge means that it cannot be said that turbine will replace Castleward cairn as a prominent feature in the view along the ridgeline from Wester Denoon, nor can it be said for any other view.

Both objection letters noted that the turbine would '...reduce the monument's elevated location in the landscape'. It is unclear what is meant by this and we would ask for clarification.

The letters note that:

'Due to its dominance and location, the turbine would become the main feature in this surrounding area, altering the balance between the relationship of the local landscape agricultural setting and the elevated position of the monuments, and its key visual relationship along the ridge line'

The letters go on to say that this would reduce the ability to appreciate the monument and its setting. However the letters also acknowledge expansive views across the Strathmore which

effectively form a 180° view from southwest to northeast. Therefore it is unlikely that an observer would have difficulty understanding the elevated location of the cairns above the extensive Strathmore plain and agricultural land below. Our comments on impacts upon the visual relationship between the cairns along the ridge line are addressed throughout this response and so not reiterated here.

HS Response to Similar Applications

Whilst we would acknowledge the idiosyncrasies of each case we would offer the following examples (in addition to the mention of West Mains, Auchterhouse by Locogen in an email of 5 February) of Historic Scotland's responses to one turbine developments in the vicinity of prehistoric burial cairns. In both cases, AOC acted as the heritage consultant for the applicant and predicted impacts of moderate significance (and therefore of significance in terms of EIA regulations) upon the setting of the burial cairns. While Historic Scotland acknowledged significant adverse affects, and in both cases indicated they felt impacts would be slightly greater than the impacts of Moderate significance predicted by AOC, they did not consider that the impacts warranted objection.

Greens Farm, South Lanarkshire (CL/13/0026)

The application at Greens Farm was for a single turbine of a maximum height of 87 m to tip. The turbine was located within 1 km of five scheduled monuments which comprised a total of seven burial cairns. It was these cairns which were the main concern for Historic Scotland, though a number of other scheduled cairns were also located within 2 km of the proposal. One of Historic Scotland concerns was that the turbine would be juxtaposed with two round cairns when these were viewed from a nearby long cairn (e.g. a concern similar in nature to that expressed in this case with regard to view of Castleward from Wester Denoon). The dominance and/or prominence of the turbine in a number of other views was also a concern. In initial pre-application advice Historic Scotland indicated they would object to the proposal. However, following assessment by AOC, a joint site visit and submission of the application, Historic Scotland did not object to the application but rather advised the council that they should consider requesting that the applicant reduce the height of the turbine and/or consider other locations within the land holding.

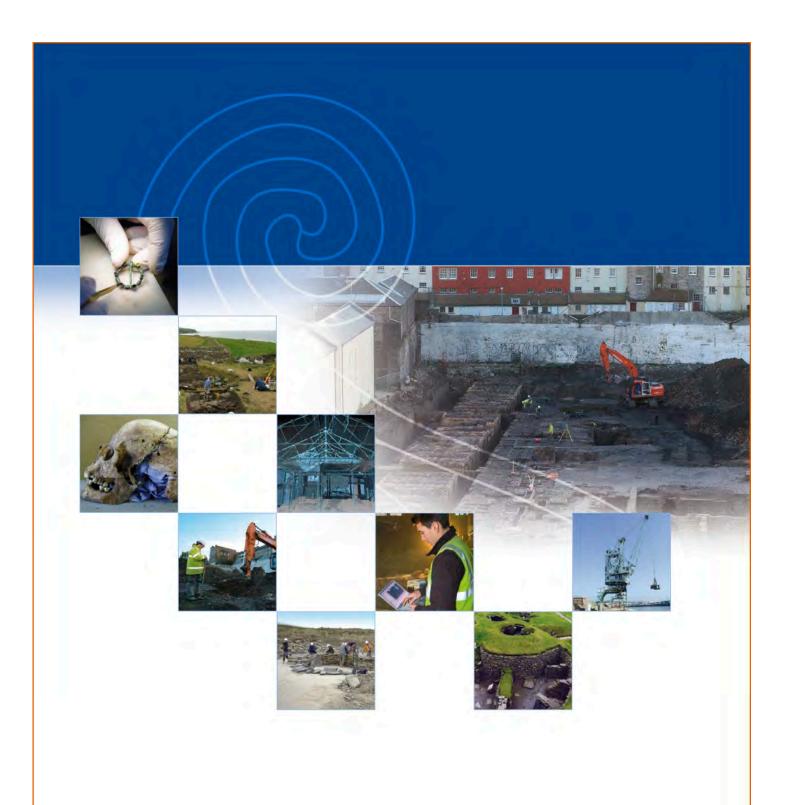
Lessendrum Home Farm, Aberdeenshire (APP/2013/1103)

The application at Lessendrum Home Farm was for a single turbine of a maximum height of 77 m to tip. The turbine was located between c. 590 m and c. 672 m from Gerrieswells scheduled monument which comprised a long barrow and a round cairn set atop a prominent hill. The turbine was proposed to the north of the monuments. The monuments were aligned northeast to southwest and the turbine would have appeared prominent in the view to the north from the long barrow across the round cairn. The turbine was set off slightly from the alignment and did not appear directly behind the round cairn in views. While the hill on which the cairns were located was sparsely surround by mature deciduous trees which partially screened the turbine; the turbine could be glimpsed through the trees and the tip of the blade over topped the trees. While Historic Scotland didn't object they considered the impact was of slightly more than Moderate significance, as predicted by AOC, and they indicated they would welcome mitigation measures such as relocation or height reduction.

Conclusion

This discussion document has set out AOC's comments on the application for a single turbine proposed at Ingliston Farm, Angus. We stand by our assessment of the original proposal which indicated impacts of *Minor* and *Moderate* significance, respectively, upon the setting of the scheduled burial cairns at Castleward and Wester Denoon. We note that the applicant's proposals to shorten the proposed turbine would lessen the impact upon the setting of these heritage assets.

Our comments on Historic Scotland's objection letters are set out above and we consider that further comment and/or clarification from them on points of prominence, key visual relationships and reduction of elevated location is necessary and would be helpful. This is especially true given that from Historic Scotland has not objected to a number of similar single turbine proposals, as set out above.





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