Our Ref: 1006991/Abbey View Farm Wind Turbine/Screening Request – 250912/CD
Your Ref:

P/12/01275

CARTER JONAS

The Property People

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September 2012

For the attention of East Staffordshire Borough Council Development Control

EIA Screening Request, Proposed Wind Turbine at Abbey View Farm

Our client, Mr J Kent is seeking to install a medium scale wind turbine on farm land on the Abbey View Farms estate, located 0.7km to the south east of the town of Croxden and 3km to the south of the village of Alton.

The proposed development is for a single medium scale wind turbine with a maximum hub height of 32.5m and maximum height to blade tip of 47m. The purpose of the proposed wind turbine is to generate renewable energy, offset electricity usage and to reduce the overall carbon footprint of the farm operations. In addition to having an environmental benefit, the proposed wind turbine will also support the continued viability of the existing farm business. It is hoped that a planning application can be submitted to East Staffordshire Borough Council in late 2012.

The proposed wind turbine is a Schedule 2 development under the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999 (herein referred to as the 'EIA Regulations') as it is greater than 15m in height. Schedule 2 of the EIA Regulations describes developments for which the need for an EIA is determined by the Local Planning Authority on a case-by-case basis. EIA is only required if a development is likely to have significant effects on the environment by virtue of factors such as its size, nature or location.

For wind energy developments Annex A of "Circular 02/99: Environmental Impact Assessment" states that an EIA is more likely to be required for commercial developments of five or more turbines or more than 5MW of new generating capacity. Our view is that the proposed wind turbine will not require an EIA under the EIA Regulations; as it is below this indicative threshold and is unlikely to have any significant effects. However, before proceeding with a planning application we wish to confirm that this is the case.

This letter is a request to East Staffordshire Borough Council to provide a formal "screening opinion" in accordance with Part II, Section 5 of the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999 and to assist you in doing so we have attached a summary of the proposed development and the assessment work we propose to undertake.

If you require any further information regarding the proposed development please do not hesitate to contact me.

Yours Sincerely

Clare Davey BSc
Energy Specialist
For and on behalf of Carter Jonas LLP

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Enc. Proposed Development Information
Site Location Plan
Zone of Theoretical Visibility Plan
Photomontages

1. Proposed Development

1.1 Scheme Details

The proposed development is for a single medium scale wind turbine with a hub height of 32.5m and maximum height to blade tip of 47m and supporting infrastructure, namely turbine foundation, crane pad, on-site access track, underground cabling and a building housing electrical equipment. The proposed wind turbine is of typical modern horizontal axis design comprising a rotor (consisting of a hub and three blades) and a nacelle (containing the gearbox and generator) to which the rotor is mounted.

The exact turbine foundation design requires confirmation as it is dependent on ground conditions at the site, but typically a standard foundation consists of a square concrete block approximately 9m wide and 2m in depth.

Through the low speed rotational motion of its blades caused by air passing over them, the wind turbine will convert the kinetic energy of the wind into electrical energy by a generator. The turbine will be connected to the local grid via underground cables from the turbine to the overhead line.

1.2 Access Route

It is proposed that general construction materials and the turbine components will be transported to the site via the public highway from the A50, turning north onto the B5030 towards Rocester, onto Station Road/Hollington Road and then Kellings Lane, turning off Kellings Lane into the site utilising the existing access. A short stretch of new access track will be constructed, which will be approximately 4m wide increasing at bends as required, and will comprise crushed road stone.

1.3 Construction and Decommissioning

The construction phase of the proposed development is anticipated to last approximately 1 month. General construction activities are expected to take place between 08:00-18:00 hours Monday to Friday and 08:00-14:00 hours on Saturday. Although the nature of turbine erection requires a level of flexibility in working hours for specific activities, namely: pouring of the concrete foundation (which may be undertaken as a continuous pour requiring extended working hours); delivery of turbine components out of hours to minimise disruption of the road network; and erection of the turbine which is only possible in low wind conditions.

The wind turbine will be designed with an operational life of 25 years, at this time it is expected that the wind turbine will be dismantled and removed and the site reinstated.

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2. Likelihood of Significant Effects

As the proposed development comprises a wind turbine with a maximum height to blade tip of 47m the development exceeds the thresholds set out in Schedule 2 3(i) of the EIA Regulations which states:

"Installations for the harnessing of wind power for energy production (wind farms)" which meet the following thresholds:

(i) "The development involves the installation of more than 2 turbines; or
(ii) The hub height of any turbine or height of any other structure exceeds 15 metres."

Developments listed in Schedule 2 require EIA if it is likely to have a significant effect on the environment by virtue of factors such as its size, nature or location. The guidance suggests that *"The LPA must screen every application for Schedule 2 development in order to determine whether or not an EIA is required."* (Circular 02/99: EIA, paragraph 32).

We would, however, wish to draw your attention to "Circular 02/99: Environmental Impact Assessment" which provides additional guidance on the interpretation of the EIA Regulations. It advises that *"in general, EIA will be needed for Schedule 2 developments in three main types of case:*

a. *for major developments which are of more than local importance;*
b. *for developments which are proposed for particularly environmentally sensitive or vulnerable locations; and*
c. *for developments with unusually complex and potentially hazardous environmental effects."* (Circular 02/99, paragraph 33).

Environmentally sensitive locations are defined as:

a. *"Sites of Special Scientific Interest, and any consultation areas around them and international conservation sites; and*
b. *National Parks, the Broads, Areas of Outstanding Natural Beauty, World Heritage Sites and scheduled monuments."* (Circular 02/99, paragraph 36).

Whilst it is acknowledged that the proposed development falls within the definition of a Schedule 2 development in the EIA Regulations, having undertaken detailed site investigation we consider that the potential impact of a single medium scale wind turbine in this location will not cause significant environmental effects. We therefore consider that a planning application, whilst requiring additional environmental reporting, will not require a formal Environmental Impact Assessment in accordance with the EIA Regulations. This is for the following reasons:

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a) For major developments which are of more than local importance

The proposed development is for a single wind turbine with a maximum height to blade tip of 47m. Although beneficial, it will contribute only a small percentage to the national energy target thus the proposed development is not considered to be a major development of more than local importance.

The construction phase of the proposed development is anticipated to take up to 1 month and the wind turbine will be in-situ for 25 years before being decommissioned and the site reinstated.

b) For developments which are proposed for particularly environmentally sensitive or vulnerable locations

It is proposed that the turbine is located at NGR E407058, N339178 (refer to the attached location plan), subject to ongoing consultations and the findings of the assessment work. The proposed wind turbine will be situated in a rural location on farm land. The field in which the turbine is proposed is pastoral farm land used for grazing, which is surrounded by farm land and bordered by Kellings Lane. The overhead line to which the turbine is proposed to be connected is located in the adjacent field.

Circular 02/99 defines sensitive areas as: Sites of Special Scientific Interest (SSSI), land to which Nature Conservation Orders are applied, international conservation areas, National Parks, the Broads, Areas of Outstanding Natural Beauty, World Heritage Sites and Scheduled Monuments. The site is not designated as a sensitive area under the Circular 02/99 definition.

There are no designated nature conservation sites within 2km of the site. The nearest SSSI to the site is Saltersford Lane Meadows SSSI, located 3km to the north east of the site. This comprises of two hay meadows and is designated for its flora; the site mainly contains grasses such as sweet vernal-grass (*Anthoxanthum odoratum)*, Meadow Foxtail (*Alopecurus pratensis)*, Creeping Bent (*Agrostis stolonifera)* and crested dog's-tail (*Cynosurus cristatus)*. Another SSSI, Dimmings Dale & the Ranger SSSI is located approximately 4.5km to the north west of the site, which is a streamside and woodland habitat which supports nationally important populations of mosses, liverworts and invertebrates (moths, flies and beetles). These are the only designated nature conservation sites within 5km of the site and would not be impacted by the proposed turbine. There are no Special Protection Areas, Special Areas of Conservation, Ramsar, National Nature Reserves or Local Nature Reserves within 5km of the site.

The site is not located within an area designated for its landscape value at the national level, including landscapes of historical or cultural significance. Neither is it designated for having landscape character value at the local level. The site is not located in or near to a National Park, the Broads or an Area of Outstanding Natural Beauty. Preliminary Landscape and Visual Impact Assessment (LVIA) work has been undertaken for the proposed development, with a Zone of Theoretical Visibility (ZTV) Plan and photomontages/wirelines provided to illustrate the potential landscape and visual impact; please refer to Section 3 of this screening document.

There are no known designated features of historical and cultural importance within the site. The nearest sensitive area is Croxden Abbey Scheduled Monument situated in the village of Croxden, approximately 0.6km to the north west of the site at its closest point. Croxden Abbey comprises the Grade I Listed, English Heritage-owned ruins consisting of standing remains and earthwork remains of buildings and their water management schemes. Consideration has been given to the potential impact of the proposed turbine on the setting of Croxden Abbey (refer to Section 3). Figures 1 and 2 illustrate a view taken from a location in the grounds where glimpses of the proposed turbine from the Abbey grounds may be possible in between trees and built development. As shown in these figures the blades of the proposed turbine could be seen from the grounds of Croxden Abbey where a view is afforded but the impact would not be significant. The proposed turbine would be situated at a lower elevation with screening provided by mature trees and existing buildings surrounding the ruins.

c) For developments with unusually complex and potentially hazardous environmental impacts

The proposed development is for a single medium scale wind turbine. The proposed development will not give rise to any complex or hazardous effects; the wind turbine will be harnessing a renewable energy resource and will not result in the production of any waste to be taken off-site following construction or create a significant risk of an accident.

In establishing a suitable location for the wind turbine an appropriate buffer zone has been placed around residential properties to ensure that operational noise at residential properties will be limited to the lowest levels permissible in ETSU-R-97, and as such significant effects on amenity will not arise. The wind turbine is also located sufficient distance from any residential properties to avoid any significant effects on amenity due to shadow flicker, notably ten times rotor diameter.

Taking account of the above we do not believe that the proposed development will give rise to any significant effects on the environment and that an EIA of the proposed wind turbine is not required.

Whilst we consider that the proposed wind turbine is unlikely to result in significant environmental effects and hence will not require EIA, it is recognised that potential impacts at local level may occur. Therefore, as part of the planning application we would undertake a landscape & visual impact assessment and historic environment assessment, with particular consideration given to the potential impact on sensitive receptors in the surrounding area. Furthermore, as part of the planning application we will submit a supporting environmental report including a Design & Access Statement which will outline the background to the proposed turbine, planning policy, the scheme details and assessments in relation to landscape & visual impact, historic environment, biodiversity, noise, shadow flicker, traffic & transport, hydrology, telecommunications and aviation.

In establishing a suitable location consideration has been given to the potential for noise and shadow flicker effects, with an appropriate buffer zone applied to ensure that noise limits can be

met. Desk based noise and shadow flicker modeling will be presented together with a brief commentary to demonstrate that there will be no significant adverse noise and shadow flicker effects.

Consideration has been given to features of potential ecological value within the site and buffer zones applied in accordance with Natural England guidelines. In addition, a desk based study extending up to 2km from the site and an Extended Phase I habitat survey will also be undertaken in support of the planning application.

The proposed development could have other non-environmental effects e.g. aviation and telecommunications, which are not within the remit of this screening opinion. Consultation with telecommunication and aviation providers is ongoing and the supporting report accompanying the planning application will include details of these so that the council can make an informed decision on all aspects of the proposed development.

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3. Preliminary Landscape and Visual Assessment

As detailed in Section 2, the turbine is proposed to be located at NGR E407058, N339178, subject to ongoing consultations and assessment work. The proposed location of the turbine is shown on the plan attached to this screening request.

The proposed turbine location is within the field boundary of a pastoral field belonging to Abbey View Farm. The field in which the proposed turbine will be located is bordered to the west by Kellings Lane, to the east by a woodland belt and to the north and south by adjacent farm land (fields), separated by a mixture of hedgerows with trees and drainage ditches. The site is relatively well enclosed, with hedgerows and trees along field boundaries providing screening. The surrounding land use predominantly comprises pastoral farm land with defined field margins bound by fences and hedgerows with isolated trees, bands of trees and small woodland blocks.

The site is situated in a rural location with few sensitive receptors in the surrounding area. The nearest residential property to the site is Homestead Farm and Chipperlee Farm situated on Hollington Road approximately 405m and 430m to the south east and south of the site respectively. Both of these residential properties have limited views towards the site due to screening afforded by trees surrounding the properties. There is no public access to the site, although there are some Public Rights of Way (PROW) in the wider surrounding area, the nearest of which is the public footpath which runs north west from the mile post at Wootons, to the west of Pointhorne and to the north of Croxden, which is 340m east from the proposed turbine location at its closest point.

The site falls within the Potteries and Churnett Valley National Character Area, which is an area of transitional landforms, between lowland and upland areas, with ongoing fluvial activity from the Rivers Trent and Churnet. Local landscapes have been affected by mining activities. Woodland is a significant feature, especially near Dimmings Dale. The predominant farming type is grazing livestock and dairy farming, with most agricultural land being under grass or uncropped (89%). Towards the south of the National Character Area, fields are medium sized, with hedges and hedgerow trees, as with the area surrounding the site. Although in open countryside, the immediate landscape is relatively contained and it is considered that the surrounding landscape could accommodate a turbine of this size.

In order to inform the assessment of the potential visual impact of the proposed turbine a Zone of Theoretical Visibility (ZTV) has been produced to illustrate theoretical visibility. The ZTV was created by a computer programme (WindPro) that uses a digital model of the turbine in conjunction with a digital terrain model (DTM) for the surrounding area to calculate the locations from where the proposed turbine would theoretically be visible. However, ZTVs only illustrate the general topographic constraints on the visual influence of a proposed development and do not take into consideration any built elements, vegetation, or localised topographical variation (e.g. embankments), all of which can significantly reduce the area and extent of actual visibility. ZTVs therefore represent the worst case scenario with regard to the visibility of a proposed development, forming an appropriate starting point for undertaking an assessment.

Further to this, eight photomontages and wirelines have been produced from key viewpoint locations around the site (refer to Figures 1 to 16) where views of the proposed turbine are most likely to be afforded, along with a photomontage illustrating a view from within the grounds of Croxden Abbey, which is Grade I listed and a Scheduled Monument.

Viewpoint	National Grid Reference	Proximity to proposed turbine
VP1: Croxden Abbey (Figures 1 and 2)	E406621, N339696	0.77km south east
VP2: Great Gate PROW, Sandy Lane (Figures 3 and 4)	E406063, N340429	1.49km south east
VP3: Stubwood lane PROW, Stubwood (Figures 5 and 6)	E409627, N339935	2.58km south west
VP4: Staffordshire Way National Trail near Eaton Hall Farm (Figures 7 and 8)	E410637, N336336	4.58km north west
VP5: Hollington Road PROW, Hollington (Figures 9 and 10)	E406010, N339005	0.99km north east
VP6: Gravelly Bank, Watery Lane, Hollington (Figures 11 and 12)	E406842, N337983	1.12km north
VP7: Junction of footpaths near Pointhorne and Hollington (Figures 13 and 14)	E407518, N339108	0.39km west
VP8: Nabb Lane, Rocester (Figures 15 and 16)	E408338, N339220	1.29km south west

Taking account of terrain only, the ZTV illustrates that views of the proposed turbine are expected to be limited to the immediate surrounding area, with some potential for longer distance views from the east from elevated locations. The extent of visibility of the proposed turbine from the north, south and west would be limited due to the undulating topography in the area. As noted above, the ZTV only illustrates the general topographic constraints (the ZTV does not reflect the screening provided by intervening vegetation and built development) and therefore represents the worst case scenario with regard to the visibility of the proposed turbine. The photomontages provide further resource in determining visual impact.

VP1, Figures 1 and 2 illustrate a view of the proposed turbine from within the grounds of Croxden Abbey from a position where a glimpse of the proposed turbine is most likely to be afforded, approximately 770m north east of the proposed turbine location. Croxden Abbey is the remains of a 13th Century church, infirmary and 14th Century abbot's lodging which was inhabited by Cistercian 'white monks', the grounds of which extend over 6.1 hectares in total. Since this time, a road has been built through the remains of the Abbey adjoining Hollington Road and Sandy Lane. As shown on the photomontage from this location the blades of the proposed turbine would be visible in the distance in certain weather conditions, but not intrusive, with a large part of the proposed turbine screened by bands of trees situated around the grounds of Croxden which provide effective natural screening. It is expected that the turbine would be screened from view

from numerous locations around the grounds of the Abbey due to the screening afforded by woodland. The impact of the proposed turbine on the setting of Croxden Abbey is therefore not considered to be significant.

VP2, Figures 3 and 4 illustrate a view from Great Gate PROW off Sandy lane, a footpath that joins Great Gate with Gallows Green, approximately 1.49km to the south east. From this location a large part of the proposed turbine would be screened due to the undulating topography, with the blades of the proposed turbine just visible in the far distance sat behind the hillside. In this case a 60 degree angle of view has been provided as the PROW is screened by a well established hedgerow and trees along much of its course. From this viewpoint the existing Hollington wind turbine (which stands at 46m to blade tip), can be viewed in the distance to the east of the proposed turbine sat in a more prominent position on the hill. Taking account of the scale of the turbines and their distance any cumulative impact is considered to be low.

VP3, Figures 5 and 6 illustrate a view from the PROW on Stubwood Lane, 2.58km north east of the proposed turbine. From this location a short distance away, due to the lay of the land and screening afforded by trees and woodland in the area, the proposed turbine would not be visible, with the turbine sat behind the hillside

VP4, Figures 7 and 8 illustrate a view from Staffordshire Way National Trail near to Eaton Hall Farm, approximately 4.58km to the north west. From this location although the ZTV illustrated the potential for views of the proposed turbine to be possible, due to the lay of the land and screening afforded by vegetation the proposed turbine would not be visible.

VP5, Figures 9 and 10 illustrate a view from the southern area of Hollington Road PROW which runs directly towards Croxden Abbey on the edge of the village of Hollington, approximately 990m north east. Again from this location a short distance away due to the lay of the land and screening provided by vegetation the proposed turbine would be barely visible with only a glimpse of the turbine blades afforded.

VP6, Figures 11 and 12 illustrate a view from the PROW near Gravelly Bank on Watery Lane, located approximately 1.12 km directly south of the proposed turbine. From this location the proposed turbine would largely be screened due to the undulating topography, with the blades of the proposed turbine just visible in the far distance sat behind trees along the hillside. In this case a 60 degree angle of view has been provided as the PROW is screened by a well established hedgerow along much of its course.

VP7, Figures 13 and 14 illustrates a view from the junction of the footpaths near Pointhorne and Hollington, located at the closest distance of 390m to the east of the proposed turbine. From this nearby location the turbine can be seen as a prominent feature in the landscape, but the proposed turbine is not overbearing due to its scale and situation in the distance at a lower elevation behind the hillside. Of the locations this is considered to be the most prominent and where a view from a sensitive receptor is most likely to be afforded.

VP8, Figures 15 and 16 illustrates a view from the PROW where it crosses Nabb Lane in Rocester, approximately 1.29km north east of the proposed turbine. This image has been taken in the same line of sight as VP7, only 1km further north east. In this location, due to the screening provided by vegetation the proposed turbine would not be visible.

Due to the nature of the proposed development, the proposed turbine will inevitably have a landscape and visual impact, but as the photomontages demonstrate the proposed turbine is unlikely to have a significant effect on landscape and visual amenity which can arise as a result of turbines being overbearing or visually dominant. The images were taken from sensitive receptors where views are most likely to be afforded taking into account theoretical visibility illustrated by the ZTV. The photomontages illustrate that with the exception of those in close proximity to the site views of the proposed turbine from key sensitive receptors are likely to be limited. Although the proposed turbine is in the locality of Croxden Abbey, as Figures 1 and 2 demonstrate due to screening afforded by trees surrounding the grounds the proposed turbine would not be significantly visible from Croxden Abbey with only glimpses possible. The trees and woodland surrounding Croxden Abbey serve to enclose the area and afford protection to its setting. Similarly, due to the lay of the land and intervening vegetation and built form, it is anticipated that views of the proposed turbine from the surrounding landscape will be limited. It is therefore considered that the proposed turbine is unlikely to have a significant landscape and visual impact.

Path: G:\all offices CAD\Energy Team\Abbey View Farm - Free Breeze - 1005991\Abbey View Farm - Location Plan.mxd

Map center: 407,001 339,332

(Cistercian founded 1178)

Croxden Abbey

Drain

Track

Croxden Brook

Iss

Issues

Iss

Track

Sinks

123m

Croxden

Issues

Abbey View Farm

136m

Path

129m

Issues

/icarage

Butterley Bank Farm

132m

Path

Spr

Issues

FB

Path

122m

Path

Track

Reservoir (covered)

Pointhorne

P12/01275

RECEIVED
- 8 OCT 2012

Legend

Land Ownership Boundary

Turbine Location

CARTER JONAS
South Pavilion Sansaw Business Park
Hadnall Shrewsbury SY4 4AS
T 01939210134 F 01939 210535

Client: Free Breeze
Project: Abbey View Farm
Title: Location Plan

Scale: 1:3,500 @A3 Date: 14 Aug 12
Drawn By: MFrance Dwg No: 1006991/12/05

P:\Projects\Mapping Archive 2\Free Breeze\Abbey View Farm - Free Breeze 100699 Abbey View Farm -ZTVc.mxd

Map center 407 059, 339 178

Legend

- Turbine Location
- Area where turbine blade tip (47m) may be visible
- Area where turbine hub (32.5m) may be visible
- 1 VP1: Croxden Abbey
- 2 VP2: Great Gate PROW, Sandy Lane
- 3 VP3: Stubwood Lane PROW, Stubwood
- 4 VP4: Staffodshire Way National Trail near Eaton Hall Farm
- 5 VP5: Hollington Road PROW, Hollington
- 6 VP6: Gravelly Bank, Watery Lane, Hollington
- 7 VP7: Junction of footpaths near Pointhorne and Hollington
- 8 VP8: Nabb Lane, Rocester

Note: The ZTV plan has been created utilising a digital terrain model and digital surface model up to 1km. The theoretical visibility from 1km to 5km takes account of terrain only

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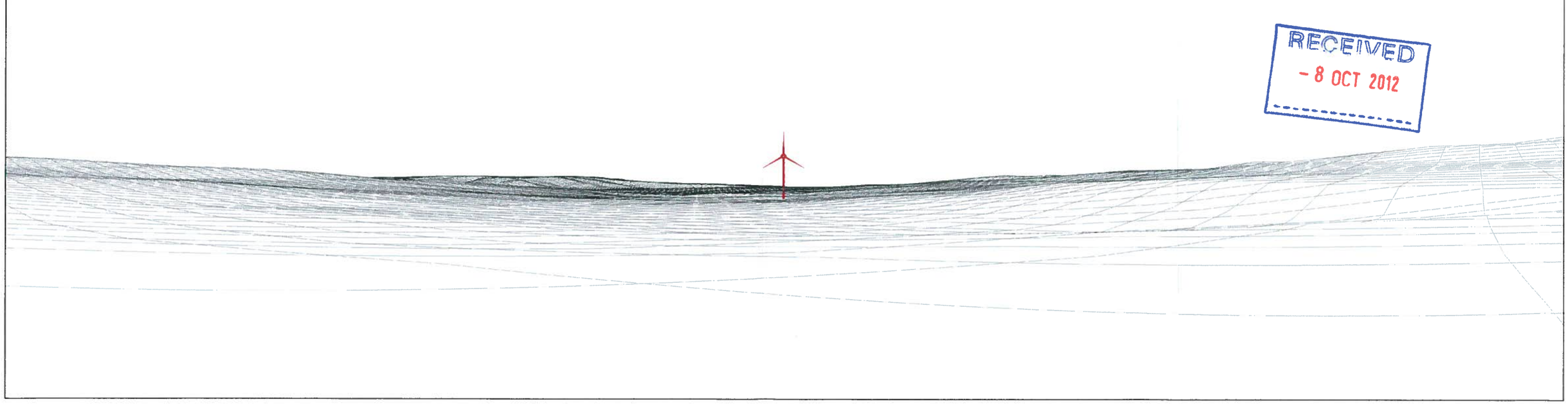
Client: Free Breeze
Project: Abbey View Farm
Title: Zone of Theoretical Visibility

Scale: 1:40,000@A3 Date: 26 Sep 12
Drawn By: MFrance Dwg No: 1006991/12/03c

Existing View



Wireline View

Viewer Height	Ground Height	VP Grid Ref	Date of Photo	Angle of View	Viewing Distance	Direction to Turbine	Distance to Turbine	Wind Turbine Grid Ref	Hub Height	Blade Tip Height
1.6m	181m ASL	406621 339696	16/08/2012	90°	255mm	139°	0.77km	407058 339178	32.5m	47m

Galpin Landscape Architecture

Client	Project	Project Location	Drawing Title	Scale	Date	Drawing Number
Carter Jonas	Abbey View Farm	Croxden, Uttoxeter	Viewpoint 1	NTS - To be viewed at A3	August 2012	Figure 1

Existing View

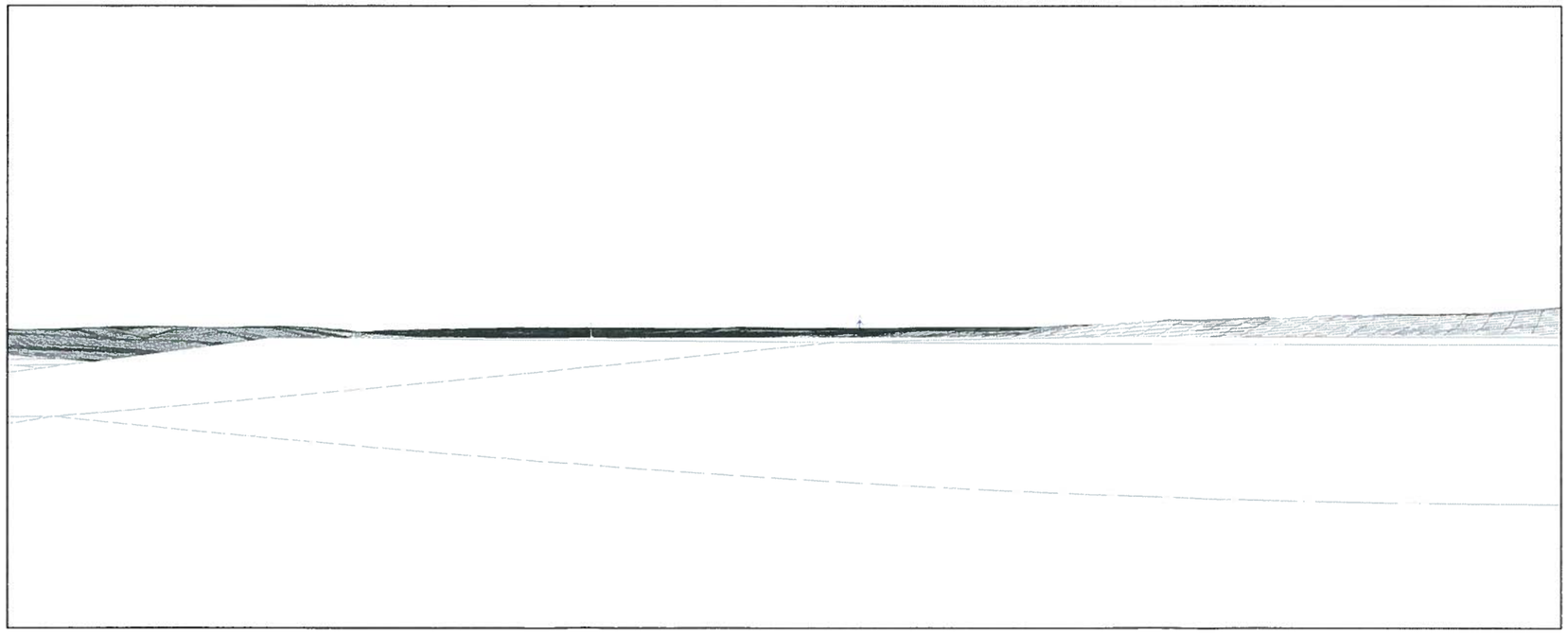
Photomontage View

Viewer Height	Ground Height	VP Grid Ref	Date of Photo	Angle of View	Viewing Distance	Direction to Turbine	Distance to Turbine	Wind Turbine Grid Ref	Hub Height	Blade Tip Height
1.6m	181m ASL	406621 339696	16/08/2012	90°	255mm	139°	0.77km	407058 339178	32.5m	47m

Galpin Landscape Architecture

Client	Project	Project Location	Drawing Title	Scale	Date	Drawing Number
Carter Jonas	Abbey View Farm	Croxden, Uttoxeter	Viewpoint 1	NTS - To be viewed at A3	August 2012	Figure 2

Existing View



Wireline View

Viewer Height	Ground Height	Grid Ref	Date of Photo	Angle of View	Viewing Distance	Direction to Turbine	Distance to Turbine	Wind Turbine Grid Ref	Hub Height	Blade Tip Height
1.6m	226m ASL	406063 340429	16/08/2012	60°	255mm	144°	1.49km	E407058, N339178	32.5m	47m

Galpin Landscape Architecture

Client	Project	Project Location	Drawing Title	Scale	Date	Drawing Number
Carter Jonas	Abbey View Farm	Croxden, Uttoxeter	Viewpoint 2	NTS - To be viewed at A3	August 2012	Figure 3

Existing View

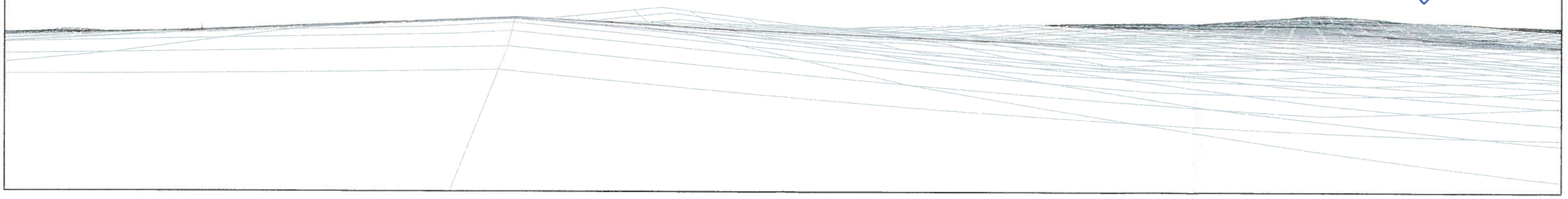
Photomontage View

Viewer Height	Ground Height	Grid Ref	Date of Photo	Angle of View	Viewing Distance	Direction to Turbine	Distance to Turbine	Wind Turbine Grid Ref	Hub Height	Blade Tip Height
1.6m	226m ASL	406063 340429	16/08/2012	60°	255mm	144°	1.49km	E407058, N339178	32.5m	47m

Galpin Landscape Architecture

Client	Project	Project Location	Drawing Title	Scale	Date	Drawing Number
Carter Jonas	Abbey View Farm	Croxden, Uttoxeter	Viewpoint 2	NTS - To be viewed at A3	August 2012	Figure 4

Existing View



Wireline View

Viewer Height	Ground Height	Grid Ref	Date of Photo	Angle of View	Viewing Distance	Direction to Turbine	Distance to Turbine	Wind Turbine Grid Ref	Hub Height	Blade Tip Height
1.6m	201m ASL	409627 339935	16/08/2012	90°	255mm	256°	2.58km	E407058, N339178	32.5m	47m

Galpin Landscape Architecture

Client	Project	Project Location	Drawing Title	Scale	Date	Drawing Number
Carter Jonas	Abbey View Farm	Croxden, Uttoxeter	Viewpoint 3	NTS - To be viewed at A3	August 2012	Figure 5 Rev1

Existing View

Photomontage View (turbine tip behind hedgerow on lhs)

Viewer Height	Ground Height	Grid Ref	Date of Photo	Angle of View	Viewing Distance	Direction to Turbine	Distance to Turbine	Wind Turbine Grid Ref	Hub Height	Blade Tip Height
1.6m	201m ASL	409627 339935	16/08/2012	90°	255mm	256°	2.58km	E407058, N339178	32.5m	47m

Galpin Landscape Architecture

Client	Project	Project Location	Drawing Title	Scale	Date	Drawing Number
Carter Jonas	Abbey View Farm	Croxden, Uttoxeter	Viewpoint 3	NTS - To be viewed at A3	August 2012	Figure 6 Rev1

Existing View

Wireline View

Viewer Height	Ground Height	Grid Ref	Date of Photo	Angle of View	Viewing Distance	Direction to Turbine	Distance to Turbine	Wind Turbine Grid Ref	Hub Height	Blade Tip Height
1.6m	156m ASL	410637 336366	16/08/2012	60°	255mm	307°	4.58km	E407058, N339178	32.5m	47m

Galpin Landscape Architecture

Client	Project	Project Location	Drawing Title	Scale	Date	Drawing Number
Carter Jonas	Abbey View Farm	Croxden, Uttoxeter	Viewpoint 4	NTS - To be viewed at A3	August 2012	Figure 7

Existing View

Photomontage View

Viewer Height	Ground Height	Grid Ref	Date of Photo	Angle of View	Viewing Distance	Direction to Turbine	Distance to Turbine	Wind Turbine Grid Ref	Hub Height	Blade Tip Height
1.6m	156m ASL	410637 336366	16/08/2012	60°	255mm	307°	4.58km	E407058, N339178	32.5m	47m

Galpin Landscape Architecture

Client	Project	Project Location	Drawing Title	Scale	Date	Drawing Number
Carter Jonas	Abbey View Farm	Croxden, Uttoxeter	Viewpoint 4	NTS - To be viewed at A3	August 2012	Figure 8

Existing View

Wireline View

Viewer Height	Ground Height	Grid Ref	Date of Photo	Angle of View	Viewing Distance	Direction to Turbine	Distance to Turbine	Wind Turbine Grid Ref	Hub Height	Blade Tip Height
1.6m	226m ASL	406010 339005	16/08/2012	90°	255mm	82°	0.99km	E407058, N339178	32.5m	47m

Galpin Landscape Architecture

Client	Project	Project Location	Drawing Title	Scale	Date	Drawing Number
Carter Jonas	Abbey View Farm	Croxden, Uttoxeter	Viewpoint 5	NTS - To be viewed at A3	August 2012	Figure 9

Existing View

P/12/01275

Photomontage View

Viewer Height	Ground Height	Grid Ref	Date of Photo	Angle of View	Viewing Distance	Direction to Turbine	Distance to Turbine	Wind Turbine Grid Ref	Hub Height	Blade Tip Height
1.6m	226m ASL	406010 339005	16/08/2012	90°	255mm	82°	0.99km	E407058, N339178	32.5m	47m

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Galpin Landscape Architecture

Client	Project	Project Location	Drawing Title	Scale	Date	Drawing Number
Carter Jonas	Abbey View Farm	Croxden, Uttoxeter	Viewpoint 5	NTS - To be viewed at A3	August 2012	Figure 10

Existing View

Wireline View

Viewer Height	Ground Height	Grid Ref	Date of Photo	Angle of View	Viewing Distance	Direction to Turbine	Distance to Turbine	Wind Turbine Grid Ref	Hub Height	Blade Tip Height
1.6m	223m ASL	406842 337983	16/08/2012	60°	255mm	009°	1.12km	E407058, N339178	32.5m	47m

Galpin Landscape Architecture

Client	Project	Project Location	Drawing Title	Scale	Date	Drawing Number
Carter Jonas	Abbey View Farm	Croxden, Uttoxeter	Viewpoint 6	NTS - To be viewed at A3	August 2012	Figure 11

Existing View

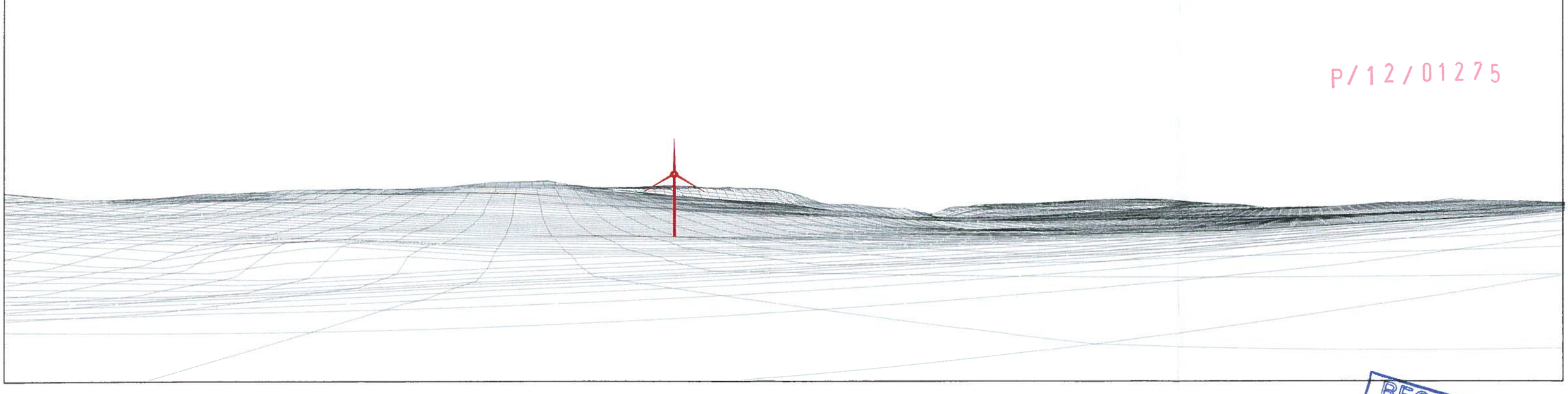
Photomontage View

Viewer Height	Ground Height	Grid Ref	Date of Photo	Angle of View	Viewing Distance	Direction to Turbine	Distance to Turbine	Wind Turbine Grid Ref	Hub Height	Blade Tip Height
1.6m	223m ASL	406842 337983	16/08/2012	60°	255mm	009°	1.12km	E407058, N339178	32.5m	47m

Galpin Landscape Architecture

Client	Project	Project Location	Drawing Title	Scale	Date	Drawing Number
Carter Jonas	Abbey View Farm	Croxden, Uttoxeter	Viewpoint 6	NTS - To be viewed at A3	August 2012	Figure 12

Existing View



Wireline View

Viewer Height	Ground Height	Grid Ref	Date of Photo	Angle of View	Viewing Distance	Direction to Turbine	Distance to Turbine	Wind Turbine Grid Ref	Hub Height	Blade Tip Height
1.6m	175m ASL	407518 339108	16/08/2012	90°	255mm	273°	0.39km	E407058, N339178	32.5m	47m

Galpin Landscape Architecture

Client	Project	Project Location	Drawing Title	Scale	Date	Drawing Number
Carter Jonas	Abbey View Farm	Croxden, Uttoxeter	Viewpoint 7	NTS - To be viewed at A3	August 2012	Figure 13 Rev1

Existing View

P/12/01275

Photomontage View

Viewer Height	Ground Height	Grid Ref	Date of Photo	Angle of View	Viewing Distance	Direction to Turbine	Distance to Turbine	Wind Turbine Grid Ref	Hub Height	Blade Tip Height
1.6m	175m ASL	407518 339108	16/08/2012	90°	255mm	273°	0.39km	E407058, N339178	32.5m	47m

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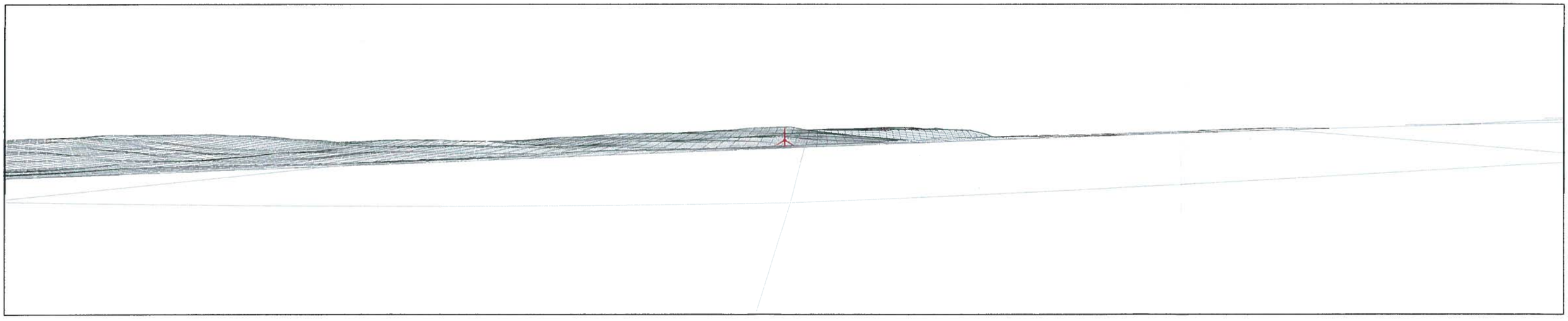
- 8 OCT 2012

Galpin Landscape Architecture

Client	Project	Project Location	Drawing Title	Scale	Date	Drawing Number
Carter Jonas	Abbey View Farm	Croxden, Uttoxeter	Viewpoint 7	NTS - To be viewed at A3	August 2012	Figure 14 Rev1

Existing View



Wireline View

Viewer Height	Ground Height	Grid Ref	Date of Photo	Angle of View	Viewing Distance	Direction to Turbine	Distance to Turbine	Wind Turbine Grid Ref	Hub Height	Blade Tip Height
1.6m	181m ASL	408338 339220	16/08/2012	90°	255mm	268°	1.29km	E407058, N339178	32.5m	47m

Galpin Landscape Architecture

Client	Project	Project Location	Drawing Title	Scale	Date	Drawing Number
Carter Jonas	Abbey View Farm	Croxden, Uttoxeter	Viewpoint 8	NTS - To be viewed at A3	August 2012	Figure 15

Existing View

Photomontage View

Viewer Height	Ground Height	Grid Ref	Date of Photo	Angle of View	Viewing Distance	Direction to Turbine	Distance to Turbine	Wind Turbine Grid Ref	Hub Height	Blade Tip Height
1.6m	181m ASL	408338 339220	16/08/2012	90°	255mm	268°	1.29km	E407058, N339178	32.5m	47m

Galpin Landscape Architecture

Client	Project	Project Location	Drawing Title	Scale	Date	Drawing Number
Carter Jonas	Abbey View Farm	Croxden, Uttoxeter	Viewpoint 8	NTS - To be viewed at A3	August 2012	Figure 16