DELEGATED

AGENDA NO

PLANNING COMMITTEE

DATE 2 MARCH 2011

REPORT OF CORPORATE DIRECTOR, DEVELOPMENT AND NEIGHBOURHOOD SERVICES

10/2549/EIS

Land West Of Stillington, Stockton on Tees Erection of 4 No. wind turbines (max height 125m) and associated infrastructure to include anemometer masts, access roads, crane pads, control building, substation and temporary construction compound.

Expiry Date 6th January 2011

SUMMARY

Planning permission is sought for the erection of a wind farm at Lambs Hill, Stillington consisting of four wind turbines with a maximum height to blade tip from ground level of 125m, together with the associated development of meteorological masts, a control building, access tracks, crane pads, site compounds, underground electrical cabling and other ancillary development.

A total of 65 representations have been received of which 40 raise objection to the scheme and 20 offer support for the scheme, with the remainder offering comment. Objections to the scheme relate mainly to the visual impact of the turbines on the surrounding landscape and residential properties, the potential cumulative impact with other wind farm schemes, impact on residential and public amenity, economic and environmental matters. Comments of support relate to the generation of renewable energy tackling climate change, meeting our targets, reducing energy importing, the fact that the resource will never run out, creating employment opportunities for the area and benefits for the community.

Within Planning Policy Statement 22 – Renewable Energy and the Regional Spatial Strategy, Government has set targets for the UK for 20% of energy to be from renewable energy by 2020 whilst the European Union has set a 15 % target for the same date. Whilst these are targets, they are not ceiling levels. The Tees Valley has its own targets based on these percentages and to date, has not yet achieved the target figures.

The impact of the wind farm has been considered against all material planning considerations including the impact on the landscape, residential properties and settlements, ecology, highway safety, the Stillington Forest Park and the environment in general as well as the cumulative impacts of the scheme taking into account other approved and proposed wind farm schemes. There are no outstanding objections (subject to the imposition of conditions) from consultees with responsibility for air traffic safety, ornithology, archaeology, cultural heritage, pollution, noise disturbance, highway safety or microwave links.

Whilst it is acknowledged that there is a major local impact on the landscape, the Head of Technical Services considers that, based on current consented or operational wind farms within the area, this impact would be acceptable, although has noted that were other proposed schemes within the area developed then there may be an unacceptable cumulative impact with the landscape being dominated by wind farms as a result. Although submitted information has allowed for a cumulative assessment of wind farms to be made, it is considered that this proposal needs to be determined based on the current approved schemes within the area.

The Head of Technical Services has considered the Environmental Statement in respect to construction traffic, abnormal load movements and operational traffic against the need to ensure the scheme is achievable without undue detrimental impact on highway safety. Based on the details as submitted, the traffic impact is considered to be acceptable although conditions are recommended to ensure adequate control is achieved of such matters.

The representations received have been fully considered as have the comments received from consultee's alongside all material planning considerations. Taking all matters into account, although the proposed wind farm will have a major impact on the landscape within the local area and will affect the views for some properties as well as having other impacts, these are consistent with impacts of the majority of wind farms and it is not simply whether a scheme has an impact but the extent of the impact, whether it is confined to a local area and the detail of the effects, taking into account potential mitigation. Taking into account the assessments within this report, the proposed wind farm is considered to be in accordance with national, regional and local planning guidance.

RECOMMENDATION

That planning application 10/2549/EIS be approved subject to the applicant entering into a Section 106 agreement in accordance with the Heads of Terms detailed below and subject to the following conditions;

HEADS OF TERMS

The applicant shall use reasonable endeavours to ensure that thirty per cent (30%) of the Jobs on the Development (excluding specialist jobs such as site manager, agent, resident engineer, turbine erection crew and specialist electrical crew) are made available to residents of Stockton and the Tees Valley.

To use reasonable endeavours to ensure that thirty per cent (30%) of the total net value of the services and materials used in the Development (excluding specialist services and materials such as the supply and erection of wind turbines and electrical connection works) are provided by Businesses within Stockton and the Tees Valley.

CONDITIONS:

01. Approved Plans

The development hereby approved shall be in accordance with the following approved plans unless otherwise agreed in writing with the Local Planning Authority.

HJB/749/PA10	received on the 30 th September 2010.
HJB/749/PA11	received on the 30 th September 2010.
HJB/749/PA17	received on the 30 th September 2010.
HJB/749/PA18	received on the 30 th September 2010.
HJB/749/PA19	received on the 30 th September 2010.
HJB/749/PA20	received on the 30 th September 2010.
HJB/749/PA21	received on the 30 th September 2010.
HJB/749/PA22	received on the 30 th September 2010.
HJB/749/PA23	received on the 30 th September 2010.
HJB/749/PA24	received on the 30 th September 2010.
HJB/749/PA25	received on the 30 th September 2010.
HJB/749/74	received on the 24 th December 2010.

Reason: To define the consent.

CONDITIONS: PRE COMMENCEMENT

02. Contaminated Land Survey

Unless otherwise agreed in writing with the Local Planning Authority, prior to the commencement of development hereby approved a scheme detailing the risks of

contamination will be submitted to and approved in writing by the Local Planning Authority. The scheme shall detail a preliminary risk assessment, site investigation and results, mitigation works and verification plan. The development shall be undertaken in accordance with this scheme unless otherwise agreed in writing by the Local Planning Authority.

Reason: This condition will ensure that the risks posed by the site to controlled waters are assessed and addressed as part of the development, in accordance with the requirements of Stockton on Tees Core Strategy Development Plan Policy CS3 and PPS 23.

03. Surface Water Drainage

No development hereby approved shall be commenced until a scheme for the provision of a surface water drainage system, including a means of attenuation has been submitted to and approved in writing by the Local Planning Authority. The scheme shall include details of how surface water run-off shall be prevented from entering the highway, prevented from affecting rail infrastructure and detail long term management responsibilities. The scheme shall be implemented before the construction of impermeable surfaces, which are to drain into the approved drainage system unless otherwise agreed in writing by the Local Planning Authority.

Reason: To prevent the increased risk of flooding and increased risk to highway safety in accordance with the requirements of Planning Policy Statement 22: Renewable Energy.

04. Foundations

No development hereby approved shall be commenced until a scheme to assess the risks posed and possible impacts of pouring concrete foundations directly on top of the Magnesian Limestone principal aquifer has been submitted to and approved in writing by the Local Planning Authority. The development shall be undertaken in accordance with the approved scheme unless otherwise agreed in writing with the Local Planning Authority.

Reason: In order to prevent pollution of the water environment in accordance with Stockton on Tees Core Strategy Development Plan Policy CS3 and PPS 23.

05. Phased Archaeological Work

Unless otherwise agreed in writing by the Local Planning Authority, no development hereby approved shall take place within the application site boundary until a written scheme of investigation has been submitted to and approved in writing by the Local Planning Authority. The written scheme of investigation shall detail a phased programme of archaeological work including;

- An assessment of significance;
- Research questions;
- A programme and methodology of site investigation and recording;
- A programme for post investigation assessment;
- Provision for analysis of the site investigation and recording;
- Provision to be made for publication and dissemination of the analysis and records of the site investigation;
- Provision to be made for archive deposition of the analysis and records of the site investigation;
- Nomination of a competent person or persons/organisation to undertake the works set out within the Written Scheme of Investigation;
- Post investigation assessment;
- Provision made for analysis, publication and dissemination of results and archive deposition has been secured;
- Timing for each part of the programme

Where important archaeological remains exist provision should be made for their preservation in situ. The development shall be undertaken in strict accordance with the

details of the approved Written Scheme of Investigation and programme of archaeological work.

Reason: To ensure the development does not unduly affect potential archaeological remains in accordance with Saved Stockton on Tees Local Plan Policy EN30.

06. Turbine and transformer cabinet positioning (Micro siting)

Notwithstanding details hereby approved, the wind turbines and their associated transformers shall be sited within 50m of the positions indicated on plan ref: HJB/749/PA17 issue A2 entitled 'proposed site layout' in accordance with a final scheme of siting to be first submitted to and approved in writing by the Local Planning Authority. The final scheme of siting will be considered by the Local Planning Authority in conjunction with consultees including the MoD, Durham Tees Valley Airport, the National Grid, the Joint Radio company Limited and Natural England in order to ensure safe and acceptable distances remain between the turbines and receptors.

Reason: To provide scope for micro siting whilst ensuring the development does not differ materially from the submitted proposal in accordance with the guidance contained within Planning Policy Statement 22: Renewable Energy.

07. Turbine and transformer cabinet type and size

No development shall commence until full details of the design, siting dimensions finish and colour of the turbines and their associated transformer cabinets has been submitted to and approved in writing by the Local Planning Authority. The turbines shall not exceed an overall height to tip of blade when installed of 125m above ground level with an overall rotor diameter of 92.5m. The development shall be carried out in accordance with the approved details unless otherwise agreed in writing by the Local Planning Authority.

Reason: In the interests of and landscape and visual impacts in accordance with guidance contained within Core Strategy Policy CS3.

08. Access track positioning

Notwithstanding details hereby approved, the proposed access tracks shall be sited within 10m of the positions indicated on plan ref: HJB/749/PA17 Issue A2 entitled 'Proposed site layout' in accordance with a final scheme of siting to be first submitted to and approved in writing by the Local Planning Authority. The final scheme of siting will be considered by the Local Planning Authority in conjunction with consultee responses in order to ensure safe and acceptable distances remain between the tracks and receptors.

Reason: To provide marginal scope for micro siting whilst ensuring the development does not differ materially from the submitted proposal

09. Access track through Forest Park

Notwithstanding details hereby approved, the access track through the Stillington Forest Park shall be constructed in accordance with a specification to be first submitted to and approved in writing by the Local Planning Authority in order to limit the impact of the track on the forest park.

Reason: In order to adequately control the details of the scheme being considered.

10. MoD and DTVA Notification

Both the Ministry of Defence and Durham Tees Valley Airport shall be notified in writing, a minimum of 4 weeks in advance of the following at the addresses below;

- The date construction on site commences, including timing for the erection of each turbine,
- The date construction on site ceases,

- The maximum height of construction equipment,
- The latitude and longitude of each turbine.

Each submission of details shall be accompanied by the site address, grid co ordinates and the Local planning Authority's Planning Application reference number.

Reason: In order to inform individuals responsible for aviation safety within the area in accordance with the requirements of Planning Policy Statement 22: Renewable Energy.

Address: MoD Safeguarding Wind Energy Defence Estates Kingston Road Sutton Coldfield West Midlands B75 7RL

Address DTVA Senior Air Traffic Engineer Durham Tees Valley Airport Darlington Co. Durham DL2 1LU

11. Construction Traffic Mitigation

Unless otherwise agreed in writing with the Local Planning Authority, at least one month prior to the commencement of development hereby approved, the developer shall;

- a) Submit to the Local Planning Authority a plan of the routes within the administrative boundary of Stockton on Tees to be used by either Heavy Goods Vehicles or Abnormal Load Vehicles associated with the transportation of goods to site required as part of this development;
- b) Submit to the Local Planning Authority in writing or other agreed form, the results of carriageway and footways inspections both before and after completion. Inspections shall be undertaken using Detailed Visual Survey (DVI) survey techniques which will enable the process the data through the Local Highway Authorities accredited UKPMS system. All work to be undertaken by accredited inspectors in agreement with the Local Planning Authority;
- c) Undertake a joint visual inspection with the Local Authority to monitor and assess the condition of the highways on the selected route of construction traffic.

Prior to the commencement of the development, the applicant shall secure means by which, any damage to the highway caused by the traffic associated with the development, shall be repaired/made good or mitigated at the applicant's expense, being subject to the written approval of the Local Planning Authority in consultation with the Highway Authority. The approved details shall specify timing for repair works to be undertaken.

Reason: In order to ensure the transport phase of the construction works does not unduly affect the highway network

12. Construction Traffic Management Plan

Prior to the commencement of the development hereby approved, a Construction Traffic Management Plan shall be submitted to and approved in writing by the Local Planning Authority. The Construction Traffic Management Plan shall include but not be restricted to detailing the following;

- Site information
- Programming
- Traffic disruption, speed control, road works co-ordination

- Temporary widening, running surfaces, narrow lanes, visibility
- All statutory utility services that may need protecting or diverting
- Temporary safety barriers and safety zones
- Routes for emergency vehicles, diverted vehicles, diverted pedestrians
- Abnormal Load Movements
- Vehicle recovery and incident management
- Temporary Traffic Regulation Order's, signing, lighting, vehicle waiting areas
- Detailed layout of the Traffic Management scheme
- Consultation
- Operational hours

Throughout the construction phase, the Construction Traffic Management Plan shall be implemented in accordance with the approved details, and any changes to the plan shall only be permitted by prior written consent from the Local Planning Authority.

Reason: in the interests of highway safety and free flow of traffic on the Highway Network

13 Abnormal Loads Dry Run – Technical Services

Notwithstanding details hereby approved, prior to commencement of the development, a 'dry run' for transporting the abnormal loads to the site shall be carried out. The 'dry run' load shall accurately represent the maximum width, length and height of the turbine components. The Local Planning Authority shall be informed in writing of timing of the dry run a minimum of 2 weeks prior to its operation. A written statement of the findings of the dry run shall be submitted in writing to the Local Planning Authority prior to any commencement of development on site.

Reason: In order to address any unforeseen impacts of transporting the Abnormal Loads to site.

14. Scheme to retain the highway in a clean state

Notwithstanding details hereby approved and prior to commencement of the development on site, details of measures to be employed to prevent the egress of mud, water and other detritus onto the highway and details of the measures to be employed to remove any such substance from the highway, shall be submitted to and approved in writing by the Local Planning Authority. The development shall be undertaken in strict accordance with the approved scheme unless otherwise agreed in writing with the Local Planning Authority.

Reason: In order to ensure site debris does not affect highway safety.

15. Detailed site operation method statement

No construction, decommissioning or removal work as part of the development hereby permitted shall commence until a detailed method statement for working practices has been submitted to and approved in writing by the local planning authority. The statement shall include but not be restricted to details on foundations, hard standing, site access tracks, drainage, construction compound, soil handling and storage and fencing. It shall also indicate how it has had regard to wildlife surveys undertaken and shall specify any mitigation measures proposed, including the timing of any work. Any works that abut the highway including adopted verges shall be carried out in accordance with the Councils Design Guide and Specification (Residential and Industrial Estates Development) latest edition. All other work shall be carried out in accordance with the approved details.

Reason: In order to adequately control the construction phase of development, its impacts on the surrounding area and protection of the highway.

16. Landscaping scheme, implementation and maintenance

Notwithstanding details hereby approved and prior to the commencement of works on site a scheme of soft landscaping shall be submitted to and approved in writing by the Local Planning Authority. The scheme shall provide details including the species, numbers and locations of planting, timescales for implementation and a maintenance schedule for a minimum period of five years. The development shall be carried out in accordance with the approved scheme.

Reason: In order to ensure a high quality of development in accordance with guidance contained within Core Strategy Policy CS3.

17. Forest Park Improvement Scheme

Notwithstanding details hereby approved and prior to the commencement of works on site a scheme of improvements to the Stillington Forest Park shall be submitted to and approved in writing by the Local Planning Authority. The scheme shall provide details of the improvements to be made and timescales for their implementation. The development shall be carried out in accordance with the approved scheme.

Reason: In order to ensure the recreational value of the park is maintained in accordance with guidance contained within Core Strategy Policy CS3.

18 Lighting scheme

Notwithstanding details hereby approved all fixed lighting to be erected or used as part of both the construction and operational phases of the development, shall be erected and operated in accordance of a scheme of such to be first submitted to and approved in writing by the Local Planning Authority. Any scheme should demonstrate how the impacts of lighting on the landscape and on the operational railway line shall be minimised in respect to intensity, number, direction and colour.

Reason: In order to prevent undue impact on the character and appearance of the surrounding area and prevent undue safety implications for the safe operation of the railway line in accordance with Stockton on Tees Core Strategy Development Plan Policy CS3 and PPS 23.

19. Aviation (a)

No development hereby approved shall commence until a detailed scheme for the provision to air traffic controllers of Durham Tees Valley Airport ('the Airport') of additional radar information (as defined in the note below) in respect of aircraft and other radar returns over or within 3 nautical miles of the boundary of the application site has been submitted to and approved in writing by the Local Planning Authority in consultation with the airport operator and all necessary approvals for the installation, testing and operation of the requirements of the approved detailed scheme have been obtained to the satisfaction of the local planning authority in consultation with the airport operator, including the regulatory approval of the Civil Aviation Authority where necessary.

20 Aviation (b)

The wind farm hereby approved shall not commence operation until the requirements of the approved scheme have been installed, effected, tested and become operational and any further necessary approvals for the same including the regulatory approval of the Civil Aviation Authority, have been obtained, all to the satisfaction of the local planning authority in consultation with the airport operator. Any variation to the approved scheme, including its implementation, shall not take place except with the prior written consent of the local planning authority.

Reason: In order to safeguard airport operations in the interests of Public Safety

Note:

The detailed scheme referred to in condition Aviation DTVA (a) shall;

- Provide for date supplied by primary radar ('the additional radar') other than the primary radar located at the airport, which is fully compatible with the radar data processing system used by the airport; and
- Demonstrate that the scheme when operational will ensure that any radar returns from the development will not be displayed to air traffic controllers of the airport and will not otherwise adversely affect the sir traffic control at the airport.
 'Additional radar information' means information from a primary radar optimised in order to be interpreted or combined with information from the primary radar (watchman) located at the airport.

21 Checking Surveys Badgers

Checking surveys shall be carried out immediately prior to works commencing on site to ensure no Badger Setts have been established on site. If Setts are established or badgers are found to be foraging over the site, no works shall be undertaken until an impact assessment and suitable mitigation strategy has been submitted to and approved in writing by the Local Planning Authority. Development shall be undertaken in accordance with the approved scheme. Should works cease for any period over 1 month then further checking surveys shall be undertaken and any evidence shall be similarly agreed with the Local Planning Authority.

Reason: To conserve protected species and their habitat in accordance with the requirements of guidance contained within Stockton on Tees Core Strategy Development Plan Policy CS3 – Sustainable Living and Climate Change, Planning Policy Statement 22: Renewable Energy and the guidance contained within ODPM Circular 06/2005.

22 Protected species, ecology and ornithology

Unless otherwise agreed in writing with the Local Planning Authority, no development hereby approved shall commence until an Environmental Action Plan (EAP) has been submitted to and approved in writing by the Local Planning Authority. The EAP shall be based on Section 7 of the 'Lambs Hill Environmental Statement, September 2010, relating to mitigation, compensation and enhancement measures and shall include but not be restricted to detailing timing and spatial restrictions, provision of mitigation including protective fencing, habitat enhancements in advance, careful working practices in relation to amphibians, micro siting of turbines, undertaking confirming surveys, adherence to precautionary working methods and appointment of persons responsible for overseeing operations.

Reason: To conserve protected species and their habitat in accordance with Stockton on Tees Core Strategy Development Plan Policy CS3 – Sustainable Living and Climate Change, Planning Policy Statement 22: Renewable Energy and the guidance contained within ODPM Circular 06/2005.

23 Protected Species

No development shall take place unless in accordance with the mitigation detailed within Section E of the protected species report 'Lambs Hill Wind Farm, Bat and Barn Owl Report, AESL, Summer 2010' including, but not restricted to; maintenance of a 50m buffer from the nearest part of the rotor swept path to a habitat feature (trees, hedges, waterways), adherence to precautionary working methods and adherence to timing restrictions.

Reason: To conserve protected species and their habitat in accordance with Stockton on Tees Core Strategy Development Plan Policy CS3 – Sustainable Living and Climate Change, Planning Policy Statement 22: Renewable Energy and the guidance contained within ODPM Circular 06/2005.

CONDITIONS: DURING CONSTRUCTION

24 Vegetation clearance timings

All site vegetation clearance shall avoid the bird breeding season (March to end of August), unless otherwise agreed in writing by the Local Planning Authority and subject to a checking survey being undertaken by a qualified ecologist immediately prior to the clearance works being undertaken.

Reason: To conserve protected species and their habitat in accordance with Stockton on Tees Core Strategy Development Plan Policy CS3 – Sustainable Living and Climate Change, Planning Policy Statement 22: Renewable Energy and the guidance contained within ODPM Circular 06/2005.

25 Construction hours of operation and construction traffic movements

Notwithstanding details hereby approved, all construction operations on site associated with this development, including delivery of materials onto site, but excluding activities associated with abnormal loads, shall be restricted to 8.00 a.m. - 6.00 p.m. on weekdays, 9.00 a.m. - 1.00 p.m. on a Saturday and no Sunday or Bank Holiday working unless otherwise agreed in writing with the Local Planning Authority. All HGV movements shall avoid passing along Morrison Street and the associated school between 8.30 and 9.15am and 3.00 and 4.00 pm. Monday to Friday unless first agreed in writing with the Local Planning Authority. All HGV movements shall avoid passing through Stillington Forest Park outside of the hours 8.30am to 5.30pm Monday to Friday and at any time on Saturdays or Sundays unless first agreed in writing with the Local Planning Authority.

Reason: In order to limit the impact of construction traffic on the amenity of the surrounding area and safe passage of pupils to school in accordance

26 Temporary site compound

Prior to the site compound being constructed on site, a plan to a scale of 1:500 shall be submitted to the Local Planning Authority showing its location and layout, indicating the location of the buildings, car parking, and boundary fencing. Thereafter any temporary site compound at the site shall be constructed in accordance with the approved plans. Unless otherwise agreed in writing with the Local Planning Authority, the compound and all associated features shall be removed from the site and the land reinstated to its former profile and condition no later than 9 months after the date when electricity is first exported from the wind turbines to the electricity grid network (the First Export Date).

Reason: In order to adequately control the appearance of the development and its impact on the character and appearance of the surrounding environment.

27 Control building

The control building and its associated compound shall be constructed in accordance with a scheme of such to be first submitted to and approved in writing by the Local Planning Authority. The scheme shall detail the siting, dimensions, appearance and external finishes of the building, any fencing and the surface material of the compound area. The development shall be carried out in accordance with the approved details.

Reason: In order to adequately control the appearance of the development in accordance with guidance contained within Core Strategy Policy CS3.

28 Site cabling and connection

All electrical cabling between the individual turbines and the on-site control building shall be located underground in accordance with details to be submitted to and agreed in writing by the Local Planning Authority. Thereafter the excavated ground shall be reinstated to its former condition within 6 months of the commissioning of the wind turbines to the satisfaction of the Local Planning Authority Reason: In order to limit the impact of the development on the character and appearance of the surrounding landscape

29 Ice detection equipment

Prior to the erection of any turbine hereby approved, details of a scheme for the detection of blade icing and mitigation of its impacts shall be submitted to and approved in writing by the Local Planning Authority. The procedures, measures and use of equipment set out in the approved scheme shall be operated at all times unless otherwise agreed in writing with the Local Planning Authority.

Reason: In order to take into account the position of the turbines in respect to the public right of way and the safe operation of the surrounding land Dust suppression from vehicles

30 Controlling Dust and Debris

All vehicles leaving the site which are transporting loads from which dust and debris may be produced shall be fully sheeted prior to leaving the site.

Reason: In order to prevent the emission of blown dust and debris from impacting on highway safety

31 Storage of potentially polluting goods

Any facilities for the storage of oils, fuels or chemicals shall be sited on impervious bases and surrounded by impervious bund walls. The volume of the bunded compound should be at least equivalent to the capacity of the tank plus 10%. If there is multiple tankage, the compound should be at least equivalent to the capacity of the largest tank, or the combined capacity of interconnected tanks, plus 10%. All filling points, vents, gauges and sight glasses must be located within the bund. The drainage system of the bund shall be sealed with no discharge to any watercourse, land or underground strata. Associated pipe work should be located above ground and protected from accidental damage. All filling points and tank overflow pipe outlets should be detailed to discharge downwards into the bund.

Reason: To prevent pollution of the water environment

32 Foundation Piling

There shall be no piling of foundations or foundations using penetrative methods unless first agreed in writing with the Local Planning Authority.

Reason: In order to prevent contamination of the water environment in accordance with Stockton on Tees Core Strategy Development Plan Policy CS3 and PPS 23.

33 Wind turbine noise assessment

Unless the REpower MM92 2MW wind turbine with a hub height of 78m is installed at all positions hereby approved for wind turbines, prior to the erection of any turbines, a noise assessment shall be submitted to and agreed in writing by the Local Authority which demonstrates the predicted noise levels for chosen turbine model for the locations and wind speeds as detailed in tables 8.3 and 8.4 of the Environmental Statement.

Reason: In order to ensure the selected turbines reflect the predicted noise levels and do not unduly affect the amenity of the surrounding receptors, in accordance with guidance contained in PPS 22 Renewable Energy.

CONDITIONS: POST CONSTRUCTION

34 Decommissioning – 25 Years

Notwithstanding details hereby approved, unless a renewal permission is granted for the scheme by the Local Planning Authority, the turbines may remain on site for a period not exceeding 25 years from the date that electricity from the development is first exported into the electricity grid. Within 12 months of the expiration of the 25 year period, elements of the development shall have been removed and the site shall be restored in accordance with a scheme of remediation and reinstatement to be first submitted to and approved in writing by the Local Planning Authority. The scheme shall include all highway or landscape features affected by the decommissioning.

Reason: In order to ensure the wind turbines and associated infrastructure and ancillary development are removed in a timely manner at the end of their operational life

35 Turbine removal after 12 months in-operation

Unless otherwise agreed in writing with the Local Planning Authority, if any wind turbine ceases to be operational for a continuous period of 12 months it shall be dismantled and removed from the site within a period of 9 months from the end of the 12 month period and the immediate location of the turbine shall be restored in accordance with a scheme of remediation and reinstatement to be first submitted to and approved in writing by the Local Planning Authority. The scheme shall include all highway or landscape features affected by the decommissioning For the purposes of this condition a period of in operation shall include periods where the wind turbine is operating beyond the approved noise limits as detailed by the noise condition hereby imposed.

Reason: To ensure turbines are removed at the end of their operational life and do not have an unjustified impact on the character and appearance of the surrounding area

36 80m Met Mast - removal

Unless otherwise agreed in writing with the Local Planning Authority, the two 80m masts approved as part of this permission shall be removed from site within 18 months following their initial erection.

Reason: To prevent an unnecessary longer term impact on the appearance of the landscape

37 Television Interference

Prior to the commencement of development, a baseline television reception study in the area shall be undertaken by a qualified television engineer and submitted in writing to the Local Planning Authority with a scheme of works to mitigate the effects of the development on domestic television signals in the area. Any claim by a person for domestic television picture loss or interference at their household within 12 months of the final commissioning of the wind farm, shall be investigated by a qualified engineer at the expense of the wind farm operator and the results shall be submitted in writing to the Local Planning Authority. Should any impairment to the television reception be determined as attributable to the wind farm operation on the basis of the baseline study, such impairment shall be mitigated within 3 months from the decision in accordance with the approved scheme of mitigation.

Reason: In the interests of protecting local amenity

38 Noise emission limitations

The rating level of noise emissions from the combined effects of the wind turbine generators (including the application of any tonal penalty) when calculated in accordance with the attached guidance note shall not exceed the values set out in Table 1 or Table 2 below (as appropriate).

Noise limits for dwellings (defined for the purposes of these noise conditions as a building within Use Class C3 of the Use Classes Order) which lawfully exist or had planning permission at the date of this permission but are not listed in the Tables attached shall be those of the physically closest location listed in the Tables, unless otherwise agreed with the

Local Planning Authority. The coordinate locations to be used in determining the location of each of the dwellings are listed in Tables 1 and 2:

Location (easting, northing grid co-	Wind speed (m/s) at 10m height measured within the site averaged over 10m minute periods											
ordinates)	1	2	3	4	5	6	7	8	9	10	11	12
Foxton (436313, 524722)	43	43	43	43	43	43	43	43	46	49	52	55
Stillington (437099, 523425)	43	43	43	43	43	43	43	43	43	44	47	49
Old Stillington (436392, 522789)	43	43	43	43	43	43	43	47	49	52	53	53
The Whins (435168, 523576)	43	43	43	43	43	43	43	43	43	46	48	50
Moor House Farm (435082, 524082)	43	43	43	43	43	43	43	44	47	50	53	54
Foxton Farm (435993, 524794)	43	43	43	43	43	43	43	43	43	44	47	50

Table 1: Between 23:00 and 07:00 hours (Noise Level in dB LA90, 10min):

Table 2: At all other times (Noise Level in dB LA90, 10min):

Location (easting, northing grid co- ordinates)	Wind speed (m/s) at 10m height measured within the site averaged over 10m minute periods											
	1	2	3	4	5	6	7	8	9	10	11	12
Foxton (436313, 524722)	35	35	35	37	38	40	43	45	47	50	52	54
Stillington (437099, 523425)	35	35	35	36	37	38	40	42	44	46	49	52
Old Stillington (436392, 522789)	35	35	35	37	39	42	45	48	51	54	56	58
The Whins (435168, 523576)	36	37	37	39	40	41	43	44	46	47	48	49
Moor House Farm (435082, 524082)	35	35	35	35	37	39	42	45	47	48	49	49
Foxton Farm (435993, 524794)	35	35	35	35	36	37	39	41	43	45	48	50

Note: The geographical coordinate references set out in these Tables are provided for the purpose of identifying the general location of dwellings to which a given set of noise limits applies.

Reason: In the interests of noise monitoring and the living conditions of occupants of nearby properties

39. Noise a

Within 28 days from the receipt of a written request from the Local Planning Authority and following a complaint to the Local Planning Authority from the occupant of a dwelling which lawfully exists or has planning permission at the date of this consent, the wind farm operator shall, at the wind farm operators expense, employ an independent consultant approved by the Local Planning Authority to assess the level of noise emissions from the wind farm at the complainant's property following the procedures described in the attached Guidance Notes.

Reason: In the interests of the living conditions of occupants of nearby properties.

40. Noise b

The wind farm operator shall provide to the Local Planning Authority the independent consultant's assessment and conclusions regarding the said noise complaint, including all calculations, audio recordings and the raw data upon which those assessments and conclusions are based. Such information shall be provided within 3 months of the date of the written request of the Local Planning Authority unless otherwise extended in writing by the Local Planning Authority.

Reason: in order to protect the amenity of neighbouring residents.

41. Noise c

Wind speed, wind direction and power generation data shall be continuously logged and provided to the Local Planning Authority at its request and in accordance with the attached Guidance Notes within 21 days of such request. Such data shall be retained for a period of not less than 12 months.

Reason: In the interests of noise monitoring and the living conditions of occupants of nearby properties.

42. Noise d

No development shall take place until the wind farm developer / operator has notified the Local Planning Authority of a nominated representative to act as a point of contact for local residents (in connection with conditions 21-24) together with the arrangements for notifying and approving any subsequent change in the nominated representative in relation to any complaints made about noise and any other matters arising during construction, operation and decommissioning of the wind farm.

Reason: For the avoidance of doubt.

43. Wind speed data

The wind farm operator shall commence to log wind speed and wind direction data from the date the wind farm becomes operational, by a method to be first agreed in writing with the Local Planning Authority and thereafter monitor such data continuously throughout the period of operation of the wind farm (unless otherwise agreed in writing with the Local Planning Authority). This data shall be retained for a period of not less than 12 months and shall include the arithmetic mean wind speed in metres per second (ms-1) and the arithmetic mean wind direction in degrees from north for each 10 minute period, synchronised with Greenwich Mean Time.

At the written request of the Local Planning Authority the recorded data relating to a standardised height of 10 m above ground level and relating to any periods during which noise monitoring took place or any periods when there was a specific noise complaint shall be made available. Wind speeds at the standardised height of 10 m shall be derived either by direct measurement of 10 m height wind speeds or derived by calculation from measurements of wind speed at other heights or derived by calculation from the power output of the turbines by a method to be agreed by the Local Planning Authority prior to commencement of the development.

Reason: In order to safeguard the amenity of nearby properties

44. Turbine in-operation data

At the written request of the Local Planning Authority the wind farm operator shall provide, within 28 days from the date of request, a list of ten-minute periods during which any one or more of the turbines was not in normal operation. This information will only be required for periods during which noise monitoring was undertaken in accordance with conditions attached to this permission. 'Normal operation' is defined in the guidance notes referred to above.

Reason: In order to safeguard the amenity of nearby properties.

INFORMATIVES

Noise Conditions

These notes form part of conditions 38-42 as detailed above. They further explain these conditions and specify the methods to be deployed in the assessment of complaints about noise immissions from the wind farm.

Reference to ETSU-R-97 refers to the publication entitled "The Assessment and Rating of Noise from Wind Farms" (1997) published by the Energy Technology Support Unit (ETSU) for the Department of Trade and Industry (DTI).

NOTE 1

- Values of the LA90,10min noise statistic shall be measured at the complainant's property using a sound level meter of EN 60651/BS EN 60804 Type 1, or EN 61672 Class 1 quality (or the replacement thereof) set to measure using a fast time weighted response as specified in BS EN 60651/BS EN 60804 or BS EN 61672-1 (or the equivalent UK adopted standard in force at the time of the measurements). This shall be calibrated in accordance with the procedure specified in BS 4142:1997 (or the replacement thereof). These measurements shall be made in such a way that the requirements of Note 3 shall also be satisfied.
- b) The microphone should be mounted at 1.2 1.5 m above ground level, fitted with a two layer windshield (or suitable alternative approved in writing from the Local Planning Authority), and placed outside the complainant's dwelling. Measurements should be made in "free-field" conditions. To achieve this the microphone should be placed at least 3.5m away from the building facade or any reflecting surface except the ground at a location that shall be agreed with the Local Planning Authority.
- c) The LA90,10min measurements shall be synchronised with measurements of the 10-minute arithmetic mean average wind speed as measured within the wind farm site at a height of 10 metres and with operational data, including power generation information for each wind turbine, from the turbine control systems of the wind farm.
- d) The wind farm operator shall continuously log arithmetic mean wind speed and arithmetic mean wind direction data in 10 minute periods at a height of 10 minutes unless otherwise requested by the Local Planning Authority to enable compliance with the conditions to be evaluated. All 10-minute periods shall commence on the hour and in 10-minute increments thereafter synchronised with Greenwich Mean Time and adjusted to British Summer Time where necessary. It is this measured 10m height wind speed data which is correlated with the noise measurements of Note 2(a) in the manner described in Note 2(c).

NOTE 2

(a) The noise measurements shall be made so as to provide not less than 20 valid data points as defined in Note 2 paragraph (b). Such measurements shall provide valid data points for the range of wind speeds, wind directions, times of day and power generation requested by the Local Planning Authority. In specifying such conditions the Local Planning Authority shall have regard to those conditions which were most likely to have prevailed during times when the complainant alleges there was disturbance due to noise. At its request the wind farm operator shall provide within 21 days of the completion of the measurements all of the data collected under condition 4 to the local planning authority.

- (b) Valid data points are those that remain after all periods during rainfall have been excluded. Rainfall shall be assessed by use of a rain gauge that shall log the occurrence of rainfall in each 10 minute period concurrent with the measurement periods set out in Note 1(c) and is situated in the vicinity of the sound level meter.
- (c) A least squares, "best fit" curve of a maximum 2nd order polynomial or otherwise as may be agreed with the local planning authority shall be fitted between the standardised mean wind speed (as defined in Note 1 paragraph (d)) plotted against the measured LA90,10min noise levels. The noise level at each integer speed shall be derived from this best-fit curve.

NOTE 3

Where, in the opinion of the Local Planning Authority, noise immissions at the location or locations where assessment measurements are being undertaken contain a tonal component, the following rating procedure shall be used.

- For each 10-minute interval for which LA90,10min data have been obtained as provided for in Note 1, a tonal assessment shall be performed on noise immissions during 2-minutes of each 10-minute period. The 2-minute periods shall be regularly spaced at 10-minute intervals provided that uninterrupted clean data are available. Where clean data are not available, the first available uninterrupted clean 2 minute period out of the affected overall 10 minute period shall be selected. Any such deviations from standard procedure as described in Section 2.1 on pages 104 – 109 of ETSU-R-97 shall be reported.
- b) For each of the 2-minute samples the margin above or below the audibility criterion of the tone level difference, □Ltm (Delta Ltm), shall be calculated by comparison with the audibility criterion given in Section 2.1 on pages 104-109 of ETSU-R-97.
- c) The margin above audibility shall be plotted against wind speed for each of the 2-minute samples. For samples for which the tones were below the audibility criterion or no tone was identified, a value of zero audibility shall be substituted.
- d) A linear regression shall then be performed to establish the margin above audibility at the assessed wind speed for each integer wind speed. If there is no apparent trend with wind speed then a simple arithmetic average shall be used.
- e) The tonal penalty shall be derived from the margin above audibility of the tone according to the figure below. The rating level at each wind speed shall be calculated as the arithmetic sum of the wind farm noise level, as determined from the best-fit curve described in Note 2, and the penalty for tonal noise.



NOTE 4

If the wind farm noise level (including the application of any tonal penalty as per Note 3) is above the limit set out in the conditions, measurements of the influence of background noise shall be made to determine whether or not there is a breach of condition. This may be achieved by repeating the steps in Note 1 & 2 with the wind farm switched off in order to determine the background noise, L3, at the assessed wind speed. The wind farm noise at this wind speed, L1, is then calculated as follows, where L2 is the measured wind farm noise level at the assessed wind speed with turbines running but without the addition of any tonal penalty:

$$L_1 = 10 \log \left[10^{\frac{L_2}{10}} - 10^{\frac{L_3}{10}} \right]$$

The rating level is re-calculated by adding the tonal penalty (if any) to the derived wind farm noise L1. If the rating level lies at or below the values set out in the conditions then no further action is necessary. If the rating level exceeds the values set out in the conditions then the development fails to comply with the conditions.

Network Rail

a) Fail Safe Use of Crane and Plant

All operations, including the use of cranes or other mechanical plant working adjacent to Network Rail's property, must at all times be carried out in a fail safe manner such that in the event of mishandling, collapse or failure, no materials or plant are capable of falling within 3.0m of the nearest rail of the adjacent railway line, or where the railway is electrified, within 3.0m of overhead electrical equipment or supports.

b) Security of Mutual Boundary

Security of the railway boundary will need to be maintained at all times. If the works require temporary or permanent alterations to the mutual boundary the applicant must contact Network Rails Asset Protection Engineer.

c) Abnormal Loads

From the information supplied, it is not clear if any abnormal loads will be using routes that include any Network Rail assets (e.g. bridges). We would have serious reservations if during the construction or operation of the site, abnormal loads will use routes that include Network Rail assets. Network Rail would request that the applicant contact our Asset Protection Engineer to confirm that any proposed route is viable and to agree a strategy to protect our asset(s) from any potential damage caused by abnormal loads. I would also like to advise that where any damage, injury or delay to the rail network is caused by an abnormal load (related to the application site), the applicant or developer will incur full liability.

d) Access to Railway

All roads, paths or ways providing access to any part of the railway undertaker's land should be kept open at all times during and after the development.

Network Rail advises that they are required to recover all reasonable costs associated with facilitating these works.

f) Excavation works near to railway line

Network Rail has requested that prior to commencement of works, full details of excavations and earthworks to be carried out near the railway undertaker's boundary fence should be agreed with them and that works shall only be carried out in accordance with the approved details. Where development may affect the railway, consultation with the Asset Protection Engineer should be undertaken. The method statement will need to be agreed with:

Asset Protection Engineer Team Network Rail (London North Eastern) Floor 1B George Stephenson House Toft Green York Y01 6JT

National Grid

The National Grid has advised that a Major Accident Hazard Pipeline (MAHP) high pressure gas pipeline runs through the application site with turbines in close proximity and access tracks passing over the pipeline. There are certain requirements that will be required in respect to work around the pipeline, providing an impact slab above the pipeline to protect it from construction traffic, details of cable routing and other similar matters. National Grid advised that the developer consult the Technical Specification HS(G) 47 "Avoiding Danger from Underground Services", further details can be found in their specification for Safe Working in the vicinity of National Grid high pressure gas pipeline and associated installations - requirements for third party : T/SP/SSW22.

National Grid will also need to ensure that access to their pipelines is maintained during and after construction, that pipelines are normally buried to a depth of 1.1 metres or more below, and that ground cover above pipelines should not be reduced or increased. Some guidance can be found on the UK Onshore Pipeline Operators Associations website www.ukopa.co.uk).

It is strongly recommended that prior to commencement of any part of this development or any pre commencement site works, that any developer contacts the National Grid direct and fully discusses and agrees in writing with the National Grid the impact of their proposals on the National Grid's apparatus, namely the high pressure gas pipeline and a scheme of mitigation, timing and supervision as deemed appropriate. The contact dealt with in respect to this application was :

Sarah Robinson, Policy Support Officer, Land and Development Group, National Grid, Warwick, sarah.robinson2@uk.ngrid.com

Environment Agency

a) Turbine Foundations

The proposed turbines are above the Magnesian Limestone principal aquifer and lie within the source protection zone of an important public water supply. Any concrete foundations placed at depth may come into direct contact with this important ground water reserve.

b) Watercourses

The applicant should note that any proposal to divert or culvert a watercourse within the site will require the prior written permission of the Environment Agency under the Land Drainage Act 1991.

c) Culverting works

The applicant is advised to seek advice from the Environment Agency regarding any necessary permits required for culverting existing ditches.

Teesmouth Bird Club – Bird Monitoring

A request has been made for the applicant to undertake bird monitoring over a 5 year period following the wind farm commencing operation. The applicant is directed to Teesmouth Bird Club should they wish to undertake this survey work in order to agree the survey parameters.

BACKGROUND

- A wind farm has the potential for wide ranging impacts across a number of areas and is required to be accompanied by an Environmental Impact Assessment (EIA), the aim of which is to assess all of the developments impacts on its surroundings in order to ensure the applicant covers all relevant issues within the EIS. Scoping Opinions are submitted to the Local Planning Authority, who, in consultation with relevant statutory bodies advise the applicant on issues to cover and the level of detail expected, i.e. the scope of the assessment.
- 2. The applicant for this current application submitted a Scoping Opinion ref: 09/0416/SOR to Stockton Borough Council. The Local Planning Authority undertook the relevant consultation on this scoping opinion and advised the applicant accordingly.
- 3. A proposal to erect a 60m high cable stayed wind monitoring mast at the Lambs Hill site for a period of 3 years was approved on the 15th April 2010 under application 10/0368/FUL. The mast is used to verify estimated wind speed data and the overall viability of a wind farm at a specific location. The wind monitoring mast is currently in position.
- 4. In addition to the normal communications between the applicant and planning officers both entered into a Planning Performance Agreement (PPA). This is a government led initiative whereby an independent facilitator is appointed to draw up an agreement of the applications progress through the planning system detailing each sides expectations in terms of what information will be required and in what form and an expected time period for determination. The agreement is aimed at ensuring an efficient and well considered process although the PPA in no way binds the Local Planning Authority in its decision making process.
- 5. Following the undertaking of relevant survey work and assessments as requested at scoping stage, this application was registered valid on the 7th October 2010. Within the Environmental Impact Assessment it is indicated that the applicant has considered several other sites for a wind farm and has considered this site as being suitable based on wind speed data and following a sieve mapping exercise for constraints. Other sites considered where there are 'least constraints' are shown as land east of Hilton, land at Seal Sands and Cowpen Marsh, land south of Longnewton, land south of Redmarshall and land west of Thorpe Thewles.

PROPOSAL

- 6. Planning permission is sought for the erection of 4 wind turbines and their associated infrastructure as well as a 60m (max.) lattice anemometry mast and two 80m (max) power performance wind monitoring masts. The ancillary development to the wind farm mainly consists of the following;
 - a) Control building incorporating sub station;
 - b) Temporary lay down area and construction compound;
 - c) Construction of new access to the south of the site (from the road between Stillington and Old Stillington);
 - d) Construction of new access to the east of the site (from the road between the A177 and Morrison Street);
 - e) Construction of approx. 3.5 4km of new access tracks;
 - f) Construction of a crane pad adjacent to each turbine;
 - g) Underground electrical cabling;

See appendix reference 2: Proposed site layout plan.

- 7. The wind farm is proposed to have a 25 year life excluding construction and decommissioning phases which are indicated as being 10 month periods. Decommissioning is indicated as providing for the removal of the turbines and all surface features although suggests that foundations and tracks would remain in place. The submission suggests construction working hours of Mon Fri 7 am to 7 pm and Sat 8 am to 1 pm although requests works associated with the abnormal loads (construction of turbines) be unrestricted as these require police escorts, etc and would need third party agreements.
- 8. The EIS states that the wind farm would have an installed capacity of between 8 and 10 MW based on the use of 2 / 2.5 MW turbines. Turbines would typically generate electricity at between 690 and 1000 volts which is passed through a transformer, typically located in an enclosure or cabinet adjacent to the base of each tower. It is then connected to the on site metering within the control building via 11 kV or 33 kV underground cables placed in trenches generally following the route of the access tracks.
- 9. A more detailed description of the proposed scheme is as follows;

Wind Turbines

- 10. The proposed scheme is for the erection of 4 wind turbines each having a maximum height to tip of blade of 125m, an installed capacity of between 2 and 2.5 MW, a 3 blade rotor with diameter around 90 92.5m. The wind turbines consist of a tubular tower supporting the hub (nacelle) which then in turn supports the 3 rotor blades.
- 11. The EIA advises that turbines proposed would normally operate between 3/5 and 12/18 metres per second, rotating between 9 and 19 times per minute and being finished in a semi matt light grey colour. Once erected the wind turbines require periodic servicing.
- 12. The EIA advises that the turbine foundation details cannot be specified until precise ground conditions and turbine models are known. However, typical details are submitted based on the size of turbine being proposed. Indicative turbine foundations are detailed as being 19 x 19m in plan and 3.5m max. in depth, each using approximately 720 tonnes of concrete and 40 tonnes of steel reinforcing. Most of the foundation would be below ground level with excavated soil being used to reinstate the surface ground level.

The turbine positions are detailed as follows;

- a. T1 436306E 529495N 59m AOD
- b. T2 435930E 523343N 49m AOD
- c. T3 435704E 523679N 57m AOD
- d. T4 436126E 523930N 60m AOD

See appendix reference 3 and 4: Typical wind turbine detail and typical foundation detail.

Cabling and control building incorporating sub station,

- 13. Energy generated from the wind turbines is passed to transformers which are either to be located in the base of each turbine or provided as stand alone cabinets located adjacent to the turbine base. These feed electricity via underground cable to the control building where the wind farms switch gear, protection, metering, communication and control equipment is housed along with other electrical infrastructure. The control building is in turn connected into the National Grid via the Local Distribution Network.
- 14. The connection from the control building to the grid would be the subject of a separate application under Section 37 of the Electricity Act 1989. The grid connection study undertaken has highlighted a possible connection with the Norton sub station located at the Stockton end of Letch Lane. See appendix reference 6: Possible grid connection corridor. The grid connection from the site is not part of this application although would normally either be underground cables or overland cables on wooden poles.

- 15. An indicative design has been submitted for the control building, suggesting that the final detail including its materials are agreed with the Local Planning Authority as part of the Construction Management Plan. The indicative drawing shows a rectangular building with dual pitched roof measuring 18.5m x 7m in plan and a ridge height of 5m. The applicant has confirmed that the control building details are accurate as is possible at this stage of works. See appendix reference 5: Indicative control building detail.
- 16. It is indicated that until the precise model of turbine is known, the precise details of the transformers are unknown although it has been indicated that they are typically 4.5m long, 2.5m wide and 2m high.

Temporary lay down area and construction compound

- 17. The site layout details a temporary site compound and lay down area. This would house the temporary site offices, mess facilities and toilets. See appendix ref: 7: Typical Site compound area. Foul water from the toilets would be contained and removed from site. The compound area would also provide parking for site vehicles. Concrete would either be brought direct to site in lorries or a batching plant would be provided on site. Where concrete is brought to site a settling pit for the wash out from the empty concrete lorries would be provided within the compound area. The settling pit would typically be a trench 10m long 3m wide and 2m deep and lined with an impermeable sheet. The applicant has advised that the setting pit would be emptied out as required using the services of an industrial waste company to remove the water. The remaining solid residue would be disposed of by the contractor via HGV and it is estimated this would account for 10 HGV's accessing the site during the construction phase of the development.
- 18. Fuels and oils would be stored in either a bunded area with concrete plinth or in double skinned containers as required.
- 19. It is indicated that employment on site will be between 15 to 30 operatives.

New accesses to highway

- 20. The wind farm is split by a railway line crossing the site with three turbines to the south and one to the north. There is an access for small vehicles beneath the railway line although it is advised that this could not accommodate the abnormal loads or the HGV's. As such, two access points are proposed with a smaller maintenance track running beneath the railway line which can be utilised throughout the construction period to keep smaller traffic off the highway as well as for the future maintenance traffic.
- 21. The northern access point is taken from the road linking Stillington with the A177. An access track then routes across agricultural land, through the Stillington Forest Park and back through agricultural land until it reaches Turbine T4. The southern access point is taken from the road between Stillington and Old Stillington to the West. See appendix reference 2: Proposed site layout.

Internal access tracks

22. The application details that there will be between 3.5 km and 4 km of internal access tracks linking the turbines with the public highway. See appendix reference 2: Proposed site layout. Tracks are detailed as being constructed using compacted stone and being either 500 mm thick where the track is cut into existing ground or 800 mm thick where it is laid on top of existing ground, with cut tracks having drainage ditches provided either side. Tracks would be 5m in width although widening at corners where turning manoeuvres need to be accommodated. Typical track construction is detailed as involving the topsoil being stripped back, the track being laid and top soil being placed at the sides of the track and allowed to re-vegetate. See appendix reference 8: Cross section of internal tracks. The applicant has requested that the detailed methods be

agreed as part of a construction management plan and that the position of the tracks as submitted be subject to a 10m micro siting allowance.

Crane pads

23. A crane pad is provided next to each turbine to allow each turbine to be lifted into place. The crane pads are shown as being 20m x 40m in plan and having a min. 200 mm thick crushed stone surface. See appendix reference 2: Proposed site layout plan.

60m Wind Monitoring Mast

24. The application also seeks permission for a 60m wind monitoring mast (25 year period) which is shown as a typical detail, being constructed as a lattice tower with an 8m wide base and having a foundation measuring 10m x 10m in plan and being 1m thick. The function of the wind monitoring mast is to measure wind conditions. See appendix reference 9 : Indicative 60m Wind monitoring mast.

80m Wind Monitoring Masts

- 25. The application also seeks permission for two 80m guyed power performance test masts, one being located at the position of turbine T1 and one set a distance away. These two masts would be erected approximately 6 months prior to the commencement of the wind farm development to allow an assessment of variations of results between the two. Once information is gathered, the 80m mast on the position of turbine T1 would be removed. The second would remain in place for several months post operation of the turbines to assess the output of the turbines against their design output. The applicant has indicated that the 80m wind monitoring masts would be required for a minimum period of 12 months.
- 26. Monitoring masts are shown as an indicative detail, having an 80m pole with equipment attached and guy wires anchored to the ground. See appendix reference 10: Indicative 80m guyed mast details.
- 27. The proposal suggests that upon decommissioning the turbine foundations, crane pads and underground cables would be left in situ along with the access tracks which could either be allowed to re-vegetate or used as tracks associated with agricultural operations.

SITE AND SURROUNDINGS

- 28. The application site is located at the north western edge of the Borough immediately to the west of Stillington and adjacent to the administrative boundaries of both Durham County Council and Darlington Borough Council.
- 29. The site is located at a high point within the immediate landscape and its wider setting mainly consists of undulating arable farmland, the settlement of Stillington, sporadic properties and farm buildings, country lanes and landscaping in the form of hedgerows and small copses of trees. There is a disused quarry within the site along with watercourses.
- 30. The largest nearby settlement is Stillington which has both its industrial estate and housing along the western edge. The closest residential properties that are not associated with Stillington are generally sporadic hamlets such as Old Stillington to the South, Foxton to the north and Bishopton Crossings to the west with villages such as Bishopton and Whitton being slightly further afield. Other individual houses and farms also exist within the surrounding area. The site is split by an active railway line which runs east to west across the site.

CONSULTATIONS (summarised)

Government Office For The North East

If it is minded to grant planning permission, the council will wish to consider whether it needs to notify the Secretary of State formally on the application in accordance with statutory directions.

One North East

Currently One North East is responsible for the delivery and review of the Regional Economic Strategy (RES) which sets out how sustainable economic prosperity will be delivered. One North East recognises that providing a clean, secure and stable energy supply is a key challenge and a key opportunity for the region's economy. Efficient use of low carbon energy is the key policy the Agency is promoting. The UK Renewable Energy Strategy (July 2009) sets out how the UK will meet its EU target of 15% of energy coming from renewable sources by 2020 which will require a seven fold increase on current levels. The generation of renewable electricity will be critical in achieving this and the proposed development will play an important role in achieving targets. The Coalition Government has confirmed continued commitment to onshore wind development within the DECC 2050 Pathway Analysis, completed in July 2010 and through financial incentives.

One North East recognises the potential conflict between wind turbine installations and the region's airports. The Agency also acknowledges the importance of air connectivity in city regional economies, and, in that context, supports the growth of both the regions airports. Clearly, the Local Planning Authority will need to be satisfied that there is no risk to aircraft safety. Subject to resolution of aviation safety issues, and other policy, environment, design and access matters to the LPA's satisfaction, One North East is supportive of this application.

Alex Cunningham MP

Owing to the controversial nature of such proposals I undertook my own survey of opinion by writing to every household in the village. The only clear outcome was that very few people in Stillington appear to have strong views on whether or not the wind farm is a good idea.

Of the 14 people who responded six supported the plans, seven were opposed and one had mixed feelings.

I personally am very aware of the need to diversify our energy production into the future as our other natural resources dry up – and it is important that the Stockton Borough plays its part in approving sites for wind farms. Unless the Planning Authority has been inundated with objections from local people this particular application may well provide a positive opportunity for the Borough to do just that.

Stillington and Whitton Parish Council

During the last year the Members of Stillington and Whitton Parish Council have studied this planning application on a number of occasions, attended public exhibitions organised by the developer, spoken to representatives from the development company about the plans, obtained further information about the proposals from Stockton Borough Council Officers, held a public meeting for local residents to air their views, listened to the opinions of local residents on a number of other occasions and arranged a site visit to look at an operational wind farm. As a result of this work the Council would like to feel that the following comments are a fair representation of local resident's views of this Planning Application and would like the Planning Committee to give all of the comments and issues raised serious consideration before making a decision about this proposal.

The main concern of the Parish Council and of many local residents is the number of potential wind farm sites that could be created in this area – on land that is covered by three different planning authorities. Some of these proposals have planning applications submitted – Lamb's Hill (4 turbines), Foxton Lane (3 turbines) and the A1 site (10 Turbines), others are not at this stage as yet – Newbiggin (4 turbines) and another, Moorhouse (10 turbines), has

had the initial planning application turned down but could go to appeal. There are already 17 turbines installed at the Butterwick and Walkway sites – these can be clearly seen from a number of locations in this area and there is an approved site for 5 turbines at Red Gap Moor which is not very far away. The Council is concerned that if development takes place at more than one of these new sites there would be a significant detrimental impact on the attractive rural landscape of this area. Residents would see turbines in a number of directions from the Parish and some would be very close to the Parish. As well as the negative visual impact the Members are concerned that the cumulative noise created by this number of turbines would reduce the quality of life for local residents.

Members are aware of a report written by Arup and Partners that was commissioned by the Association of North East Councils - Wind Farm Development and Landscape Capacity Studies: East Durham Limestone and Tees Plain. The conclusions of this report state that the Butterwick Walkway wind farm plus one other would possibly be acceptable, other combinations and numbers of sites, if developed may be unacceptable due to the effect on local communities. As such the Parish Council would like the neighbouring authorities of Stockton-Borough Council, Darlington Borough Council and Durham County Council to work together to ensure that the over population of this area by wind farms does not occur. If the authorities could agree that one additional site should be considered for a small turbine development then joint working should be carried out to ensure that the most efficient site is located for electricity production that, at the same time, has the lowest visual effect on the surrounding countryside and on the views from resident's houses. This work should not be concerned about the boundaries of each local authority but work to find the best solution for whole area covered by the document which was funded jointly by the North East Councils. To raise levels of public concern in our area to the state we are currently experiencing because residents feel that they could potentially be surrounded by wind turbines is most definitely un-acceptable and very detrimental to relationships within small communities.

Another concern of local residents and the Parish Council is the close proximity of the proposed turbines to local properties. These 125m structures would be very significant features of the landscape and the nearest property is just 600 metres away. A significant number of properties in Stillington are within one kilometre of the nearest turbine to the Village, many properties in the Parish will be able to see the turbines instead of the uninterrupted view they currently experience. While some residents do find the appearance of the turbines appealing or do not have strong feelings on the matter there is a significant proportion who do not wish to view the turbines at all. Of those residents who currently do not have strong feelings on the matter there will be few who have experienced permanently living this close to a large moving structure. If such a large turbine is installed so close to their property they may find that their feelings change. Residents have also expressed their dislike of the proposed telegraph poles that would be used to transport electricity away from the site. If planning permission was given to this proposal Members would like wiring to be buried underground as much as possible – particularly near to residential properties - to prevent further intrusion on the local countryside.

Noise is generated by wind turbines - and the level of this noise, particularly at night when other background noise is minimal - is of concern to residents – especially if more than one of the turbine developments proposed is given planning permission. The Parish Council would like to be assured by Stockton Borough Council that if this application is successful no one who lives in the areas around the Turbines will have their quality of life affected in any way by the noise coming from the turbines – which will be constant when they are operating. The Council would also like to see conditions imposed so that if any of the turbines were not operating correctly and were generating a louder noise or causing any other disruptive problems then the turbine would be repaired or turned off more or less immediately.

The Parish Council feel that Stillington is a very positive community. In a recent study by Stockton Borough Council it was judged to be the most sustainable village in Stockton-on-Tees. This is something that gives pride to residents – particularly some older residents who

remember times when the Village was struggling to be viable. There is concern among Members of the Council that if this development – which many people strongly object to – goes ahead, it could encourage people to move out of the Village and discourage potential new residents from moving into the Parish. This is not a situation that the Parish Council would wish to experience.

Members of the Parish Council share resident's concerns that the amount of heavy vehicle traffic that would pass through the Parish during the construction of the Turbines and associated infrastructure on the routes currently proposed by the developer would be detrimental to Village life and dangerous – particularly around William Cassidy primary school where the road and pavements are relatively narrow. If permission is given for this proposal Members would like conditions imposed that will ensure that the majority of the site traffic for the three turbines to the south of the railway line comes to the site from the West so it would not have to pass through Stillington at all. Conditions should also be imposed so that any traffic that does need to travel through the village does not run around the times that the school day is starting and finishing.

There is also concern that our roads will suffer under the increased heave traffic flow. This applies particularly to South Street, Stillington where the road is supported by a concrete wall that is currently showing initial signs of weakness. This structure does not appear to belong to anyone according to the land searches that have taken place in recent years. Local residents have memories that historically this area was maintained by the Local Authority of the time but no-one has anything in writing to confirm this. If this stretch of road was damaged, residents in the adjacent terraced houses have expressed concern that their properties may be affected also. As well as any surveys of the condition of the highway that take place before and after any development work, it should be ascertained who would be responsible for repair of this wall and the neighbouring properties should any damage be caused.

Access to the proposed turbine to the North of the railway line is due to be via track that would be developed in Stillington Forest Park. This is a site that is regularly used by individuals and families for recreation. If planning permission was given conditions would have to be applied to ensure that traffic only used this access during regular working hours (9.00 am – 5.00 pm) of the working week and not on evenings or weekends. The Parish Council would like Stockton Borough Council, as the owners of this land, to consider whether this track should be fenced to prevent any accidents from happening.

The Members of the Parish Council appreciate that if this development of wind turbines goes ahead there will be significant financial benefits for the community through the 'Lambs Hill Wind Farm Community Fund'. The Parish Council have not been drawn too deeply into discussions about this fund as yet as Members would like to see the decision about this planning application made on its own merits – is it the right sort of development for this area or not. Members would not like a positive decision to be made in favour of the developer mainly because of the financial gain that the community could enjoy. If the Members of the Planning Committee believe that if this development went ahead it would reduce the quality of life for any local residents then no amount of funding for community projects would make up for this.

If however the Committee decide that this will not be the case and approve this application then representatives from the Parish Council should be involved with discussions and agreements about the Community Fund at all stages. Members have seen a draft proposal for the conditions of the Community Fund and, with their extensive knowledge of the area, would like to see a number of changes made and have a number of recommendations to make if this did become a working document. The Parish Council would therefore hope only the necessary minimum details of this Fund are discussed at this stage and, if the application is approved, the full details of this package would be drawn up at a later stage by representatives from Banks, Stockton Borough Council, Stillington and Whitton Parish Council and Stillington and Whitton Residents Association.

Another form of benefit that could be experienced if this application was approved may be additional work for local contractors during the installation of the Turbines. If this application is successful the Parish Council would like to see conditions imposed that would ensure that local businesses were encouraged and given ample opportunity by Banks to bid for contracts and for contracts to be awarded to these companies where appropriate.

In conclusion the Parish Council have found there is significant but not total opposition to the erection of four wind turbines at Lamb's Hill by Banks. These differing views are reflected individually by Members of the Parish Council. There is much more widespread concern from residents and Councillors about the potential over development of this beautiful area by a number of different organisations who wish to install wind turbines. The Members of Stillington and Whitton Parish Council would hope that the Planning Departments of the neighbouring authorities of Stockton-Borough Council, Darlington Borough Council and Durham County Council find a way to work together to find the appropriate solution to this matter that is acceptable to the majority of people living in this area rather than waiting for each application to be dealt with on an individual basis leading the unrest and uncertainty in local communities that we are currently experiencing.

Grindon Parish Council

Wind turbines are appearing on mass in the area now and the PC feel we have enough already

Redmarshall Parish Council

Redmarshall Parish Council objects to this application as it is an unnecessary intrusion into the open countryside and the combined impact of the various local similar schemes is not been satisfactorily considered. Although a reduction in carbon dioxide and other atmospheric pollutants is accepted as a means of reducing global warming this cannot be taken as a carte blanch to implement schemes of dubious validity en masse. This is not a NIMBY objection to the proposal, but an attempt to look objectively at the application as an individual project and also its impact combined with other similar schemes in the area.

Efficiency and economics of wind turbines.

From various sources it can be seen that wind turbines are not an efficient means of meeting the energy requirements of the nation. The time when energy is most needed is when a low pressure zone is stationary over the UK with no wind and falling temperatures and possibly snow. During this period wind turbines are not producing energy and the National Grid has to call into action gas and oil powered power station on what are known as black starts. These power stations have been stood idle, possibly for years, on the assumption that wind turbines are producing electrical energy, but they have to be maintained and ready to produce at a moments notice. This idle time has to be paid for somewhere and is paid for by a standby fee, followed by an enhanced fee for actually generating electricity when they are called into operation. Because of this reliance on the unpredictable element of wind and down time needed for maintenance, they generate only 20 to 30 per cent of the time. Combine this with the cost, subsidy and the enhanced rate paid for the green energy and it can be seen that wind power is not only inefficient, but very, very costly. The only beneficiaries are the developers and the landowners, with little beneficial environmental impact. Is this very small benefit worth the intrusion of the wind farms on local rural communities, the answer has to be no.

The planning application

The mass of information provided with the application, although comprehensive, appears misleading and in some cases gives a totally false impression of the impact of the scheme. For example the photographic viewpoint from Redmarshall appears to have been selected to

show trees and bushes hiding the turbines, against a white sky and taken with a wide-angle lens to reduce the size of distant horizon and objects.

Looking at figure 6.17, in the application, it would appear that there are between 60 and 70 existing and proposed wind turbines within the locality. There appears to be only one study that has been undertaken of the combined environmental and visual impacts of this considerable number of very large structures. The Arup and Partners report commissioned by the Association of North East Councils to look at Wind farms and the Landscape Capacity concludes that the Butterwick Walkway development plus one other would be an acceptable situation. Redmarshall PC would like Stockton BC to liase with other Local and County Authorities to ensure that the regions landscape does not become overrun by indiscriminate wind farm developments, particularly as some small communities appear surrounded by the various proposals.

The structures are 125m tall, equivalent to the height of the London Eye, they will be intrusive in a background of a rural and village landscape.

Although there are only 4 turbines proposed in the present application, the number of vehicle movements indicated will not be a realistic picture of the number of vehicles involved, an example of this was on the 2nd Yorkshire line where actual traffic movements were 3 to 4 times those predicted.

The proposed power corridor to the Norton Substation, Letch Lane from Old Stillington is relatively short and it should be possible to underground the proposed overhead line as the circuit will be only be energised at 11kV and 11kV cable is relatively cheap.

Once planning permission is obtained for a particular site it should be assumed that further applications would be submitted for the site, as a precedent has been set regarding the necessity and impact. An example of this would appear to be the ever-increasing size of the Butterwick Walkway wind farm on the A698 near Wynyard. Can Stockton BC confirm that this organic growth will not spread from this application site

The Local Authority Planning Department have a duty to protect the countryside and the environment from unnecessary visual pollution resulting from the encroachment of structures such as the proposed wind farm.

Mordon Parish Council

The site is less than 3 km from a proposed wind farm site at Foxton and if permission is given to both they are likely to look like one big development and they will have adverse impacts on the surrounding countryside. In addition, there has been a rapid increase in the number of schemes within the area. Wind farm developments that have been approved or proposed in the area include Moor House Darlington (10 turbines), East Newbiggin (11), Foxton (3) Butterwick Walkway (17) and Stillington (4). Without a clear wind farm policy in place how can the planning committee possibly consider the application and how can they make an assessment on the likely cumulative impact this development will have on the local landscape.

Does this area constitute an area defined within Policy 42 in the Regional Spatial Strategy and if so, why is it even being considered. It is understood that there should be at least a 5 km minimum distance between wind farms and if so then it is clear that apart from the already consented wind farms, no further developments should be allowed.

It is noted that PPS 22 advises that typically, cumulative assessment will relate to consented or operational wind farms, however, account has to be taken of others within the planning system.

Bishopton Parish Council

We do believe that even though Bishopton is not in Stockton, as it is less than 2km from the proposed development and the northern houses in the parish will have a clear view of the turbines, they should have been consulted. We hope that properties that will be directly affected have had the opportunity to view the planning application and comment accordingly.

Bishopton Parish Council is very concerned as to the number of proposed and already submitted planning applications for wind turbines in the local area (regardless of boundaries). We believe that this constitutes a serious cumulative effect and that the proposals in the Arup Study should be adhered to. Bishopton is a conservation area with important views, listed buildings and an ancient monument and we believe that the planning departments of the neighbouring authorities should work together so that a beautiful area of countryside is not blighted by an abundance of wind farms.

Hartlepool Borough Council

Whilst there are concerns with the cumulative impact of turbines on the Tees Plain Landscape, there are no objections from Hartlepool Borough Council on the basis that Stockton Borough Council considers all material considerations prior to making a determination. Consideration should be given however to supplementary hedgerow planting or the provision of ponds to encourage wildlife and to counter balance any negative impact / effect the turbines would have on biodiversity.

Durham County Council

The Council has considered the scheme and there are no objections to the principle of the development.

It is recognised that national and regional planning policy place great emphasis on the planning system actively supporting renewable energy such as wind turbines, as increased development of renewable energy resources is vital to facilitating the delivery of the Governments commitments on both climate change and renewable energy.

The Council contends that the main focus here is whether, given the urgent need to foster the generation of electricity from renewable sources, the environmental, economic and social impacts of this scheme can be addressed satisfactorily. As determining authority, Stockton Borough Council will need to give the wider environmental and economic benefits of this renewable energy project significant weight in accordance with the advice in PPS 22, and fully acknowledge the raft of regional and national policy support for renewable energy, and its benefits with respect to pollution and climate change. However, Stockton Borough Council will also need to determine whether these considerations are sufficient to outweigh the harm the four wind turbines may have on the landscape, designated sites and habitats and species.

Visual Impact

Bearing in mind the close proximity of the proposed wind farm at Stillington to the existing planning application at Foxton the cumulative impact of these proposals needs to be very carefully considered, as would the relationship of this proposal with Moor House to the south and Butterwick / Walkway to the north. I would agree with the comments made from Stockton on Tees in response to the consultation regarding the Foxton Lane scheme dated 28th October that because of the close proximity of the Foxton and Stillington proposals that should planning permission be granted, it is recommended that a condition should be added to require the turbine type and tower heights to be agreed so that both schemes match. The landscape and visual impacts of the proposals within County Durham will be the subject of separate advice from our Landscape section.

Access

The supporting information submitted with the planning application states that the northern access route for construction traffic would be routed through this Authorities area along A1,

A689 and 177. Bearing in mind the nature of the routes involved I am of the opinion that this arrangement would be unlikely to warrant a highway objection in this regard. However, in order to prevent any undue significant impact on the local road network or residential amenity along traffic routes, it is advised that the Local Planning Authority impose a condition to restrict HGV traffic to the agreed routes during construction.

Abnormal load deliveries will, however, additionally need to be agreed with the Highways Agency and Police as part of any future traffic management scheme.

Noise / Shadow Flicker

I note that the noise survey information submitted with the planning application includes monitoring points at Foxton, The Whins and Stillington Moor House which are located within this Councils administrative boundary. However, from experience dealing with the Foxton Turbine application I am aware that concerns have been raised regarding the cumulative impact of noise arising from the Spring Lane / Foxton Lane and the Lambs Hill scheme. From the information I have been able to access, I am unsure whether the cumulative impact has been assessed or not. I would suggest liaising with the Environmental Health section regarding the cumulative impact of noise and shadow flicker.

Natural England

Protected Species and Biodiversity Bats

A series of surveys were undertaken during 2009 and 2010 with the site assessed as having low / moderate conservation significance for bats. Recorded activity was largely focused on existing linear features such as hedgerows and waterways with no roosts recorded within the extended survey area. As such, based on the information provided, Natural England advises that the above proposal is unlikely to have an adverse effect in respect of species especially protected by law, subject to the imposition of a condition as recommended.

However, paragraphs 7.175 – 7.177 of the Environmental Statement indicate that there is a risk - working on a worst case scenario where the nearest habitat features have a height of 15m - that the rotor sweep of two of the turbines (2 and 3) could fall just within the 50m buffer zone. Prior to granting of planning permission the LPA will need to satisfy themselves that the 50m buffer is achievable on site otherwise further consideration will need to be given to the micro-siting of the turbines and the LPA may wish to re-consult Natural England. This is in the context where the turbine constraints plan HJB/749/PA15 seems to suggest that there would be significant intrusion into the buffer zone.

Breeding and Wintering Birds

Walk over and vantage point surveys have been undertaken during both the breeding and non-breeding period. On the basis of the survey work the report concludes that 'the site is in an area not particularly sensitive for birds' as few target species were recorded and those which were - i.e. peregrine – were often only recorded on a single occasion. The Environmental Statement does however acknowledge that during the construction phase impacts on bird populations may arise as 'a result of habitat loss and disturbance' with the ES concluding that the impact will be minor / not significant.

However, notwithstanding this assessment, The ES states that to mitigate for the loss of hedgerows within the site, new hedgerows will be planted and the biodiversity value of existing species poor hedgerows will be enhanced. In addition, Section 5.0 of the Breeding and Non-breeding Bird Survey Report includes a number of recommendations for on-site enhancement for birds. To ensure that the recommendations are translated into delivery on the ground, Natural England recommends that a condition is attached to any permission which may be granted requiring the submission of a detailed Management Plan for the site. This should fully demonstrate how the proposed enhancement measures will be incorporated into scheme design and also how their management / maintenance will be secured in the

long term. Natural England also recommend that a condition is attached relating to the clearance of any on site vegetation.

Badgers (confidential)

Otter and Water Vole

Surveys have been undertaken for both otter and water vole with no evidence of the presence of either species recorded. However, the Environmental Statement (Paragraphs 7.114 & 7.115) acknowledges that suitable habitat is present. As such, while Natural England has no objection to this element of the proposal, we would recommend that the LPA also seek the views of the Environment Agency.

Great Crested Newts

Surveys have been undertaken for great crested newts with no evidence of presence recorded. However, there are historic records of the species from Stillington Forest Park LNR. In addition, two reservoirs within the industrial estate were unable to be accessed. As such, on the basis of the information provided, while Natural England accepts that the risk of great crested newts being present within the development site is low, it cannot be fully discounted. Natural England therefore recommend that a method statement outlining careful working practices in relation to amphibians is submitted to the LPA for approval prior to the commencement of works on site. This will also be of benefit to other amphibians such as common toad (a UK BAP priority species) which were recorded within the site.

Habitats

An updated plan has been provided showing the location of the turbines and associated site infrastructure in relation to the distribution of semi-natural habitats. Other than within Stillington Forest Park LNR, it appears that the impacts on semi-natural habitat will be largely restricted to the loss of sections of hedgerow, for which mitigation is proposed. As such, Natural England has no objection to this element of the proposal subject to a condition being attached requiring the submission of a detailed management plan.

Stillington Forest Park Local Nature Reserve

It is noted that the access track required to serve the development will pass through Stillington Forest Park Local Nature Reserve (LNR). This will result in the loss of 0.11 ha of broadleaved woodland and 0.08 ha of grassland with temporary disturbance to a further 0.03 ha and 0.0 5ha respectively. The ES assesses the magnitude of impact on the LNR to be low, resulting in an impact of minor significance. However, 7.198 and 7.199 provides generic details of measures it is proposed to undertake to mitigate for the losses which will occur. Natural England recommends that a detailed management plan / landscaping scheme is developed in discussion with appropriate Local Authority / Local Wildlife Trust staff. Delivery of the management scheme should be secured by means of a suitably worded condition.

Watercourses

It is noted that the proposed access road will cross the existing ditch network in three places, requiring small areas to be culverted. Natural England would advise the applicant to seek advice from the Environment Agency regarding any necessary permits.

Care must be taken to ensure no pollutants enter the watercourse during works. A condition should be attached to the permission to ensure the Environment Agency guidance on pollution prevention is adhered to for all works in the vicinity of watercourses and a suitable stand-off be maintained where appropriate.

Landscape and Visual Amenity

Consideration of Key Visual Receptors

It is noted that a 20 km radius study area has been chosen. In this instance, Figure 6.7a (ZTV Study incl. woodlands and settlements) indicates that the Zone of Theoretical Visibility will extend beyond the study area with the proposal being visible from the North York Moors

National Park which is at a distance of approximately 23 km. However, the LVIA assessment includes no viewpoints from within the National Park or consideration of the sensitivity of this landscape, magnitude of effects or likely level of impact upon it from the proposal. Without such viewpoints or other compelling evidence to suggest no unacceptable impact, Natural England cannot provide substantive advice on the likely impacts of this proposal upon views from, and setting of, the North York Moors National Park. The LPA will need to be satisfied prior to determination of the application that no unacceptable adverse impacts will arise. Natural England recommends that the LPA seek the views of the North York Moors National Park Authority in this regard.

Landscape and Visual Impacts

The Environmental Statement indicates that the proposal will have a major-moderate effect on landscape character up to 700m from the site (Tees Lowland National Character Area: Thorpe Beck Valley and Butterwick and Shotton Local Character Areas). There will also be a major / major-moderate affect on local visual amenity (i.e. public bridleway near Foxton; Bleach House Bank). The Local Planning Authority will need to consider whether the benefits of the proposal will outweigh its landscape and visual impact. The LPA should also consider the proposal in full light of the recommendations of the 2008 report 'Wind Farm Development and Landscape Capacity Studies: East Durham Limestone and Tees Plain' and 2009 Addendum. Using the typology adopted within this document, the proposed wind farm falls between two landscape zones, 20 and 24. Within zone 20 landscape sensitivity is assessed as medium with the largest wind farm potentially acceptable assessed as medium small (between 7.5-25 MW or 4-9 turbines approx). Landscape sensitivity is also assessed as medium within Zone 24 with the largest wind farm potentially acceptable being assessed small – medium small (between 7.5-18 MW or 4-6 turbines approx). However, within Zone 24 'the constraints map indicates that there is very little unconstrained land within this zone'. Since the 2008 report, an application for three turbines at Foxton Lane has entered the planning system, with this site falling fully within Zone 20. This is addressed in an addendum to the original report published in 2009. Natural England advise that the LPA should give full consideration to the recommendations of the report (and addendum) when considering the proposals in terms of landscape capacity, visual issues and cumulative impact.

Cumulative Impacts

Natural England note that the ES considers that cumulative impacts on the landscape and visual amenity of designated sites will be of minimal significance (6.304). However, the proposal may result in additional cumulative impacts on local landscape character and visual amenity. The Local Planning Authority should consider this in their decision making process.

The Environment Agency

We would only find the proposal acceptable if conditions are imposed in respect to Contaminated Land and foundations. Further to our letter of 5 November 2010, it has been raised to our attention that liquid concrete will be used for foundations in an area where the aquifer is quite sensitive. As a result, we would request that this additional condition be imposed on any approval in addition to those included in our previous response.

Civil Aviation Authority

I have reviewed the relevant sections of Environmental Statement and the aviation report, and I have nothing further to add beyond seeking comments from the MoD, Durham tees Valley Airport, Newcastle Airport and NATS.

Ministry Of Defence

The principal safeguarding concerns of the MOD with respect to wind turbine developments relate to their potential to create a physical obstruction to air traffic movements and cause interference to air traffic control and air defence radar systems.

In the case of the proposed Lambs Hill Wind Farm, the MOD have no objection to the proposal based on the height and position of the turbines as specified. It is requested that

should the application be approved then we be informed of the start and end dates of construction, maximum height of construction equipment and the latitude and longitude of each turbine. This is vital as this will then be plotted on flying charts.

If the application alters in any way then we must be consulted again as even the slightest change could unacceptably affect us.

Durham And Tees Valley Airport

The proposed wind farm would be likely to interfere with the primary radar located at Durham Tees Valley Airport. Discussions have taken place between the applicant and our client and, as a result, our client now confirms that it has no objection to the grant of planning permission provided that conditions are attached to the planning permission in the form set out in the annexed document. The wording of the conditions closely follows the wording of similar conditions imposed by the Secretary of State in respect of the Tween Bridge and Keadby wind farms, located near to Robin Hood Airport, where similar issues arose.

Newcastle Airport

Given the location of the proposed turbines is in excess of 30 km from Newcastle International Airport, the scheme would not result in any obstruction to trafficking aircraft, nor would it present itself as an obstruction to the airports navigational aids and therefore we offer no objection. It is suggested that Durham Tees Valley Airport are consulted.

English Heritage

The proposed scheme will have no direct impact on any historic environment asset for which English heritage has responsibility. At the pre application stage we had concerns over the schemes impact on Scheduled Ancient Monuments at Bishopton and Layton but these concerns have been dealt with.

The development may however have an impact on non designated archaeological remains and we would advise you consult with Tees Archaeology as they are best placed to give more localised advice including any mitigation.

Tees Archaeology

The application includes an archaeological desk-based assessment. This indicates that the proposal may have an adverse effect on as yet unrecorded prehistoric or Roman features. The report recommends further archaeological assessment in the form of geophysical survey and excavation trenching. I support this recommendation and am happy for the archaeological works to be carried forward as a planning condition. Condition suggested by Tees Archaeology which is as recommended to the Planning Inspectorate by the Association of Local Government Archaeological Officers (2010).

Highways Agency

The Highways Agency initially placed a Holding Direction on the application. A further response was received suggesting that additional information should be supplied in respect to accident data, trip generations, trip distributions and assignment, Auto track runs and a Traffic Management Plan.

The Highways Agency have since commented further indicating that they are content with the additional information supplied and have no objections in principal.

Health and Safety Executive

The HSE confirmed that they did not need to be consulted on applications for this development type and that wind turbines are not a relevant development type for their computerised consultation database in relation to planning in the vicinity of major hazard sites and pipelines as they do not in themselves involve the introduction of people into the area.

Chief Fire Officer

Cleveland Fire Brigade offer no representations.

Network Rail

With reference to the protection of the railway, Network Rail has no objection in principle to the development, but below are some requirements which must be met.

Our main concern would be that we must consider the possibility, however remote, of the turbines falling (either in whole or in part) across the permanent way. To alleviate this the turbines should be located as a minimum of its own height away from the railway.

As the development is situated on both sides of the Norton South Junction and Ferryhill South Junction line it maybe necessary to enter into an agreement with Network Rail for any easements required over or under the railway itself.

Drainage

All surface and foul water arising from the proposed works must be collected and diverted away from Network Rail property. In the absence of detailed plans all soakaways must be located so as to discharge away from the railway infrastructure.

Fail Safe Use of Crane and Plant

All operations, including the use of cranes or other mechanical plant working adjacent to Network Rail's property, must at all times be carried out in a "fail safe" manner such that in the event of mishandling, collapse or failure, no materials or plant are capable of falling within 3.0m of the nearest rail of the adjacent railway line, or where the railway is electrified, within 3.0m of overhead electrical equipment or supports.

Excavations/Earthworks

All excavations/ earthworks carried out in the vicinity of Network Rail property/ structures must be designed and executed such that no interference with the integrity of that property/ structure can occur. If temporary works compounds are to be located adjacent to the operational railway, these should be included in a method statement for approval by Network Rail. Prior to commencement of works, full details of excavations and earthworks to be carried out near the railway undertaker's boundary fence should be submitted for the approval of the Local Planning Authority acting in consultation with the railway undertaker and the works shall only be carried out in accordance with the approved details. Where development may affect the railway, consultation with the Asset Protection Engineer should be undertaken.

Security of Mutual Boundary

Security of the railway boundary will need to be maintained at all times. If the works require temporary or permanent alterations to the mutual boundary the applicant must contact Network Rail's Asset Protection Engineer.

Abnormal Loads

From the information supplied, it is not clear if any abnormal loads will be using routes that include any Network Rail assets (e.g. bridges). We would have serious reservations if during the construction or operation of the site, abnormal loads will use routes that include Network Rail assets. Network Rail would request that the applicant contact our Asset Protection Engineer to confirm that any proposed route is viable and to agree a strategy to protect our asset(s) from any potential damage caused by abnormal loads. I would also like to advise that where any damage, injury or delay to the rail network is caused by an abnormal load (related to the application site), the applicant or developer will incur full liability.

Lighting

Where new lighting is to be erected adjacent to the operational railway the potential for train drivers to be dazzled must be eliminated. In addition the location and colour of lights must not give rise to the potential for confusion with the signalling arrangements on the railway. Detail of any external lighting should be provided as a condition if not already indicated on the application.

Access to Railway

All roads, paths or ways providing access to any part of the railway undertaker's land shall be kept open at all times during and after the development.

Network Rail is required to recover all reasonable costs associated with facilitating these works.

It is realised that much of the above does not apply directly to the application but should be taken into consideration as appropriate. Nevertheless it gives a useful guide as to the considerations to be taken into account in relation to development adjacent to the railway. I would advise that in particular the <u>lighting</u> should be the subject of conditions, the reasons for which can include the safety, operational needs and integrity of the railway. For the other matters we would be pleased if an informative could be attached to the decision notice.

I trust full cognisance will be taken in respect of these comments. If you have any further queries or require clarification of any aspects, please do not hesitate to contact myself I would also be grateful if you could inform me of the outcome of this application, forwarding a copy of the Decision Notice to me in due course.

<u>Council For The Protection Of Rural England – Stockton Branch</u> Object to this application and ask for this planning application to be refused.

CPRE onshore wind turbine policy recognises the significant importance of wind energy but believes this should not come at the expense of visual landscape amenity value or impaired tranquillity of the local countryside. We have a major concern with this application, notably the cumulative impact on the local landscape when all the other adjacent wind farms are included for consideration, (either operational, under construction or approved). These are all listed in the letter of objection already submitted by CPRE Durham Branch which we support. We consider such a concentration of wind farms in a relatively small area is likely to result as an industrial scale wind farm complex which would exceed the potential capacity of the site and would significantly impact on the landscape quality of the area.

This area is mostly agricultural and rural, with a number of footpaths with relatively little existing noise. CPRE has studied the importance of tranquillity, and this area is mapped as one of the most tranquil in the district. The detrimental affects of wind farms on tranquillity are recognised. The village of Stillington is very close to the site proposed and as such will be affected by noise should these turbines be allowed.

<u>Council For The Protection Of Rural England – Durham Branch</u> Object to this application.

CPRE policy about onshore wind turbines states;

"While wind energy can make an important contribution to tackling climate change, CPRE believes this should not come at the expense of the beauty, character and tranquillity of rural England. We assess wind turbine proposals for their potential impact on the landscape, taking account of their cumulative impact, and strongly resist those whose impact we consider to be unacceptable.

This application is unacceptable on the following grounds;

Landscape Matters

There is already a number of wind farms in this general area which are either operational. under construction or approved. To the north east is the Walkway wind farm and adjacent to this the Butterwick wind farm is now under construction. Further to the east along the A689, the Red Gap application has been approved subject to agreement being reached regarding aviation issues. A little up the A19 from Red Gap is the High Vaults wind farm. To the north and a little further away is the Trimdon wind farm. In addition there is the small turbine at Cassop School. Further away to the north are the existing wind farms at Hare Hills, Great Eppleton and High Sharpley. High Haswell (5 turbines) has now been constructed and a further two at the adjacent Haswell Moor are under construction. Further applications at South Sharpley and Murton/Cold Heseldon are currently being appealed. A little further away to the south east, the application at Seaton/Hilton has recently received approval. Other applications are presently being considered by the relevant LPA or awaiting an application being made. Most are in the immediate locality of this site. Closest is the application to Durham County Council for a wind farm at Foxton, barely a mile from this site. Moorhouse, an application for 10 turbines, a short distance to the west. This was refused permission by Darlington Council on 10 November but will undoubtedly be the subject of an appeal. An application also to Darlington, for a similar sized proposal at Newbiggin is awaited. An application for a similar sized proposal at Mordon has been made to Durham but has been withdrawn. It is understood however it is likely to be resubmitted. An application for a single turbine at Pesspool Lane Easington has also recently been submitted to Durham County Council.

While I accept that this covers a reasonable area, I still believe this to be a considerable number of wind farms for a relatively small area. The character of the area is in danger of being turned into a site for industrial wind farms. Indeed, I believe this is demonstrated by the photomontages that show the cumulative effect from Great Stainton.

The Durham Plan Core Strategy Issues and Options Paper states at paragraph 11.71

"Evidence from landscape capacity studies indicates that the strategic areas for wind energy identified in the RSS are either at, or near to, capacity and that further opportunities in these areas are limited". This is no doubt a reference to the Ove Arup report. I represent that this comment is equally valid for Stockton and indeed this site at Stillington is right on the boundary with Durham. On behalf of CPRE Durham, I fully agree with this view.

Whatever may or may not be the merits of this application in isolation, I represent that it is now necessary to consider the cumulative effect of wind farms in this area, not just the immediate area but also the sequential effect as one travels through the area. In addition I represent that views from locations such as the road between Ferryhill and Kirk Merrington or roads in the Trimdon area are important in that they show there is already a significant number of wind turbines on the Tees Lowlands. If these plus the wind farms under construction and others are considered, the prospect of an almost unbroken panorama of wind turbines cannot be ruled out. I represent that the comments in paragraph 11.71 of the Durham Core Strategy Issues and Options Paper are correct and this area is at capacity without this particular application and is a relevant consideration for this part of Stockton.

Noise and Tranquillity

This area is surprisingly quiet. While the A689 and A177 are fairly close, they are still some distance away. I have last weekend walked paths to the east of Stillington while carrying out a survey for the BTO Bird Atlas. This is an agricultural area and intrusive noise during my walk was almost unnoticeable. Views are open and generally unspoiled.

I note a footpath passes through the site (albeit crossing the railway line) and there is another relatively short path to the west of the site. There are also paths in the Foxton area between the two proposed wind farms. Whether or not the noise from the turbines does accord with ETSU R 97, there will be a noise factor. Experience from other wind farms suggests that complaints do result from nearby residents in a significant number of cases (not, I accept, all of them). There is residential development within 750 metres from the turbines and I represent that complaints are likely to result from these properties, whether ETSU is complied with or not unlike Foxton, a number of properties here are upwind of the prevailing wind.

It is perhaps interesting that one developer has recently acknowledged this when objecting to a proposed holiday development close to its approved site for a wind farm in Northumberland. A copy of this letter is attached. Tranquillity is an important CPRE issue and has been the subject of a comprehensive study by them. This area is shown on the Durham map as one of the most tranquil. Wind farms are specified as a development that detrimentally affects tranquility in an area.

I note that there is currently a Bill, the Wind Turbines (Minimum Distances from Residential Premises) Bill, recommending specified distances of turbines from dwellings, unless the occupiers consent to them being closer. The turbines at Stillington are much closer to dwellings than the distances mentioned in this Bill. Indeed, because of this sites proximity to the one at Foxton, they could combine with any noise from these turbines. (I also understand this may be an issue to be included in the Decentralisation and Localism Bill).

While I am not producing noise evidence in this case, I represent that noise and tranquility are likely to be relevant issues. As there is currently legislation under consideration, I represent it is premature to approve an application that would breach either of those provisions before the outcome of them is known. I note representations have been made by nearby residents and, while one or two support the application, most object to it. Some raise issues similar to those I have mentioned. Clearly CPRE would wish to support generally the views of the local residents. For the reasons given above this application should be refused.

The Ramblers Association

The Ramblers Association supports renewable energy projects and has no objection to the erection of wind turbines outside of designated areas such as National Parks or Areas of Outstanding Natural Beauty or valued scenic areas. The government's advice indicates that the minimum desirable distance between wind turbines and occupied buildings for purposes of noise levels and visual impact will often be greater than that necessary to meet safety distance and that fall over distance (height to tip) plus 10% is often used as a safe separation distance. We note that the length of a turbine is stated to be 125m to the tip of its rotor, the turbine's fall over distance is 137.5m and approximately 160m of Footpath Stillington 05 lies within the fall over distance, parts about 90m away from turbine. The Companion Guide to Planning Policy Statement 22: Renewable energy at Para 57 states:

"Although a wind turbine erected in accordance with the best engineering practice should be stable, it may be advisable to achieve a set back from roads and railways of at least the fall over distance, so as to achieve maximum safety". "The British Horse Society has suggested a 200m exclusion zone around bridle paths to avoid wind turbines frightening horses. Whilst this could be deemed desirable, it is not a statutory requirement, and some negotiation should be undertaken if it is difficult to achieve this".

"There is no statutory separation between a wind turbine and a public right of way. Often, fall over distance is considered an acceptable separation, and the minimum distance is often taken to be that the turbine blades should not be permitted to over sail a public right of way."

Users of the right of way should not be subjected to avoidable hazards introduced by development, however small those risks might appear to be, especially when those hazards can be avoided by design. Users of rights of way should not be subjected to hazards which are undesirable for road users, railways or buildings and a separation of fall over distance is essential.

The Ramblers Association initially objected to the proposed development based on the proximity of Turbine T1 in respect to Public Right of Way no. 5 Stillington. However, following discussions with the applicant they have advised that they would withdraw this objection subject to the footpath being located 125m from the turbine base by either moving the turbine away from the existing footpath or realigning the footpath to provide the 125m stand off.

Teesmouth Bird Club

Teesmouth Bird Club has submitted three responses to the proposed scheme, the initial ones having been revised following the consideration of additional information. Teesmouth Bird Club do not object to the application and there comments are as follows;

In respect to collision risk assessment, in view of the low incidence and small number of birds recorded flying through the wind farm at rotor height (given in the figures provided) we agree that a CRA would produce no meaningful results and, therefore, concur with the developer's conclusions. The access track to T4 in the northern part of Stillington Forest Park will follow the route of an existing track and will involve the removal of only a small swathe of trees, which are to be replanted as part of the mitigation. The new track will be in a natural surfacing material and will rarely be used post-construction. We appreciate that, due to land ownership problems, it is not possible to relocate the access track to the north.

Regarding the location of T3, as this is to be 80 metres from the Sand Martin colony, we do not envisage any problems in terms of collision risk or low frequency noise impacts. We would like to see this area fenced of to minimise impacts from construction.

The only outstanding matter concerns the preparation of a Master Plan showing the mitigation and enhancement proposals and an accompanying Environmental Action Plan (EAP) outlining how and when these are to be achieved and who is to be responsible for overseeing the work to satisfactory completion. Banks Developments have given us an assurance that we will be consulted further during the preparation of the EAP and that this will be produced at the post-approval stage. We recommend, therefore, that the production of an EAP be made a Condition should your Council be mindful to approve this development.

The question of post-construction monitoring of bird collisions was discussed and, whilst we agree with Halcrow that the risks are relatively small in this case, we still feel it would be advantageous to the wind farm industry as a whole if developers are requested to carry out such monitoring in view of the current major dearth of data in the UK. Collision monitoring is low cost when compared with the overall capital value of the development (half a day per month is all that should be required in this case) and TBC has offered to help with this if requested by Banks Developments. We recommend that a 5-year post-construction monitoring period be made a Condition of Planning Approval.

Northumbrian Water Limited No Objections.

Northern Gas Networks

Have no objections although advised that consultation should be undertaken with the National Grid as a high pressure gas pipeline is within the area.

National Grid Transmission Asset Protection Team

National Grid wish to withdraw our holding objection. National Grid has a Major Accident Hazard Pipeline (MAHP) high pressure gas pipeline which runs through this land parcel. The locations of the four turbines are acceptable to National Grid at a maximum hub height of 80 metres then the locations of these masts will not breach our current guidance.

- a. T1: 436306, 523495 = 484 metres away
- b. T2: 435930, 523343 = 131 metres away
- c. T3: 435704, 523679 = 133 metres away
d. T4: 436126, 523930 = 255 metres away

There will be the usual restraints centred around crossing our pipeline, for lay down areas, cable crossings, location of sub-station and inference testing.

<u>Arqiva</u>

Arqiva (formerly Crown Castle UK) is responsible for providing the BBC and ITV's transmission network and is responsible for ensuring the integrity of Re Broadcast Links. We have considered whether this development is likely to have an adverse affect on our operations and have concluded that we have no objection to this application.

Both the BBC Research Department and OFCOM are interested in the effects of wind farm interference on domestic reception for BBC, ITV, Channel 4 and five. The BBC have launched a web-based tool so that wind farm developers can carry out assessments of interference to domestic reception for themselves. Any wind farm enquiries to the BBC or OFCOM now result in the enquirer being directed to this web based tool.

BBC Wind farms Web Tool

You would be likely to affect 0 homes for whom there is no alternative off air service and it may affect up to 2017 homes for whom there may be an alternative off air service.

Cable and Wireless

Cable & Wireless Worldwide have no objection to this proposal.

Joint Radio and Communications Ltd

JRC analyses proposals for wind farms on behalf of the UK Fuel & Power Industry. This is to assess their potential to interfere with radio systems operated by utility companies in support of their regulatory operational requirements. In the case of this proposed wind energy development, JRC does not foresee any potential problems based on known interference scenarios and the data you have provided. However, if any details of the wind farm change, particularly the disposition or scale of any turbines, it will be necessary to re-evaluate the proposal.

In making this judgement, JRC has used its best endeavours with the available data, although we recognise that there may be effects which are as yet unknown or inadequately predicted JRC cannot therefore be held liable if subsequently problems arise that we have not predicted. It should be noted that this clearance pertains only to the date of its issue. As the use of the spectrum is dynamic, the use of the band is changing on an ongoing basis and consequently, developers are advised to seek re-coordination prior to considering any design changes.

Please note that, with the agreement of NEDL, our earlier objection of 12th October 2010 is withdrawn subject to the turbine specifications and positions quoted above.

Stockton Borough Council – Head of Technical Services

General Summary

The visual impact of the development of the proposed Lambs Hill wind farm on the amenity of local residential properties has been assessed as major and adverse (significant). This assessment is based on Lambs Hill as a stand-alone application.

Should other wind farms within neighbouring administrative areas that are currently in the planning system but not determined, subsequently be constructed then the Lambs Hill wind farm, (if consented) would be visible in views of a number of the other wind farms with the potential to create a cumulative visual impact. This cumulative impact would effect the amenity of residential properties over a wider area and be significantly adverse and visually unacceptable.

The character of the landscape where the wind farm is proposed has a low capacity for change as identified in the Stockton Borough Council (SBC) Landscape Character Study. However, due to the benefit of settlement patterns, intervening topography and vegetation the degree of change in the character of the countryside resulting from the stand alone wind farm at Lambs Hill would not have a significant visual impact upon the wider landscape. However, this application has not been assessed in isolation as there is the possibility of other wind farms which if constructed, are likely to be visible in various views throughout the Lambs Hill assessment area. The Lambs Hill wind farm has been considered against these potential impacts and assessed as having the potential to contribute to a cumulative visual impact. This cumulative impact would have the potential to change the character of this rural landscape into that of a 'wind farmed landscape'. This would then constitute an unacceptable visual impact on a number of settlements notably Foxton and Bishopton and other isolated dwellings. The consideration of other wind farm applications within the planning system as contributing factors to cumulative impact is a matter of planning policy.

In conclusion, there needs to be strategic consideration of the most appropriate locations for wind farms both in terms of landscape impact and energy generation. In particular the contribution from larger capacity wind farm prospects in the East Durham Limestone and Tees Plain area need to be considered as do sources of renewable and low carbon energy which would also contribute to the overall mix to meet the Stockton Borough Council requirement.

Providing micro-siting is restricted there is no identified highway impact due to the construction of this wind farm.

Head of Technical Services - Landscape & Visual Comments

General

The Lambs Hill Wind Farm proposal comprises 4 turbines, with a maximum tip height of 125m above ground level (typically 80m hub height and up to 46.25m blade length) located on land approximately 800m to the west of Stillington. The proposal site is located such that all 4 proposed turbines and their associated infrastructure lie within the administrative boundary of SBC, however proposed turbines are situated within 500m of the Durham County Council (DCC) boundary and 1000m of the Darlington Borough Council (DBC) boundary.

The potential landscape and visual impacts that would arise as a result of the wind farm proposal are assessed in the Landscape and Visual Impact Assessment (LVIA) chapter of the Environmental Statement (ES), submitted as part of the application and the LVIA chapter of the ES Addendum.

Assessment Guidance

LDA Design the agents for the proposed wind farm have prepared a methodology for carrying out LVIA's for the proposed wind farm development based on the Countryside Agencies Landscape Character Assessment Guidance, 2002 together with the guidelines laid down by the Institute of Environmental Management and Assessment, the Landscape Institutes Guidance for Landscape and Visual Impact Assessment, Second Edition 2002 and Scottish Natural Heritage's Visual Representation of Wind Farms Best Practice Guide 2006.

A study area with a radius of 20 km has been agreed with Stockton Planning Services for this assessment. Whilst the Head of Technical Services agree with the general principle of the methodology used in their assessment it has not sort to determine whether views are positive or negative suggesting that these could be subjective. However, The Head of Technical Services considers that any proposed turbine would have a negative impact on a rural landscape and the key issue to assess is the extent of the impact and the importance of the landscape.

The key terms in the LVIA are shown below:

Sensitivity is shown for designated landscapes, assessed viewpoints, landscape character areas and visual receptors. The term is used to describe the likelihood of material effects on the receptors mentioned above. The scale is rated as follows:

High - material effects are likely to arise from a development of this nature; Medium - material effects may arise from a development of this nature; Low - material effects are unlikely to arise from a development of this nature.

Magnitude of effect is used to describe the degree of change caused by the development: High - total or major alteration to key elements features or characteristics such that post development the baseline situation would be fundamentally changed; Medium - partial alteration to key elements, features or characteristics, such that posts development the baseline situation would be noticeably changed; Low - minor alteration to key elements, features or characteristics, such that post development the baseline situation would be largely unchanged despite discernable differences.

Significance indicates the importance of the effect, taking into account the sensitivity of the receptor and the magnitude of the effect. It is rated on the following scale:

Major (sometimes called substantial) - indicates an effect that is very important in the planning decision making process;

Major – Moderate - indicates an effect that is in itself, material in the planning decision making process;

Moderate - indicates a noticeable effect that is not in itself material in planning decision making process;

Slight (sometimes called minor) - indicates an effect that is trivial in the planning decision making process;

Minimal (sometimes called no change) - indicates an effect that is akin to no change and is thus not relevant to the planning decision making process.

Other Policy used by SBC in the assessment of the application:

Regional Character

The area where the proposed wind farm is proposed affects two national character areas as detailed in the Character of England produced by the Countryside Agency and English Nature. The most effected of these areas is the Tees Lowland and the Durham Magnesium Limestone Plateau. These are broken down into local landscape character areas of which 16 are likely to be affected by the development.

Wind Farm and Landscape Capacity Studies: East Durham Limestone and Tees Plain and addendum (2009), Wind farm Development and Landscape Capacity studies: East Durham Limestone and Tees Plain was commissioned in 2008 by North East Regional Assembly as to the capacity of the East Durham Limestone and Tees Plain landscape areas to accommodate wind farm developments. The addendum is a high level assessment of cumulative impacts for current winds farms and those in the planning system. It should be noted that the Lambs Hill farm was not considered as part of this addendum.

SBC Landscape Character Study

Consultant Landscape Architects White Young Green were commissioned in 2009 by SBC to carry out a landscape character assessment and capacity study for the rural areas within the borough. The study (which is not yet adopted as Planning Policy but is still considered to be a material consideration in any planning decision) identifies various landscape character areas, the qualities that give those areas their character and gives guidelines for future management. The study is to be used as part of the 'evidence base' to assist in the development of policy and policy guidance, particularly with regards to regeneration briefs

and land management programmes, and to inform the emerging Local Development Framework. Of particular interest in this case is the assessment of the capacity for landscape area to accommodate change.

Within this study Landscape Character Units have been identified which give a finely grained assessment of the landscape capacity of the landscape to accommodate change. Each unit has been assessed as to its capacity with levels ranging from Very High, High, Moderate, Low to Very Low. It should be noted that this only covers the area of land within SBC administration.

SBC Stockton Renewables Study

Arup was commissioned by SBC in 2008 to undertake a high level desk based review of the borough to assess the extent of land suitable for commercial scale wind energy developments. As part of the study a map was produced to identify likely constraints. The study concluded that much of the borough has major constraints to the development of commercial scale wind farms meaning that such wind farms are unlikely to be viable within SBC's administrative boundary. However there was a small area shown with fewer constraints in the location of the proposed Lambs Hill Wind Farm. It should be noted that this was a high level study that aimed to indicate in broad terms where constraints were fewest. Any proposed wind farm would need to assess constraints at a far more detailed level.

Compliance with Other Policy used by SBC in the assessment of the application: Wind Farm and Landscape Capacity Studies: East Durham Limestone and Tees Plain (2008) and addendum (2009): The application at Lambs Hill is considered to be broadly in line with the findings of this North East England study. The study identifies 27 zones and determines the sensitivity of the landscape and the approximate maximum capacity for wind farm developments within these zones. The Lambs Hill wind farm straddles 2 zones both of which are considered within the study as of medium sensitivity to accommodate a wind farm. The study broadly indicates that zone 20 located just to the north of turbine T4 could accommodate a wind farm of medium - small size (4 - 9 turbines) and zone 24 where all 4 turbines within this scheme are located could accommodate a wind farm of small - mediumsmall size (4 - 6 turbines). The report states that zone 20 has capacity to accommodate a wind farm. Specifically it states that:

The report describes zone 24 as follows:

'Sparsely wooded, open, gently undulating landscape of mixed farmland which rises gently in the south to around 73m AOD at the village of Sadberge. Several reservoirs and other water bodies are scattered throughout the zone. A windsurfing centre is located at one of these water bodies near Bishopton. The remains of a Motte and Bailey castle are also located near Bishopton. The villages of Stillington, Bishopton and Sadberge are located in the centre, north and south of the zone respectively, with scattered farms located throughout the zone.

The sensitivity of the zone allows only a small – medium - small typology due to the scale grain and pattern of the land cover and settlement.'

The LVIA also concludes that the wind farm proposal is in line with the East Durham Limestone and Tees Plain Study and whilst widely visible for distances up to 5km from the site, the landscape character of the Tees Plain is not significantly affected. The assessment also considered the landscape to have the capacity to accommodate a wind farm of this scale and location. It is the opinion of the Head of Technical Services that up to 2km the landscape impact would have a significant local impact on this character with turbines forming prominent or dominant features in the landscape. However beyond this the Head of Technical Services considers the impact to be reduced to a moderate level. The ES states that 'No character areas would be significantly effected over all with the most effected areas being Thorpe Beck Valley (Stockton) and Butterwick and Shotton (Durham) and Central Belt Farmlands (Darlington) '. The local impact of the wind farm would vary considerably due to the undulating nature of the landscape and the presence of small areas of woodland, intervening hedges and buildings. Some locations particularly up to 2km from the site would have uninterrupted views of the turbines where they would effectively become dominant landscape features. However, the landscape views of the proposed turbines would be highly variable and fragmented as topography and vegetation screen or filter views. The LVIA considers that where views are available the significance of impacts would generally be 'major–moderate' up to 700m and 'moderate up to 2.5km. Sensitive receptors such as footpaths and dwellings would suffer effects of moderate significance up to 4km from the site. Between 4 - 9 km effects would be medium - low and negligible over 9km. The Head of Technical Services broadly agree with these findings.

There would be significant visual effects on sequential views from footpaths and roads within 4km of the site. A number of the viewpoints in the LVIA are from local footpaths and many of these would experience high visual effect of wind turbines and with a high degree of sensitivity the impact upon these receptors would be significant. The Castle Eden Walkway would experience some visual effects but these would be limited by topography and vegetation and so would not be significant. As such visual effects would not be significant. The wind farm would be visible from the A177/ A689 however due to the low sensitivity of this route and the intermittent nature of views the impact would not be significant. Graphs 1 & 2 from Figure 6.15 indicate visibility of various wind farms from the A689/A177 and the Castle Eden Walkway.

There are no landscape designations on the application site or within 1km. There are no National Parks or Areas of Outstanding Natural Beauty within 20km of the site. The Head of Technical Services considers that the impact of the proposed turbines upon the North York Moors National Park (which lies beyond this 20km limit) would be negligible. This assessment is based on the limitations of views which would only occur from the high ground of the National Park over looking the Tees Lowland and the Durham Magnesium Limestone Plateau., The proposed wind farm would be seen at a considerable distance against the wider landscape, not breaking the skyline and most importantly would be further away than other build features in the foreground such as the Wilton site. In addition the Hilton - Seamer wind farm (approved at appeal) will be considerably closer to the National Park boundary than the Lambs Hill site.

Two registered Parks and Gardens (Hardwick Hall and Wynyard Park) are located around 4km from the proposed wind farm but the impact of the proposed turbines would be negligible due to distance, topography and vegetation. Bishopton village located 2km south of the application site includes a conservation area and a Scheduled Ancient Monument (within Darlington Borough Councils (DBC) administrative area). Although views will be achievable, it is considered that the impact of the proposed turbines is reduced somewhat by the distance, topography and vegetation.

It is considered that none of the designated landscapes in the wider area would suffer significant adverse visual effects due to the construction of the wind farm.

The findings of the LVIA concluded that visual impacts of major-moderate significance would be limited to the local landscape character at distances of up to 700m. Whilst the Head of Technical Services does agree with this conclusion the study is high level and the degree of impact should also be assessed against the SBC Landscape Character Study, which adds further detail of character and capacity. The EA states that Major – Moderate impacts are material in the planning decision making process;

With regard to the SBC Landscape Character Study, the proposed wind farm is located within what is described as the Thorpe and Billingham Beck Valley. This Landscape

Character Area extends from Portrack Marshes along the A19, through Billingham Beck and west to Stillington.

As previously noted this study has identified individual Landscape Character Units. The study identifies that there are 3 units on which the application site would potentially have the greatest impact (within the SBC administrative area). These are to the west of Stillington up to the edge of the borough, to the east of Stillington towards Whitton and to the south of Old Stillington. All 3 areas are described as having a low capacity to accommodate change. This differs from the East Durham Limestone and Tees Plain Study which identifies much of the landscape character of the study area as being of 'moderate sensitivity to change'.

As an adopted planning document the SBC study takes precedence over the Arup study and, therefore, should be given more weight in the planning process. It should, however, be noted that the SBC Landscape Character Study was not specifically looking at the landscape capacity to accommodate commercial scale wind farms but was indicating a more general capacity to accommodate change of all types. It also only covers the SBC administrative area.

With regard to the Stockton Renewables Study the area of the proposed Lambs Hill development would be located in an area classed as being of variable constraints indicating that the area may be suitable for a commercial scale wind farm development. As a high level study this is aimed at giving a broad indication and where commercial scale wind farms may be appropriate. These character assessments do not consider impacts on individual properties which are likely to be adversely impacted by the proposed wind farm. These impacts are considered below.

Impact on Settlements

The rural nature of the proposed application site means that the visual impact of the wind farm is limited to the fringes of rural settlements and isolated dwellings. The closest settlements are Old Stillington (0.65 km) Foxton (including Shotton) - (0.8 km), Stillington (0.8 km), Whitton (1.7 km), Bishopton (2 km) Great Stainton (2.4 km.), Little Stainton (3.2 km), Carlton 3.2 km, Redmarshall (3.2 km), Thorpe Thewles (3.8 km), Mordon (3.8 km) and Sedgefield (4.4 km). From the report and officer site visits it is likely that the greatest impact would be upon Old Stillington, Foxton (including Shotton), Stillington, Whitton, Bishopton and Great Stainton. Old Stillington is considered later in this report under residential properties. Impacts on settlements are identified as follows:

Foxton (including Shotton), at a distance of only 0.8 km is one of the settlements that would be most effected by the proposed farm due to its proximity and orientation. Viewpoint 1 indicates views that could be expected from this approximate locality. This impact would be reduced substantially within the settlement by the presence of buildings, trees and hedging however the proposed turbines would become dominant features on approaches to the settlement and within the village itself.

The proposed wind farm is likely to become a prominent feature in relation to Stillington at a distance of only 0.8 km. It would be visible on approaches from the north and west towards the village. However, the position of various industrial units to the north of the village, houses, outbuildings and vegetation means that there are a relatively small number of receptors within the village where the proposed turbines can be clearly seen. Viewpoint 21 shows that at least two turbines would be viewed from Morrison Street and a number of adjacent properties. However, in this location the proposed turbines are partially screened by buildings, topography and vegetation. As such it is considered that the wind farm would not dominate the village to the extent that might be expected. There would however be some uninterrupted views of the wind farm when approaching Stillington by car and on foot, and from the adjacent forest park.

Whitton is located at 1.7 km east of the proposed wind farm. Viewpoint 4 roughly approximates to views from Whitton; however, these views are partially screened by vegetation. There would, however, be some clear views of the wind farm when approaching the village by car and on foot. Bishopton is located 2 km south of the wind farm. Views from the northern boundary of the village roughly equate to those shown in viewpoint 8 however due to existing woodland and buildings only a small number of properties would experience similar views to this. Furthermore there should be very limited or no views of the turbines from streets within the village to building patterns and vegetation.

Great Stainton is located 2.4 km to the south west of the proposed wind farm. Views from the eastern edge of the village roughly equate to viewpoint 13. This view would only be available to a small number of properties on the very edge of the settlement and from upper floors. Even in the worse cases there would be some screening due to vegetation. There should be very limited or no views from streets within the Great Stainton.

Little Stainton, Carlton, Redmarshall, Thorpe Thewles are further away from the proposed wind farm and whilst there would be views of turbines these viewpoints are limited and also screened or filtered by intervening landform, vegetation and buildings. Those views that are available would mainly be from upstairs window or from highways on the approach to the villages. As Viewpoint 10 shows there would be some filtered views of turbines from Durham Road within Thorpe Thewles. This would be typical of views afforded from the outlying villages and indicate that the proposed turbines would not dominate the village. The presence of the turbines would also be apparent from some surroundings roads and footpaths.

Views from Mordon located 3.8 km north-west, would be very limited with restricted or no views available from within the village centre and only filtered views of the upper parts of the proposed turbines from mainly upstairs windows of a limited number of dwellings. Sedgefield located 4.4 km to the north should have either very limited or no views from within the village or on its southern edge due to the benefit of intervening topography and vegetation that screen views of the proposed wind farm.

From site visits the Head of Technical Services concurs with the ES comments that the visual impact upon the settlements of Stillington, Great Stainton, Whitton, Foxton and Bishopton appears to be accurate. Whilst the views may vary considerably within each settlements depending on the precise position of the viewer (in relation to buildings and vegetation) the visual impact from the settlements of the proposed wind farm are considered to be major adverse but locally limited.

Visual Impact on Individual Residential Properties

The LVIA Addendum provides a supplementary assessment of local resident's visual amenity. This assessment identifies dwellings located within the village of Stillington, properties at Old Stillington, and isolated dwellings approximately 1 km from the edge of the wind turbine group. The potential views to the proposal from dwellings were identified and assessed according to whether views were possible, the orientation of the building and whether the views were from the garden, ground floor, or upper storey windows. Following a request from SBC additional drawings were produced to show graphically the extent of such views. The nearest public access point was used for visual assessment purposes. These views are illustrated on Drawing No HJB/749/72, sheets 1 - 4.

The residential visual amenity assessment identifies that only 10 -20 out of approximately 132 dwellings on the western boundary of Stillington would have some views of the wind farm. In most cases there would be a significant degree of screening by outbuildings and vegetation. The assessment indicates that overall none of these properties would experience the development as over-bearing or oppressive.

Ten isolated farms or hamlets in closest proximity to turbines were assessed of which most would have some views of turbines from one or more windows but there would be some screening/ filtering of views and views would not be available from all windows on the facing side of the property. In some cases the properties are orientated away from the wind farm giving minimal views from within the house. As a 'rule of thumb' its is considered that 'non involved' dwellings should be located beyond a distance equal to 5×10^{10} km the north east by DCC who have also used the formula as apart of their neighbouring authority consultation on this application.

The Whins is a property located in the administrative area of DCC at just 580m from the closest turbine T2 placing it within this critical distance. The ES concludes that the wind farm would not be over-bearing or oppressive from this property due to the reduced angle of view. Whilst, views from The Whins are restricted by the orientation of the property, any views of the turbine from this close distance would be significant. Should these views be created then any visual impact on the amenity of this property would be major and adverse

A number of properties at Foxton and Old Stillington would have more direct views of the proposed turbines as several properties face the proposed wind farm at distances of around 750m -1000m. As such the proposed turbines would become dominant features from windows to the rear of some properties, particularly at Rafferdene and Old Stillington. Viewpoints 1 and 3 indicate typical views that could be expected from these approximate localities where properties do not benefit from the presence of outbuildings, trees and hedging. The ES concludes that due to distance and intervening features that the wind farm would not be over-bearing or oppressive. However, The Head of Technical Services considers that the proposed turbines due to the extent of view to result in a major adverse visual impact on the amenity of these residential properties.

A number of properties at Stillington and properties of Moor House Farm, and Oaklea are located around 800m from the closest turbine T1 and T3 respectively. In these cases views of these two turbines and the remaining group would be possible from some habitable rooms in the properties and in some cases from parts of the gardens. Viewpoints 18 and 21 are typical views that are likely to be afforded to some properties in Stillington but substantial screening would reduce the impact as compared to these illustrations. Viewpoint A is close to Moor House Farm but views from this property would be partially screened by trees and a hedge. In all cases these views are partial with a degree of screening by buildings and vegetation. Although the Head of Technical Services considers that the proposed turbines would have a moderate adverse visual impact on the amenity of these residential properties (Moderate is defined in the assessment methodology as a noticeable effect).

Generally

With regard to residential properties a response form DCC as part of their neighbouring authority consultation has been received by SBC which indicates their consideration in that the proposed wind farm would be visually acceptable. This was a high level statement as it did not consider individual properties or the SBC Landscape Character Assessment.

Cumulative Visual Assessment

A number of visualisations in the ES have been produced which provide an accurate representation of cumulative impacts that the Lambs Hill wind farm may contribute to. Whilst it is an extensive task to judge fully all of the possible cumulative impacts of proposed wind farms in the area it is clear from the large number of wind farms in the planning system that cumulative impacts are likely to be a critically important issue in determining this application.

At the time of assessment there are 17 wind farms (including Lambs Hill) that are either operational, approved or in the planning system within the 20 km study area. In order to simplify a potentially complex assessment a number of scenarios have been simulated in the ES in which various combinations of wind farms have been assessed for their potential to

contribute towards cumulative visual impact. Both combined and sequential views of the various wind farm scenarios have been assessed as part of ES. This cumulative visual impact assessment including a Zone of Theoretical Visibility plan (ZTV) has been provided within the Lambs Hill wind farm LVIA Addendum chapter.

The ZTV concludes that cumulative impact would occur if Lambs Hill was developed as this could be viewed together with existing wind farms at Walkway and Butterwick located to the east of Sedgefield. However, it is considered that the ZTV is a theoretical study and due to settlement and highway patterns, intervening topography and vegetation these cumulative views generally do not exist. Of specific note is that the ZTV illustrated that there would be a cumulative impact from Great Stainton but in the opinion of the Head of Technical Services these visual impacts should not occur from residential properties. Whilst views of the wind farms would occur from the highway and footway network around the village these viewpoints would be limited to specific areas of the network where the roads and footpaths cross over high ground. Viewpoint 13 illustrates a typical view.

Whilst the photomontage illustrates Lambs Hill with the Walkway and Butterwick wind farms in the background the distance between these elevated view points and the Walkway and Butterwick is such that in the opinion of The Head of Technical Services that any cumulative impact would be negligible.

However, there would be the potential for significant adverse cumulative visual to arise from Lambs Hill wind farm if other wind farms in the area were developed. The construction of the Newbiggin (Bishopton) and Foxton wind farms are of particular concern in this respect.

The ES assessment concludes that the proposals would contribute to significant cumulative effects on views and landscape character around Foxton should the Foxton and Lambs Hills wind farms both go ahead. Should 3 or more of the 5 wind farms be constructed (out of Lambs Hill, Newbiggin, A1, Moor House and Foxton) then a 'new local character area' would be established. The Head of Technical Services concurs with this conclusion and considers that this level of cumulative impact would create an unacceptable wind farmed landscape.

It is noted that in such a scenario properties within Foxton would be less than 1 km from 2 wind farms, the village would effectively be located within a wind farm. With a single access road, travellers to Foxton would pass within 400m to the east of the Foxton wind farm and then view the Lambs Hill turbines. It is considered that only one of these two wind farms should be built as the impact upon Foxton could be unacceptable. The ES concludes that there may be unacceptable cumulative effects on Rafferdene (a single bungalow) but all other cumulative effects on residential properties would not be overbearing' or 'oppressive'. The Head of Technical Services disagrees with this finding and believes that the visual impact of both wind farms would be overbearing and oppressive to Foxton as a whole. It should be noted that this scenario is not dealt with in the Wind Farm and Landscape Capacity Studies: East Durham Limestone and Tees Plain addendum, as the Lambs Hill farm was not in the planning system at that time.

In addition there is the potential for a cumulative impact upon Bishopton should both the Newbiggin and Lambs Hill wind farms be built. In this instance Bishopton would be located within 2 km of 2 wind farms Lambs Hill to the north and Newbiggin to the south. This would be unacceptable given that the village is a conservation area with an ancient monument just to the south. The construction of both farms may also conflict with guidelines set out for zone 24 in the Wind Farm and Landscape Capacity Studies: East Durham Limestone and Tees Plain. Cumulative effect would be increased further should the Moorhouse Farm proposed 2 km to the south west of Bishopton be approved at appeal (Moorhouse was recommended for approval by DBC but Planning Permission was refused on the 21 January 2011).

The Head of Technical Services considers that if a large proportion of the proposed wind farms were to be constructed in the Tees Lowland and the Durham Magnesium Limestone

Plateau, large areas of countryside to the north and west of the borough would be dominated by wind farms. This would change the character of the landscape and from specific view points the character would change to that of a 'wind farmed landscape'. Outside these areas almost all of the countryside to the north and west of Stockton would experience wind turbines as 'prominent' landscape features. Sequential views from local footpaths and roads would give the impression of a wind farm landscape even if views from individual properties had limited views of wind turbines.

Whilst DCC have no objections to the principle of the development on the subject of cumulative impacts they note:

'Bearing in mind the close proximity of the proposed wind farm at Stillington to the existing planning application at Foxton the cumulative impact of these proposals needs to be very carefully considered, as would the relationship of this proposal with Moor House to the south and Butterwick / Walkway to the north.'

Public Rights of Way

A number of Public Rights of Way (PROW) would be affected by the proposed wind farm, particularly those that lie within 1 km of the site. Where views of the turbines are possible the adverse visual effects would be of a major magnitude and, therefore, significant. Whilst the amenity of the PRW in the locality of the proposed wind farm are generally affected, the greatest degree of adverse impact would occur on Footpath (FP5). This PRW is the footpath between Old Stillington and Foxton (FP5). and passes within around 100m of turbine T1 as shown on drawing HJB/749/PA30. Whilst the location of this turbine has been accepted in terms of the safe usage of the PRW views from this PRW would be significant and visually adverse.

Summary of Landscape and Visual Impact Analysis

The proposed Lambs Hill wind farm would only affect a limited number of individual properties but this would lead to a change in their residential amenity at a local level. The degree of change is considered to be major and adverse.) The development impact upon the character of the landscape would also be limited to a local area but should not lead to a change in the character of wider landscape. In accordance with recognised LVIA methodology the degree of visual impact is not significant as such no objection is made to the application.

However, this summary is based on Lambs Hill (as a stand alone application) with other operational or consented wind farms. Should other schemes within neighbouring administrative areas that are currently in the planning system (but not determined, subsequently be approved) the cumulative impacts of Lambs Hill and other wind farms may become unacceptable in terms of adverse impact. This is due to the potential of cumulative impact to adversely affect the amenity of a greater numbers of residential properties and result in a significant change to the character of the landscape.

The consideration of other wind farm applications within the planning system and at appeal as contributing factors to cumulative impact is a matter of planning policy.

Swept Path

It is noted that in several locations there be a requirement to remove areas of grass verge and possibly a number of small trees and shrubs. Drawing 202913-30A shows the junction of an unclassified road with Morrison Street. From this drawing it appears likely that at least one tree will need to be removed along with an area of grass verge and some shrubs. Should this or any other trees need to be removed they should be replaced with semi mature standard stock of the same species. Grass verges and shrubs should also be fully reinstated. The replacement of trees and shrubs and the reinstatement of grass should be covered by an appropriate condition.

Access Tracks

The wind turbines micro sites would be accessed via two separate junctions, Turbines T1, T2 and T3 would be accessed from a track leading from the road between Stillington and Old Stillington. Turbine T4 would be accessed from the unclassified road north of Stillington via Stillington Forest Park. In total these accesses would require the removal of 68 linear metres of mature hedgerow and the section running through the forest park would require the clearance of a corridor up to 5m wide through the woodland. Part of this access would follow the existing footpath to minimise disruption. Arrangements would be made to allow continual pedestrian access during construction works. Both access tracks would consist of 500 mm thick layer of crushed stone.

It is noted that the access track would be a minimum of 5m wide with additional areas of clearance to allow for the movement of wide loads. Damage to the forest park may require substantial mitigation. Such mitigation measures are yet to be agreed with SBC. Therefore, full details of horizontal and vertical alignment of the proposed access tracks is required to enable disruption due to construction to be fully assessed. The construction details for the track together with landscape reinstatement details should be covered by an appropriate condition

Mitigation Proposals

New hedgerows are proposed along a number of the surrounding roads. Generally these infill gaps in existing hedges and would serve to further restrict views that could be gained of the proposed wind farm from travellers on the roads. The control building would be constructed from local materials to be agreed with SBC. In addition a native tree planting mix would be included to screen the building from the adjacent Road and Stillington. The visual impact of the control building would be minimal. These mitigation measures are acceptable.

Summary of other Landscape and Visual Impact at Date of Opening

Blade Colour -

Suggested measures to reduce the visual impact of the proposed development include painting the turbines with *"matt grey surface finish"*. This grey colour is considered to be an appropriate colour to background with the northern skies. The matt grey colour of the turbines should be confirmed as part of any approval together with a ban on advertising on any part of the structure or blades.

Clashing Blades -

The ES establishes that there would be a number of locations where views would include turbines with overlapping blades. Whilst inevitably that from certain views this would occur the degree of impact is considered to be limited and not to occur at defined residential receptors. As such this is not considered to be a significant adverse impact.

Head of Technical Services - Environment Policy

General

The Lambs Hill wind farm application comprises 4 wind turbines which are to generate 2 - 2.5 MW each. Using the lower figure and an availability of 23% this wind farm would deliver an annual electricity output of 16,118 MWh, this may be compared to the 2009/10 SBC electricity consumption of 18,395 recorded for the CRC Energy Efficiency Scheme (i.e. these 4 wind turbines would provide 88% of the Council's building related electricity demand).

A Cabinet report dated 11 March 2010, Wind Energy Generation Capacity Study, showed that a total of 237 wind turbines rated at 2.5 MW each would be required to meet the total electricity consumption across the Borough (industrial, commercial and domestic total of 1,202 GWH; 2007 data). The findings for this were drawn from wind farm development and landscape capacity studies conducted by Arup in 2008.

Main findings of the Arup report were that there are no areas of unconstrained land suitable for wind farms with only pockets of land with variable constrains, mostly close to the Borough boundaries (e.g. at Foxton near the application site at Lambs Hill). Applying a generation capacity of 23% gave a theoretical generation capacity for the Borough of 52MW. To meet the Government's 15% renewable energy target would mean 120 MWh of installed capacity is needed.

Current planning applications suggest that 171 MWh of renewable generation is planned for the Borough comprising:

- a. 16 MWh planned on-shore wind;
- b. 155 MWh planned energy from waste.
- c. Already installed is 0.8 MWh (FiT figures to 31/10/10).

From these estimates it is noted that the borough is moving towards reaching its renewable energy generation targets from energy from waste. Whilst energy from waste has been considered a 'renewable' energy supply final clarification of this status awaits decisions from the Department of Energy & Climate Change (DECC) on the detailed content of the Renewable Heat Incentive (RHI). Information on this is expected in March 2011.

Regionally a number of other wind farms are planned or already operating and in a 10 km distance of the Lambs Hill application site wind farms could provided 117 MWh of electricity.

Wind Farms Near Stillington (Lambs Hill)

Location	Rated capacity MW	Output @ 23% availability MWh
Red Gap Moor (Hartlepool, adjacent to A19/A689)	15	30,222
Butterwick, DCC	30	60,444
Foxton Lane (DCC, Between Foxton & Sedgefield)	6	12,089
A1 (DCC, between Aycliffe & Bradbury)	20	40,296
Newbiggin (DBC, near Sadberge) (estimated as no details)	18	36,266
Moor House (DBC, near Barmpton)	20	40,296
Lambs Hill (SBC, Stillington)	8	16,118

Of the above, only Red Gap Moor and Butterwick (including Walkway) have received planning approval. Moor House was refused planning permission on the 21 January 2011. Others are either at scoping or awaiting determination.

In summary, Environmental Policy recognises the role of on shore wind farms as one source of renewable energy generation but there needs to be strategic consideration of the most appropriate locations for these. In particular the contribution from larger capacity wind farm prospects in the East Durham Limestone and Tees Plain area need to be considered as does the 1 GW capacity of the offshore Dogger Bank wind farm. In addition other sources of renewable and low carbon energy contribute to the overall mix to meet the Stockton-on-Tees Borough Council requirement thus reducing the effective contribution of proposed wind farms of relatively small rated capacity (MWh) of electricity output.

Head of Technical Services - Highways Comments

The Environmental Statement, figures, visualisations, tables, drawings and appendices have been considered and comments are as follows:

Construction Phase

The proposed abnormal load route on the local highway network comes from the A1 in County Durham and into the Borough of Stockton-on-Tees via the A177.

The route to the proposed wind farm site for abnormal loads includes a right turn across A177 Durham Road at Grindon crossroads. This is an uncontrolled crossroad junction on a principal road with national speed limits and limited forward visibility. As the abnormal loads are accompanied by Police the intensification of traffic movements due to the abnormal load at this junction is accepted and management will be fully demonstrated in the Traffic Management Plan.

Abnormal loads have been assessed using height and weight restrictions along the total length of the route. Swept path analysis has been undertaken to assess the routes to ensure the required vehicles can be accommodated at junctions and pinch points and over-run areas have been identified. This analysis has been undertaken by the company who will undertake the transportation of the turbine components and demonstrates that the route is acceptable. The assessment takes account of the benefits of independently steered rear axle movements and confirms that the vehicle carrying the largest 46.25m blade can be accommodated. These drawings are based on ordnance survey data, it is therefore necessary that a Grampian condition is included for a 'dry run' to be undertaken by the developer to ensure that the vehicle can negotiate the route as the swept path analyses demonstrate. This 'dry run' will further assist in demonstrating the street furniture that is required to be temporarily removed as the vehicles pass. Where necessary, signs to be removed and be replaced with 'demountable' signs so that they can be removed then immediately returned to position once the load has passed, to ensure highway safety is maintained. This will be controlled via the Traffic Management Plan.

It should be noted that movements will be agreed in advance of any abnormal loads with appropriate liaison with the Police being undertaken. The 'dry run' would highlight areas of concern above the worst case scenario auto tracking that they have already undertaken. As topographical surveys have not been carried out for all sections of the abnormal load route then it is not possible to categorically say that the abnormal load vehicles can access the site, although, in the unlikely event that the 'dry run' result in unforeseen circumstances then either additional mitigation would need to be submitted to the LPA and considered or a reduced load length/component part could be specified by the developer.

An additional route is proposed for HGV construction traffic to access the site from the south from the A66 via the unclassified road through Redmarshall and Whitton to Stillington Village. This route is part of the "West Stockton Lorry Routes" network a scheme to concentrate HGV movements onto roads suitable to cater for them. The route links the A66 at Elton Interchange via a classified (C138) road to the site. It passes through the east extremity of Redmarshall and to the east of Whitton and is acceptable. Traffic flow on Drover's Lane (through Redmarshall) given in junction turning data (Table 10.1) gives 1439 southbound, 1436 northbound. Maximum daily HGV flow is predicted as 47 per working day (Table 10.2). The overall increase in daily traffic during the busiest month is 69 vehicles which is an average increase of 4.8%. The Yarm Back Lane/Darlington Back Lane/Drover's Lane junction is included on the Congestion Stress Plan because of peak hour delays on Yam Back Lane. The Traffic Management Plan would minimise movements in peak traffic hours to mitigate any increase in the existing delays.

There are two proposed accesses to the proposed Lambs Hill wind farm site. These locations, one to the south of the proposed site accessed from the road between the villages of Stillington and Old Stillington, and one to the north accessed from the unclassified road north of Stillington via the Forest Park are acceptable in terms of geometry and visibility for the abnormal loads and HGV movements associated with construction and operational phases.

In terms of the Public Rights of Way and based on a rotor diameter is 92.5m, Turbine T1 could possibly conflict with FP5 should T1 be micro sited up to 50m in an easterly direction.

It is recommended that micro-siting be conditioned to ensure that T1 cannot be relocated further east than the position indicated in this application.

An outline Traffic Management Plan (TMP) has been included with the Environmental Statement that outlines how the impact of the construction phase will be managed on the local highway network. It is recommended that a full TMP will be conditioned should Planning Consent be granted and it is necessary for the Developer to liaise closely with the Highway Authority in order for the plan to be developed. It is noted that the TMP will deal with the construction and operational phases only with decommissioning being dealt with at the appropriate time.

The following list indicates the key potential issues to be considered for the full TMP:

Abnormal loads and HGV's:

Detailed impact of abnormal loads & HGV's on Strategic Road Network (SRN) Detailed impact of abnormal loads & HGV's on Local Road Network (LRN) Access/Egress from site during construction Access/Egress from site during site operation and maintenance Construction of site access

The following list is an outline framework for consideration that will be added to and updated as necessary:

- a. Site information
- b. Programming
- c. Traffic disruption
- d. Visibility
- e. Temporary widening
- f. Running surfaces
- g. Narrow lanes
- h. Temporary Safety barriers
- i. Safety zones
- j. Routes for emergency vehicles
- k. Routes for diverted vehicles
- I. Non motorised users
- m. Operational hours
- n. Vehicle recovery
- o. Incident management
- p. Temporary TROs
- q. Signing
- r. Consultation
- s. Detailed layout of Traffic Management scheme
- t. Speed control
- u. Operation of wheel washing
- v. Co-ordination with other roadworks
- w. Off highway parking for vehicles waiting to access the site.
- x. Temporary lighting

It will be necessary for the Highway to be fully inspected by the Highway Authority prior to the commencement of any development so that a full report can be recorded on the condition of the highway. Once construction is complete a further inspection should be carried out to determine what reinstatement work is required to the local highway network. The developer must be responsible for any reinstatement works.

Operational Phase

There are predicted to be 35 servicing or maintenance visits to the site per annum during the operational phase of the development. No staff are based at the site. The vehicle

movements in the operational phase are therefore not considered to be significant in traffic terms.

In summary no objections are raised to the proposal subject to the above. These include a Grampian condition for a 'dry run' to be undertaken, a Traffic Management Plan to the satisfaction of the Highway Authority to be implemented and condition surveys of the highway prior to commencement and following completion of the construction phase of the development to be undertaken.

Stockton Borough Council - Care For Your Area

With regard to the comments supplied by the Teesmouth Bird Club, the temporary disruption caused by the creation of an access track through Stillington Forest Park would have significant short-term visual impact but it is not considered that the work would have a long term detrimental impact on the site. Therefore the proposal to construct an access track through the site is not opposed by the Parks and Countryside Service, providing the mitigation measures highlighted are taken into account.

The route chosen by Banks incorporates the existing track at SFP for much of the proposed vehicle movements whilst an area where trees would have to be felled to incorporate the angles required for the turning of vehicles on site is earmarked for thinning in the management plan for the site. The woodland in these locations is not of a high ecological or amenity value and supports a limited under storey and ground flora. There will still be areas of scrub and woodland for birds to use as nesting/feeding areas both during and after the works.

It has been noted that the Teesmouth Bird Club felt that a more northerly location could be identified for the access track. However, at the onset of consultation between Banks, staff from SBC's Parks and Countryside Service and the Friends of Local Nature Reserves group, it was asked if an alternative route skirting the perimeter of SFP and the adjacent farmer's field was possible to which we were told that, "With regards to the northern farmland, due to landownership constraints we simply cannot cross this land. It is not available as the landowner has entered into an agreement with another company and they have exclusive rights over it".

It should be noted that the area of woodland to the northern perimeter of the site is the only original feature (the remainder of the site being man-made), and therefore should be retained and not physically disturbed by the work. This area of woodland has already been identified to Banks by SBC's Local Nature Reserves Officer on site.

Once the work has been completed, providing the mitigation measures below are implemented, the site will have an improved network of paths which will make it easier for pedestrians to access and which will open up previously unused parts of the site for recreation. In addition the site will have enhanced opportunities for wildlife. Funds received as a result of the works will also enable the Council to make improvements to site infrastructure.

Should the access track for Turbine 4 be routed through Stillington Forest Park, the following mitigation measures would be required:

- a) Work to commence outside of the bird breeding season between Oct and Feb.
- b) Create new hard surfaced paths and upgrade some existing paths on the site to improve public access. Path specification to be provided by SBC Parks and Countryside. Paths to be identified by SBC.
- c) Create a new, alternative, informal access path through existing woodland which will still permit users access from the northern end of the site while the building work is taking place. Use felled trees as path edging and remove hummocks of grass to level surface of land.

- d) Use locally sourced limestone-based substrate to create the path. The width of the track to then be reduced down by placing topsoil over the track margins and limestone-loving plants sown on this area once the project has been installed and has been commissioned.
- e) Replace the perimeter post and wire fence adjacent to the track along the northwestern boundary of the site.
- f) Species rich hedgerow planting to compensate for loss of existing hedgerow around the site. Species and numbers of plants to be agreed with SBC and location of new hedgerow planting and gapping up of existing hedgerows to be agreed with SBC Parks and Countryside.
- g) Plant trees of feather/standard size as opposed to whips so that nesting potential for any affected bird species is enhanced in areas identified by SBC Parks and Countryside.
- h) Provision of timber so nest boxes can be installed in unaffected areas of the site.
- i) Provide and install 1 metal disabled picnic table, specification and siting to be agreed with relevant SBC Officer.
- j) Provide and install 1 metal able-bodied picnic table specification and siting to be agreed with relevant SBC Officer.

PUBLICITY

A total of 15 site notices were erected at strategic points around the periphery of the site adjacent to highways and within key settlements, a press notice has been placed in a local newspaper as well as in excess of 800 letters of consultation being sent to residents of properties at Stillington, Whitton, Redmarshall, Carlton, Thorpe Thewles, Bishopton, Foxton, Shotton, Bishopton Crossing, as well as to Parish Councils, including areas outwith Stockton Borough.

Consultation responses were received from the following;

A Calvert, 24 West Street Stillington Mr Fisher, 8 South Avenue Stillington Mr S Taylor, 48 St John's Park Stillington K T Johnson, 6 South Avenue Stillington T C Garbutt, 7 Kirk Street Stillington Deborah Harrold & Geoffrey Usherwood, High Ridge Whitton Peter and Linda Philipson, Whitton Moor Lodge Stillington Lauren Catton, 27 Forest Park Stillington Jamie Fox. 27 Forest Park Stillington Mr and Mrs T W Nicholson, The Conyers, Foxton C Huitson, 1 Heley Mews, Heley House Farm Ms Diane Metcalfe, 64 Pease Street Darlington S, K T and A Brown, Moor House Farm Bishopton Crossing L Webster, Vine Cottage Mill Terrace Mr A J Heatley, 1 The Village Green Whitton Colin Goldie, 9 Green Leas Carlton Jon Johnson, 37 St John's Park Stillington Judith Mills, 8 Town Farm Close Bishopton Mrs M Hunter, Hope House Bungalow Elstob Lane, Near Mordon Derek Mills, 4 Green Leas Carlton W And T Corney, 2 Bishopton Crossings, Stillington Swinbank, Little Rigg, Breckon Hill Farm Dr Linda Humphrey, 15 Durham Road Thorpe Thewles Stephen and Judith Wood, Merton Grange, Stillington John and Christine Ellerker, 7 Town Farm Close Bishopton Malcolm and Judith Watson, Croft Cottage Mordon A M Kirby, 4 Bishopton Crossings, Stillington

Mr R Kirton, 1 Drovers Lane Redmarshall David Nichol, Manor House Farm Whitton G Blackbourne, 24 Battersby Green Carlton C Blackbourne, 24 Battersby Green Carlton Mr C French, 6 Bishopton Crossings, Stillington Mrs Kathleen Blackbourne, 3 Coniston Crescent Redmarshall John B Corbey, The Ridings Whitton Ms Carolyn Hewitson, Bishopton Crossing Stillington David Kitching, 2 The Village Green Whitton Suzanne Lithgrow and Grant Lithgrow, 14 Town Farm Close Bishopton David and Linda Guest, 10 Town Farm Close Bishopton Mr and Mrs Bell, 6 Derwent Close Redmarshall D And H Park. The Meadows Elstob Lane. Near Mordon The Laurels, Kirk Street, Stillington I Titchner, 20 Weare Grove, Stillington R North, 25 St Johns Park, Stillington 9 Green Leas, Carlton, Ms Reay, 8 Whitton grove, Stillington B Peakman, 19 Park Crescent, Stillington G Hardy, 2 South Avenue, Stillington D Walters, 41 West Street, Stillington P Kirk, 17 Whitton Grove, Stillington Gregory, 35 West Street, Stillington 3 Mt Pleasant Close, Stillington Wall, 8 Corby Castle Lane, Bishopton 20 Redmarshall Street. Stillington J Sullivan, The Croft, Bishopton R Wilson, 4 Mt Pleasant, Stillington J Benson, 29 Durham Road, Thorpe Thewles, Burrell, 12 Windermere Avenue, Redmarshall 29 Durham Road, Thorpe Thewles G and C Dunn, 60 West Street, Stillington Peter Wood, Chairman of the Seven Parishes Action Group (SPAG). England And Lyle On Behalf Of Mr And Mrs Holloway Foxton Farm G And D Kelly, Graemepkelly@googlemail.com

Objections are summarised below:

Visual Impact

- 31. We understand that this proposal is one of many which are planned for our direct surrounding area. Although we understand that we all need to take some responsibility with regard to renewable energy, we feel the surrounding area of Sedgefield has already taken its fair share of these enormous structures. If the proposed wind farm is allowed to go ahead, along with subsequent ones which are being planned, then the view from all windows of our home would take in one of these farms. I urge you as planners to consider the massive cumulative effect which could potentially impact on this area and take your responsibility of preserving our beautiful environment very seriously.
- 32. We are not against one small wind farm in the area although we do feel that the number of potential sites is excessive and if more than one occurred there would be a significant detrimental impact on the attractive rural landscape.
- 33. We are situated at the edge of three counties, Darlington, Stockton on Tees and County Durham. The planning applications for wind farms seem to be all on the outer perimeter of these counties, consequently, should the applications be successful, we will be completely surrounded by turbines.

- 34. I understand that as an area we are doing more than our fair share from other renewable energy schemes with various anaerobic digesters already up & running on Teesside. Surely the brown field areas of Teesside are ideal for these energy providers and are more appropriate than this beautiful countryside. We have an unbroken view to the Cleveland hills of around 30 miles let's keep it this way and not break up this view with what can only be described as environmental vandalism. The council is urged to support us in our effort to preserve the character of our area by rejecting this proposal.
- 35. The size of the turbines are so tall, 15m higher than those erected on the Wynyard/Butterwick road and they will be so close to our home that they will completely dominate the landscape.
- 36. I have studied when walking paths in Whitton, Foxton, Great Stainton, Bishopton and Stillington what a terrible visual impact and noise effect they will have. From all these paths the turbines at Sedgefield can already be seen clearly as unwanted blots on the landscape and to add more would be a tragedy.
- 37. I received a news flyer re: a community consultation day for the Newbiggin Wind Farm near Little Stainton, about 4 miles from Whitton. I believe there are also further proposals for other wind farms in the local area which I find disconcerting because I believe they are in different borough council areas and potentially all could be approved with no consideration for the surrounding area.
- 38. Potentially the rural landscape will be converted into an industrial landscape devaluing people's lives and properties for those living nearby these wind farms.
- 39. Apparently the rural area is of no merit and wind farm development is acceptable. I find this objectionable since the area is very beautiful. In particular my own private view of Roseberry Topping (of great cultural heritage) will be spoilt as I cycle around the proposed wind farm area.
- 40. The turbines are too large and will dominate the landscape. I believe private individuals may well incur height restrictions on proposed developments so why should wind turbines be allowed at 125m height.
- 41. Please see attached a copy of the latest front page news headline from Renewable Energy News. This clearly refers to the new Eon proposals that we have all known about for a long time. It clearly raises the bar on the issues of cumulative clutter massively in this area for both Darlington BC & Stockton BC. Surely the two Banks applications currently with you cannot be considered by Planning Committees now, without full & proper consideration of this new wind farm which would extend over more than 800 hectares with very high numbers of turbines therein ranging between 20 and 36. Surely as Planners you must take account of this new proposal & its obvious breach of the ARUP report recommendations on cumulative clutter. This must now make it impossible for the various proposals at Moorhouse , Lambs Hill, Foxton lane, Newbiggin to be considered without taking full account of the proposed Eon site & its affects on our local environment. Extract below supplied by objector.

Re News 27th January 2011- Eon shoots for English crown

Eon is drawing up plans for a Section 36 wind farm in County Durham that, if sanctioned, could be the largest onshore scheme ever built in England. The utility is preparing to launch community consultations at a site branded The Isles, where installed capacity is slated at "between 50MW and 90 MW". The project is located north-east of Newton Aycliffe across the civil parish of Bradbury and the Isle, and the hamlets of Great Isle and Little Isle. It would dwarf Eon's 25 MW A1 wind farm which would be swallowed up and superseded under the Isles proposal. Eon documents state: "The site includes an area which we have previously considered for (the A1 wind farm), and The Isles wind farm would encompass this proposal. The A1 planning application would be withdrawn as part of this process." A map of The Isles site boundary indicates Eon is acquiring options on farmland on both sides of the A1 motorway and the east coast mainline railway. These documents show the original A1 plot, which extends across 207 hectares, would be more than quadrupled in size. The developer said the benefits of the expanded site include a strong wind resource, an existing power line with capacity, feasible transport access and no ecological or landscape designations. The main challenge is likely to be overcoming primary surveillance radar interference at Durham Tees Valley airport, which objected to the A1 project. Talks are already ongoing over how to mitigate against the radar clutter expected from the smaller project's 10 turbines.

Impact on Stillington Forest Park

- 42. Firmly against any suggestion of the Local Nature Reserve / Forest Park, being disturbed by having paths built and juggernauts destroying it let alone the ill effect the next 25 years will have on the Reserve.
- 43. The requirement to construct one of the access roads through the nature reserve is beyond belief and will completely ruin such a wonderful place. Nothing that The Banks Group can offer as compensation for the access road being situated here will ever be enough to replace the current serenity of the area.

Health and Safety issues

- 44. My 10 year old daughter suffers from a condition called spacism. This is a visionary condition which causes an inability to judge distances. The potential shadow flickering effect from wind turbine will no doubt cause problems (dizziness, loss of balance, etc...) for all of us but none of us will suffer more so than my daughter. (Moor House Farm Bishopton Crossing)
- 45. I cannot condone why the proximity of turbines to residential dwellings has not been limited to a reasonable distance of 2 km until such time that the associated health risks have been proven.
- 46. The flicker which can be produced from the suns rays passing the blades can cause a strobe effect within homes. Our home is also a work environment there is no getting away from the constant presence of these structures. Are we not entitled to peace within our own homes and gardens?
- 47. I believe there will also be a flicker effect from the blades and as they are due east of our property, we will be aware of this flickering as soon as the sun rises. I am afraid this intermittent flashing might cause epilepsy to recur I have personally suffered from this condition a number of years ago, and I am worried that this flickering from the turbines might bring it back. (Bishopton Crossings, Stillington)
- 48. Independent expert opinion states that large wind energy turbines generate a wide range of noises and vibration day and night that cause loss of sleep, headaches, tinitus, irritability, dizziness, nausea and other symptoms in people who live near them.

Amenity of neighbouring residents

49. We will be surrounded by wind turbines. There are proposals with Durham Council for some at Foxton as well as for some close by with Darlington Council, plus we already have the Butterwick / Walkway. We will be surrounded by turbines! Imagine having to look at them every day plus the disruption to wild life.

Impact on Wildlife

- 50. It would affect our wild bird habitat
- 51. Inevitable dispersion and disruption caused to the wildlife in the surrounding countryside.
- 52. If permission is granted we would like to see the colony of Sand Martins protected which nest in the old quarry. Turbine T3 should be relocated so that it does not affect the flight paths or feeding of the Sand Martins.

Noise

- 53. The noise potentially being generated from these huge structures although theoretically for some are within the legal requirements, the long term effects to health is not something that can be calculated. The constant low level noise / rumbling from the rotating blades 24/7 will no doubt effect our tranquillity and ability to get a restful nights sleep, thus causing numerous potential health issues (migraines, depression, inability to concentrate/work). The increased number of turbine development sites in the close proximity will again exaggerate the noise generated. Something must be done to ensure our quality of life is not affected by this proposal.
- 54. I am concerned that the noise emitted from these turbines will make living approximately 1 km from the nearest turbine totally impossible because, even though Banks Developments assure us in their leaflet that the noise will be minimal, my worry is that if this is not the case, then there is nothing anyone could do about it once the turbines are in situ. and operating.
- 55. We understand that the low level noise which is often produced from these structures can carry for many miles through the ground and particularly affect you when trying to sleep.
- 56. The cumulative impact of noise from wind farms would reduce quality of life particularly when using outdoor space.
- 57. The application implies a predicted noise level of 40 0dB which is very close to houses and a residential area. No predicted noise level is given beyond this 40 0dB circumference. Decibel scales have been indicated for equivalent noise however none can be compared to turbine noise because it is unpredictable (the application can only offer predicted noise). No matter what the noise level is, if residents are disturbed it is unacceptable. I believe private individuals or businesses applying for planning based upon predicted information would have their applications refused on lack of information. So why should wind turbines be allowed based upon predicted noise levels.
- 58. They raise noise levels to a degree which is incompatible with the rural or wild environment.
- 59. PPS 22 standards for noise are 15 years old and therefore out of date for modern turbines. It is unwarranted for Stockton to use such guidance.

Environmental Impact

- 60. Whilst the applicants have gone to great detail in displaying the visual effects of the proposal there is no definitive answers to the health risks attributed to these constructions let alone the damage and disruption.
- 61. We have a beautiful farm situated in this area which has been in the family for four generations. Although we own this land, we do consider ourselves merely as custodians of the land for the next generation. With this in mind, although it is farmed

for profit, it is always done with a sympathetic and environmental view. We consider that the invasion of the area with this wind farm goes against everything which our family have worked to preserve over the last 100 years.

- 62. The inconvenience of their construction and the erection of all the paraphernalia that goes with them e.g. power lines and the inevitable maintenance etc. makes us feel that this is the thin end of the wedge. There are already numerous wind turbines in the area and proposals for more with other councils it wont stop at four and even if it does we will be surrounded. The country side will be spoilt. Everyone knows this disruption and defilement is for a short time fix to a long term problem. Why not put forward proposals for hydro power at Stockton Weir; these stations can operate for some 50 yrs and are already in operation in Scotland and at some sewage farms. Wind turbines we are led to believe last 15 yrs max, with the surrounding flora and fauna taking approx 18 yrs to re-establish, that means nature will be in perpetual disruption. Migrating birds will either collide or have to make detours of miles if the whole of the area has these monstrosities.
- 63. If this proposal goes through it will be sacrilegious, it is a pleasant area not miles from the town with nature reserves and bridle paths which people can enjoy without having to drive miles to get to. Who wants to stand and listen to wind turbines 'whooshing' overhead spooking the horses and birds.
- 64. My husband has recently filmed unusual fungi in a filed adjacent to the site which has featured on look north. We love this area and have lived here for 30 years enjoying its unspoilt rural aspect. This scheme will spoil this.
- 65. I walk the footpaths surrounding this area many times per week due to the uninterrupted views, quiet and calmness. The erection of these turbines will have a detrimental visual impact and completely ruin this area which currently is a fantastic example of English countryside. There are already wind turbines situated at Sedgefield and to increase the numbers so close would be a criminal act on the countryside in this area.

Residual matters

- 66. A balanced view should also be taken when assessing how different sources of renewable energy impact on our surroundings. There are already a number of wind turbines in the local area and it is not appropriate to build any more. Therefore we object to the development of further wind farms in the Mordon/ Great Stainton / Stillington area.
- 67. Whilst I understand the environmental targets set by the government and every councils endeavour to reach their individual targets attributing to this, I feel that this driver is beginning to overlook the residents for which the councils act on behalf of.
- 68. Big grants are offered to development companies to achieve these targets who have little or no consideration for the communities and families whose lives they are massively affecting and I for one see it as my local council's duty to regulate this.
- 69. We are in the locality of a number of applications for wind turbine development sites which are regulated by Durham/Sedgefield (Butterwick), Darlington (Mordon, Great Stainton, East Newbiggin) and Stockton Borough Councils (Stillington) the majority of which from what I can devise have not been jointly consulted in the above application. I believe it is the council's responsibility to co-ordinate this between them and not look at only their constituency alone.
- 70. Many measures have been made to try and prove in theory the effects that the wind turbines will have upon our community, what will be done if these measures are

proved inaccurate once the turbines are in place & at who's expense? Who will compensate me should my home become devalued or even inhabitable?

- 71. Why are the Turbines so spaced out? To allow additional turbines to be added at a later date? Or to maximise the efficiency of the wind? If the later, why not let the developers take a small reduction in this efficiency by moving the turbines closer together or reducing the height thus limiting the effect to surrounding properties?
- 72. Banks have intentionally tried to mislead the public with the information / facts & figures which they quoted in their booklet and subsequent public meeting. The application should be rejected.
- 73. Wind Turbines are simply not that answer and I know this as I work in the renewable energy industry. People in the village really need to fight for this objection and I hope they do. I have put my property up for sale as a precaution in case this application is accepted, I recently purchased this property and would never have done so if I had known of these plans. I will undoubtedly take a big loss if it is accepted.
- 74. I am not technically au fait with the power output etc, of wind turbines, but understand that the effectiveness is minimal and therefore am at a loss as to why they are even being considered in our countryside, would they be more effective out at sea?
- 75. Area will be spoilt for negligible green energy gain put the renewables by the Tees in Biomass.
- 76. Following the information meeting held at Stillington community Centre with Banks group, no satisfactory answers could be given regarding the effects on property prices in our area. Our property is the most directly effected by this proposal and as the unique views we have from 3 aspects of our property would be severely affected, we would strongly object to any development of this scale. (South Avenue, Stillington).
- 77. If the proposal is successful we will be extremely disappointed with Stockton Borough Council and look for a substantial reduction in our rates to reflect the disastrous impact on the environment and encourage others in the area to do the same.
- 78. One has to ask why here. I would also like to add that Whitton Village road is already very heavily used and the increase in transport to and from the development would be totally un welcome. I would welcome Green Energy for the good of us all, but not at this cost to the countryside. Build them off shore if it is so important
- 79. The connection to the National Grid is either overhead or underground. Why state either since in all probability the cheapest option of overhead will be used which will have further visual impact on the rural area.
- 80. Why do we not insist on these monsters be placed in the North Sea it is a much more sensible place for them. We must not forget the Pylons required to carry the cables, they themselves are unsightly and totally unacceptable in this day and age. So no intrusion on residents views of the countryside No noises from the Turbines and most important a truly beautiful part of the countryside untouched
- 81. It would affect the approaches to our local airport by the aircraft that use it.
- 82. We understand the need for renewable energy and feel it is appropriate to obtain energy from different sources in order to balance our needs with the impact on our environment, now and in the future. Nevertheless, a balanced view needs to be taken when assessing how different sources of renewable energy affect our surroundings.

We feel there are already a number of wind turbines in the local area and it is not appropriate to build any more.

- 83. The load factor assumed by Banks is 30% although this has never been achieved in the North East and therefore figures quoted are excessive. Banks advise it would make a significant contribution to meeting the 2020 renewable energy targets. Lambs Hill would contribute less than 0.05% assuming 75Twh is targeted and is therefore insignificant. Banks have misled in respect to the contribution of wind power to the UK's generation mix. Wind power generated less than 3% of electricity in the UK in 2009.
- 84. The turbines may result in ice being thrown great distances from the blades.
- 85. Blades may fail; turbines may collapse or catch fire.
- 86. The development therefore requires adequate set backs to protect health and safety. A Bill is currently going through the House of Lords seeking a minimum 2km distance between homes and turbines.
- 87. Greater distances of 3 km 5 km are required in some terrains to protect health and welfare.
- 88. The site borders a main line railway, highway, radio system links cross the site as does a Public Right of Way. These make it totally unsuitable for development of a wind farm.
- 89. The development may have a potential impact on operations associated with Durham tees Valley Airport.
- 90. The only beneficiary of this proposed development is the developer who will make money through a lucrative levy funded by house holders electricity bills.
- 91. Impacts of the extra traffic through Stillington and Whitton.
- 92. Bishopton would be surrounded by turbines were all the current schemes to go ahead.
- 93. The size of the Lambs Hill scheme is out of proportion for its purpose of supporting the industrial estate.
- 94. 50 turbines concentrated in a small area by several schemes is too much.
- 95. There will be a loss of good grazing land.
- 96. These units are nothing more than appeasement to a minority of fanatical EU beauracrats in an attempt to supposedly cut emissions and save the planet whereby the real truth is job creation in Europe, sales to the UK, subsidies to farmers and increase in UK electricity prices. UK consumers are subsidising Danish and German manufacturers at a time when the UK faces the worst economic conditions since records began.
- 97. Throughout Teesside's history the area has been used as a dumping ground for heavy industry, chemical manufacturing, pollution and nuclear power with huge sways of ground lying polluted and dormant.
- 98. Photomontages have been taken at times to ensure minimum contrast.

- 99. The turbines are out of scale to the area.
- 100. The concrete foundations of the 4 turbines alone will emit 1633 tonnes of CO2 to atmosphere.
- 101. Solar and tidal power are a more reliable form of energy production. Support should be given to solar panels.
- 102. The construction traffic will generate noise, dust, exhaust fumes and increase potential for accidents, affecting cyclists, pedestrians and users of the roads / footpaths.
- 103. If approved it would restrict the possible future development in the immediate vicinity.
- 104. Geese, Swans and Ducks fly in this area and feed within several of the ponds in the area although the developer claims these do not cross the area and therefore surveys at key times of the day need to be conducted (dusk and dawn).
- 105. If approved, an accurate assessment of bird strike should be undertaken.
- 106. Query has been raised whether they will affect TV signals and radars.
- 107. The turbines are almost twice as wide and six times as tall as the Angel of the north.
- 108. The BBC Web tool shows that up to 2017 homes may suffer adverse effects to TV reception. Mobile phone reception may also be affected.
- 109. There is a Public Right of Way within the fall over distance.
- 110. The character of the countryside will fundamentally change as a result of some or all of the proposed wind turbine developments.
- 111. The Association of NE Councils commissioned a Wind Farm and Landscape Capacity study concentrated on known wind farms and a number of scenarios for developing them out were considered. The findings suggested that certain scenarios may be unacceptable, including the existing walkway wind farm and three other within this area. Part of the document states as one of its objections is to prevent the experience of a residential dwelling being in a wind farm landscape and that properties should not have more than 180 degrees of their field of views occupied by wind farms and that close proximity of turbines to both sides of a dwelling should be avoided. Should some or all of the proposed schemes go ahead then this would occur at Foxton / Foxton Lane. This is an unacceptable cumulative impact.
- 112. It is simply not right to assume that it is a race to grant planning consent in an attempt to let other (potentially more suitable) wind proposals be adversely affected by cumulative landscape impact.

113. Comments of support

The scheme will create employment opportunities. It will help to meet our energy requirements from our own sources. It will generate electricity without harmful emissions. We need every form of energy generation to meet our needs. It will help with climate change. It will help benefit the community. Existing wind farms do not seem to have created problems of noise or appearance. It would help to reduce imported energy. It reduces the need for nuclear energy and problems associated with storage of waste.

They are pleasant to look at.

Environmentally beneficial.

There is a grant available to improve Stillington 'community fund'

I would prefer to see wind turbines rather than pylons.

The only way I will support this is if it is British designed, built, installed and maintained, preferably in N.E. England. If we are importing this I do not support the proposal.

PLANNING POLICY

National Planning Policy

The relevant national planning policy statements are outlined below: Planning Policy Statement 1: Delivering sustainable development and companion guide Planning and Climate Change Planning Policy Statement 7: Sustainable Development in Rural Areas Planning Policy Statement 9: Biodiversity and Geological Conservation Planning Policy Statement 22: Renewable Energy Planning policy Guidance 24: Planning and Noise

- The Government's national planning policy advice, regarding renewable energy, is 114. contained within Planning Policy Statement 22: Renewable Energy (PPS22) and its companion guide, published in 2004. It supports the development of onshore wind farms in order to facilitate the delivery of the Government's commitment to climate change and the development of renewable energy sources. This includes the commitment to generating 10% of national electricity from renewable sources by the year 2010 and the aspiration to double that figure to 20% by 2020. PPS 22 advocates a plan led approach to such developments, whether through site-specific designations or the formulation of criteria based policies to guide planning applications. This guidance states that renewable energy development should be capable of being accommodated throughout England, in locations where the technology is viable and environmental, economic and social impacts can be satisfactorily addressed. Whilst PPS 22 recognises the need to consider the need to address material planning considerations, it states that significant weight should be given to wider environmental and economic benefits.
- 115. Within PPS 22 there is an acceptance that turbine siting will always be a compromise between maximising energy capture and minimising visual impact. However the impact of turbines upon the landscape will vary according to the size and number of turbines and the type of landscape involved. With the Government's guidance it states that these impacts can be temporary if conditions are attached to planning permissions to require the future decommissioning of turbines. Planning Policy Statement 1 (PPS1) and its companion guide, Planning and Climate Change, supports this approach and provides guidance regarding how planning should contribute to reducing emissions and stabilising climate change.

Regional Spatial Strategy

116. The relevant policies within the Regional Spatial Strategy (RSS) are outlined below:

Policy 39 - Renewable energy generation

Strategies, plans and programmes should:

Facilitate the generation of at least 10% of the region's consumption of electricity from renewable sources within the region by 2010 (454 MW minimum installed capacity); Aspire to further increase renewable electricity generation to achieve 20% of regional consumption by 2020;

Require new developments, particularly major retail, commercial and residential, to have embedded within them a minimum of 10% energy supply from renewable sources; and

Facilitate the achievement of the following minimum sub regional targets to 2010:

Northumberland 212 MW Durham 82 MW Tyne & Wear 22 MW Tees Valley 138 MW (Which includes authorities Darlington, Middlesbrough, Stockton on Tees, Hartlepool, Redcar and Cleveland)

Policy 40 - Planning for renewables

Strategies, plans and programmes should support and encourage renewable energy proposals and identify renewable resource areas. In assessing proposals for renewable energy development the following criteria should be considered:

- wider environmental, economic and social benefits;
- anticipated effects resulting from development construction and operation such as air quality, atmospheric emissions, noise, odour, water pollution and the disposal of waste;
- acceptability of the location and the scale of the proposal and its visual impact in relation to the character and sensitivity of the surrounding landscape;
- effect on the region's World Heritage Sites and other national and internationally designated sites, areas or their settings;
- effect of development on nature conservation features, biodiversity and geodiversity, including sites, habitats and species;
- maintenance of the openness of the region's Green Belt;
- accessibility by road and public transport;
- effect on agriculture and other land based industries;
- visual impact of new grid connection lines;
- cumulative impact of the development in relation to other similar developments; and
- proximity to the renewable fuel source such as wood-fuel biomass processing plants within or close to the region's major woodlands and forests.

Policy 41 - Onshore Wind Development

Strategies, plans and programmes should provide a positive policy framework to facilitate onshore wind development within the following broad areas of least constraint for wind energy developments. Kielder Forest has the potential to become a Strategic Renewables Resource Area, including large scale wind energy development, the following areas have potential for medium scale development:

South and West Berwick upon Tweed North/ South Charlton Knowesgate Harwood Forest Northern Coalfield south of Druridge Bay Kiln Pit Hill North Durham Upland Coalfield South Durham Upland Coalfield Tees Plain Teesside/ Tees Estuary

Small wind farms in urban areas and on the urban rural fringe should also be supported, particularly within the following areas:

Sunderland;

South Tyneside; and Tees Valley.

The broad locations of these areas should be identified within Local Development Frameworks. Other areas will be judged subject to assessments of local impact.

- 117. The Regional Spatial Strategy (RSS) includes a plan which identifies the broad areas of least constraint for onshore and off shore wind resource areas, which is intended as a guide to appropriate turbine locations. These generally fall along the east coast, having a medium resource area being identified between Hartlepool and Stockton. However, The RSS states that this does not remove the need to consider the potential for onshore wind developments in other parts of the region. Proposals for onshore wind development both within and outside these broad areas should be assessed against the criteria contained within the RSS.
- 118. (It should be noted that the High Court agreed that the Coalition Government's intended abolition of Regional Strategies can be taken into account when making planning decisions, and the judgment confirms that the intended scrapping of Regional Strategies is a 'material consideration' which can be considered by local planning authorities and planning inspectors when making decisions).

Local Planning Policy

119. Where an adopted or approved development plan contains relevant policies, Section 38(6) of the Planning and Compulsory Purchase Act 2004 requires that an application for planning permissions shall be determined in accordance with the Development Plans for the area, unless material considerations indicate otherwise. In this case the relevant Development Plans are: - the Stockton on Tees Local Plan (STLP) and the Stockton on Tees Core Strategy Development Plan.

Local Plan Policy EN4 - Sites of Nature Conservation Importance Development which is likely to have to have an adverse effect upon sites of nature conservation importance will only be permitted if:-

- There is no alternative available site or practicable approach and;

- Any impact on the sites nature conservation value is kept to a minimum Where development is permitted the council will consider the use of conditions and /or planning obligations to provide appropriate compensatory measures.

Local Plan Policy EN13 – Limits to Development

Development outside the limits to development may be permitted where;

- a. It is necessary for a farming or forestry operation; or
- b. It falls within policies EN20 (reuse of buildings) or TOUR 4 (Hotel conversions); or
- c. In all remaining cases and provided that it does not harm the character or appearance of the countryside; where:
 - *i.* It contributes to the diversification of the rural economy; or
- d. It is for sport or recreation; or
- e. It is a small scale facility for tourism.

(Policy EN13 neither refers to or excludes wind farm development within its text, however, it is considered that this policy does not specifically relate to this type of development, with the principle for locating such developments being outlined in the more up to date guidance within national, regional policies and the councils Core Strategy).

Core Strategy Policy CS3 – Sustainable Living and Climate Change

All new residential developments will achieve a minimum of Level 3 of the Code for Sustainable Homes up to 2013, and thereafter a minimum of Code Level 4.

All new non-residential developments will be completed to a Building Research Establishment Environmental Assessment Method (BREEAM) of `very good' up to 2013 and thereafter a minimum rating of `excellent'.

- The minimum carbon reduction targets will remain in line with Part L of the Building Regulations, achieving carbon neutral domestic properties by 2016, and non domestic properties by 2019, although it is expected that developers will aspire to meet targets prior to these dates.
- To meet carbon reduction targets, energy efficiency measures should be embedded in all new buildings. If this is not possible, or the targets are not met, then on-site district renewable and low carbon energy schemes will be used. Where it can be demonstrated that neither of these options is suitable, micro renewable, micro carbon energy technologies or a contribution towards an off-site renewable energy scheme will be considered.
- For all major developments, including residential developments comprising 10 or more units, and non-residential developments exceeding 1000 square metres gross floor space, at least 10% of total predicted energy requirements will be provided, on site, from renewable energy sources.
- All major development proposals will be encouraged to make use of renewable and low carbon decentralised energy systems to support the sustainable development of major growth locations within the Borough.
- Where suitable proposals come forward for medium to small scale renewable energy generation, which meet the criteria set out in Policy 40 of the Regional Spatial Strategy, these will be supported. Broad locations for renewable energy generation may be identified in the Regeneration Development Plan Document. Additionally, in designing new development, proposals will:
- Make a positive contribution to the local area, by protecting and enhancing important environmental assets, biodiversity and geodiversity, responding positively to existing features of natural, historic, archaeological or local character, including hedges and trees, and including the provision of high quality public open space;
- Be designed with safety in mind, incorporating Secure by Design and Park Mark standards, as appropriate;
- Incorporate 'long life and loose fit' buildings, allowing buildings to be adaptable to changing needs. By 2013, all new homes will be built to Lifetime Homes Standards;
- Seek to safeguard the diverse cultural heritage of the Borough, including buildings, features, sites and areas of national importance and local significance. Opportunities will be taken to constructively and imaginatively incorporate heritage assets in redevelopment schemes, employing where appropriate contemporary design solutions.
- The reduction, reuse, sorting, recovery and recycling of waste will be encouraged, and details will be set out in the Joint Tees Valley Minerals and Waste Development Plan Documents.

Core Strategy Policy CS10- Environmental Protection and Enhancement

- i. In taking forward development in the plan area, particularly along the river corridor, in the North Tees Pools and Seal Sands areas, proposals will need to demonstrate that there will be no adverse impact on the integrity of the Teesmouth and Cleveland Coast SPA and Ramsar site, or other European sites, either alone or in combination with other plans, programmes and projects. Any proposed mitigation measures must meet the requirements of the Habitats Regulations.
- *ii.* Development throughout the Borough and particularly in the Billingham, Saltholme and Seal Sands area, will be integrated with the protection and enhancement of biodiversity, geodiversity and landscape.
- iii. The separation between settlements, together with the quality of the urban environment, will be maintained through the protection and enhancement of the openness and amenity value of:

Strategic gaps between the conurbation and the surrounding towns and villages, and between Eaglescliffe and Middleton St George. Green wedges within the conurbation, including:

- _ River Tees Valley from Surtees Bridge, Stockton to Yarm;
- _ Leven Valley between Yarm and Ingleby Barwick;
- _ Bassleton Beck Valley between Ingleby Barwick and Thornaby;
- _ Stainsby Beck Valley, Thornaby;
- _ Billingham Beck Valley;
- _ Between North Billingham and Cowpen Lane Industrial Estate.
- iii)Urban open space and play space.
- *iv.* The integrity of designated sites will be protected and enhanced, and the biodiversity and geodiversity of sites of local interest improved in accordance with Planning Policy Statement 9: Biodiversity and Geological Conservation, ODPM Circular 06/2005 (also known as DEFRA Circular 01/2005) and the Habitats Regulations.
 - v. Habitats will be created and managed in line with objectives of the Tees Valley Biodiversity Action Plan as part of development, and linked to existing wildlife corridors wherever possible.
 - vi. Joint working with partners and developers will ensure the successful creation of an integrated network of green infrastructure.
 - vii. Initiatives to improve the quality of the environment in key areas where this may contribute towards strengthening habitat networks, the robustness of designated wildlife sites, the tourism offer and biodiversity will be supported, including:

Haverton Hill and Seal Sands corridor, as an important gateway to the Teesmouth National Nature Reserve and Saltholme RSPB Nature Reserve ;Tees Heritage Park.

- viii. The enhancement of forestry and increase of tree cover will be supported where appropriate in line with the Tees Valley Biodiversity Action Plan (BAP).
- *ix.* New development will be directed towards areas of low flood risk, that is Flood Zone 1, as identified by the Borough's Strategic Flood Risk Assessment (SFRA). In considering sites elsewhere, the sequential and exceptions tests will be applied, as set out in Planning Policy Statement 25: Development and Flood Risk, and applicants will be expected to carry out a flood risk assessment.
- *x.* When redevelopment of previously developed land is proposed, assessments will be required to establish:
- _ the risks associated with previous contaminative uses;
- _ the biodiversity and geological conservation value; and
- _ the advantages of bringing land back into more beneficial use.

Core Strategy Policy CS 11 – Planning Obligations

All new development will be required to contribute towards the cost of providing additional infrastructure and meeting social and environmental requirements. When seeking contributions, the priorities for the Borough are the provision of:

_ highways and transport infrastructure;

_ affordable housing;

_ open space, sport and recreation facilities, with particular emphasis on the needs of young people.

MATERIAL PLANNING CONSIDERATIONS

120. The consideration of an application for a commercial wind farm is a balance between Governments Policy commitment to the development of renewable energy resources and the schemes impacts on the environment, residential amenity and other such factors. In assessing the application, careful consideration has to be given to the responses from specialist consultees, interested parties and local residents. Guidance within Planning Policy Statement (PPS) 22: *Renewable Energy,* and the

Regional Spatial Strategy highlights the main material planning considerations which include;

- a) Principle of development assessed against relevant policy
- b) Impact on highway safety and accessibility
- c) Landscape and visual impact including cumulative impacts of similar schemes
- d) Impact on residential amenity
- e) Impact on surrounding area
- f) Noise impacts
- g) Impact on nature conservation
- h) Impacts on archaeology and cultural heritage
- i) Health & safety and other issues
- 121. This submission is supported by an Environmental Impact Assessment (EIA) which has been undertaken to assess the varying impacts of the development. As with all EIA's, study work is undertaken to assess the value of something, the likely impact of the development on it and taking into account its value and the impact, advise on the magnitude of the impact. It is then common practice to put forward mitigation for the impact where possible. The main material planning considerations and other material planning matters are considered as follows;

General Principle of Development

- 122. Specific Local Plan and Core Strategy Policies in relation to this proposal are relatively limited and generic although there are a number of policies relevant to the detailed consideration as considered later within this report. Stockton on Tees Core Strategy Development Plan Policy CS3 (7) '*Sustainable Living and Climate Change*' indicates that suitable medium to small scale renewable energy generation schemes which meet criteria of Regional Spatial Strategy (RSS) Policy 40 will be supported. It is therefore necessary to consider the National and Regional Policies which offer more detailed guidance.
- 123. National Planning Policy Statement 22 (PPS 22) '*Renewable Energy*' supports the development of onshore wind farms in order to facilitate the delivery of the Government's commitments to climate change and the development of renewable energy sources. The RSS similarly supports such schemes. Although Government has announced its intention to abolish regional strategies, this intention was challenged in court. A court ruling was announced in February 2011 finding that the Coalition Government's intended abolition of regional strategies can be taken into account when making planning decisions, although, the RSS remains in place and it is therefore considered appropriate to take note of it.
- 124. Both national and regional policies include the commitment to generating 10% of national and regional electricity from renewable sources by the year 2010 and the aspiration to double that figure to 20% by 2020. In addition, the North East's Regional Energy Strategy concludes that the region should adopt and positively strive to achieve Governments targets for renewables advising that the UK has a target set by the European Union for 15% of its energy being supplied by renewables by 2020.
- 125. A consultation response from One North East advises that they recognise that providing a clean, secure and stable energy supply is a key challenge and a key opportunity for the region's economy and that the UK Renewable Energy Strategy (July 2009) (RES) sets out how the UK will meet its EU target of 15% of energy coming from renewable sources by 2020 and that this will require a seven fold increase on current levels and that the generation of renewable electricity will be critical in achieving this and that wind will play a pivotal role.

126. Government, under the Department of Energy and Climate Change (DECC) has produced a report in July 2010 '2050 Pathways Analysis' which looks at the future ways to reducing green house gas emissions in the UK. The report presents a framework through which to consider some of the choices and trade-offs which the UK will have to make over the next forty years. It advises that the UK faces major choices about how to move to a secure, low carbon economy over the period to 2050. The report looks at many uses, approaches and considerations to achieve this and comments on individual areas. The following statement is taken from the DECC 2050 report.

'As with other renewable technologies, wind power faces some barriers – financial and non-financial – in maximising the potential opportunities for development. However, the Committee on Climate Change has suggested that wind generation could be a major source of electricity in the UK, possibly providing 30% of electricity by 2020 and more beyond. The Government is pressing forward with policies to maximise the available opportunities from onshore wind deployment.'

- 127. Taking into account all of the above, whilst there is objection raised to the principle of onshore wind energy and it real value, the principle for development is supported in current national, regional and local planning policies, subject to all relevant material planning considerations.
- 128. The RSS identifies the broad areas of least constraint for onshore and off shore wind resource areas, which is intended as a guide to appropriate wind farm locations. These areas generally fall along the east coast, having a medium resource area identified between Hartlepool and Stockton. However, it states that this does not remove the need to consider the potential for onshore wind developments in other parts of the region. RSS Policy 41 indicates key areas where strategies, plans and programmes should provide a positive policy framework to facilitate onshore wind development. The areas listed include the Tees Plain and Teesside/Tees Estuary, having the potential for medium scale development whilst advises small wind farms in urban areas and on the urban rural fringe should also be supported, particularly within the Tees Valley. The application site lies within the Tees Plain and as such the general principle of the proposed wind farms location is in accordance with regional policy.

Renewable Energy Targets

- 129. Targets for the production of renewable energy have been set at regional, national and European levels. These vary between 15 or 20% by 2020. It should be noted however that these are minimum targets, not maximum targets and as such, reaching the target in itself would not constitute a standalone reason for refusal of a renewable energy scheme.
- 130. RSS Policy 39 Renewable Energy Generation, details minimum sub regional targets for electricity produced by renewable sources by 2010: Northumberland 212 MW Durham 82 MW Tyne & Wear 22 MW Tees Valley 138 MW (Darlington, Middlesbrough, Stockton, Hartlepool, Redcar and Cleveland)
- 131. As we are now passed 2010 and heading towards 2020 the target of 20% for the Tees Valley Region would require a provision of 276 MW.
- 132. Objectors have commented on existing targets for renewable energy within the RSS and existing provision of renewable energy schemes within Tees Valley. They

believe that there is no reason to blight the area in view of the other schemes within the region, suggesting that other types of renewable energy such as solar and tidal should be utilised and provided on brownfield industrial areas instead of destroying the countryside and the associated landscape. Whilst these concerns and suggestions are noted, Government has made it clear that in order to reach the targets that there will need to be a wide ranging mix of renewable schemes. Furthermore, each application has to be considered on its own merits and as such due consideration is required for this proposal.

133. Although there are a number of existing or approved but not yet built energy schemes within the Tees Valley a number of these are energy from waste plants. Whilst these plants generate electricity from waste, whether they classify as renewable energy is dependent on the feed source and whether that includes renewable material. The Department for Business, Enterprise and Regulatory Reform (BERR) and aiming to issue a definition in respect to this shortly. To date it is understood that the large scale renewable energy schemes in Tees Valley are as follows;

Position at February 2011

Operational

Site Location	<u>District</u>	Renewable Energy Type	Installed capacity
High Volts	Hartlepool	Wind Farm 3 no. 100m turbines	1.5 MW approx.
Sebcomp 10 Wilton	Redcar and Cleveland	Biomass Power Station	30 MW
		TOTAL	31.5 MW

Approved but not yet operational

Site Location	<u>District</u>	<u>Renewable</u> Energy Type	Installed capacity
Teesport Biomass Renewable Energy Plant	Redcar and Cleveland	Biomass powered generator	295 MW
Teesside Offshore	Redcar and Cleveland	Wind farm 30 x 3 MW turbines	90 MW
Wilton 11	Redcar and Cleveland	Domestic Waste power station	35 MW
Red Gap Farm Wolviston	Hartlepool	Wind farm 5 x 3 MW Turbines	15 MW
Seamer / Hilton	Stockton	Wind farm 3 x 3 MW Turbines	9 MW
Royal Oak	Darlington	Wind Farm 5 x 1.3 MW Turbines	6.5 MW
Middlesbrough Football Club	Middlesbrough	Wind Turbine 1 x 3 MW	3 MW
Corus Onshore	Redcar and Cleveland	Wind farm 18 Turbines	
		TOTAL	453.5 MW

Red Gap is approved subject to the S106 Agreement being signed.

Current applications in the planning process

Site Location	District	Renewable	Installed capacity
		Energy Type	
Land adjacent to	Sedgefield	Wind farm 10 x 2.5	25 MW
Howe Hills Farm		MW turbines	
Moor House	Darlington	Wind Farm – 10 x	30 MW
		3 MW turbines	
Lambs Hill	Stockton on Tees	Wind Farm 4 x 2 –	8 – 10 MW
		2.5 MW turbines	
		TOTAL	63 – 65 MW

Moor House at Darlington has been refused permission although may still go to appeal.

The above does not include schemes which have been through the Scoping Process but not yet made it to planning application submission stage (including East and West Newbiggin).

Energy from waste schemes; Operational – 20 MW Approved but not yet operational – 155 MW

- 134. Although there are a number of renewable energy schemes either approved, operational or in the planning application process, these are currently making a limited contribution to the overall 2020 targets. The figures above show that, should all schemes become operational, taking into account energy from waste, Tees Valley would be generating significant amounts of electricity although not all of this would be classed as renewable energy. It should also be noted that all non operational schemes will be subject to a wide range of influences which may affect their viability and ability to becoming operational. Furthermore, the capacity of schemes is not reflective of the output which in some cases is much lower due to technology load efficiencies. It is considered that the proposed scheme would represent a modest yet valuable contribution towards the 2020 target for the production of energy from renewable sources in the region.
- 135. As background information, the Head of Technical Services has advised that;
 As a comparison, the Lambs Hill wind farm would provide approx. 88% of the Council's building related electricity demand.

- A total of 237 wind turbines rated at 2.5 MW each would be required to meet the total electricity consumption across the Borough (industrial, commercial and domestic).

- Based on the findings of the 'Wind Farm Development and Landscape Capacity Studies' conducted by Arup in 2008, there is a theoretical generation capacity for the Borough of 52 MW.

Traffic, Transport and Highway Safety

- 136. The proposed wind farm would essentially result in two areas of impact on traffic, transportation and highway safety, these being the construction and decommissioning traffic including the abnormal loads (turbine parts), and the maintenance traffic associated with the operational wind farm. The Environmental Statement has been submitted with assessments of traffic levels, traffic routes, swept paths, duration of traffic impacts and other related details.
- 137. The proposed abnormal load route is shown as being along the A1, along the A689 then onto the A177 where it enters Stockton Borough. The loads leave the A177 at Grindon Crossroads which is an uncontrolled crossroads junction on a principal road at a point where there is a 50 mph speed limit.

- 138. The Head of Technical Services considers that there is limited forward visibility at this cross roads, however, as the abnormal loads are accompanied by Police, the use of this junction for the traffic movements as shown is considered to be acceptable.
- 139. Abnormal loads have been assessed using height and weight restrictions along the total length of the route. Swept path analysis has been undertaken to assess the routes to ensure the required vehicles can be accommodated at junctions and pinch points and vehicle over-run areas have been identified. This analysis demonstrates that the route is acceptable.
- 140. As topographical surveys have not been carried out for all sections of the abnormal load route then it is not possible to categorically say that the abnormal load vehicles can access the site. As such, a condition is recommended which requires a dry run for abnormal vehicles which will highlight any mitigation additional to that already calculated. A scheme of traffic management is also recommended as being required by condition which will detail provisions for replacing signage etc immediately following abnormal loads passing, thereby retaining highway safety. Should the intended abnormal loads be unable to navigate the road system acceptably then the applicant would have the opportunity to reduce component load lengths.
- 141. The scheme proposes to move heavy goods vehicles (HGV's) from the A66, through Redmarshall and Whitton and into Stillington Village. This route is part of the "West Stockton Lorry Routes" network, a scheme to concentrate HGV movements onto roads suitable to cater for them. See appendix ref: 15: HGV routing plan.
- 142. Concerns and objections have been raised in respect to the amount of traffic running through the area, particularly Stillington and Whitton and in relation to the highway safety of pedestrians including school children using footpaths through the village, noting that footpaths are narrow in places. Stillington and Whitton Parish Council have requested that should permission be granted, conditions be imposed that require the majority of traffic to access the site from the west and therefore not needing to travel through Stillington and for a further condition to require construction traffic to not travel through the village around the times that the school is starting and finishing.
- 143. Following consultation and their consideration of the information as submitted, Durham County Council consider that the indicated route, which in part passes through their administrative area, would be unlikely to warrant a highway objection, although advises that in order to prevent any undue significant impact on the local road network or residential amenity along traffic routes, it is advised that the Local Planning Authority impose a condition to restrict HGV traffic to the agreed routes during construction.
- 144. Whilst the suggestion of a western access route is noted, the Head of Technical Services has considered traffic flows, bus movements and accident records along the routes proposed and considers them to be acceptable for HGV movements as detailed. A Traffic Management Plan is required by condition which would allow for limiting traffic movements in peak traffic hours and during school opening and closing times to minimise impact on existing delays and highway safety.
- 145. The Head of Technical Services has advised that the proposed access points (southern access between Stillington and Old Stillington and northern access on road north of Stillington) are acceptable in terms of geometry and visibility for the abnormal loads and HGV movements. Wheel washing facilities will also be included on site to remove mud and debris prior to entering the highway.

- 146. Concern has been raised that the construction traffic will affect the condition of roads, particularly South Street where the concrete support wall which is currently showing signs of weakness. It is suggested that the Council require condition assessments of the highway and this wall prior to commencement of development.
- 147. The Head of Technical Services has requested control over the impact of the development traffic on the highways within the Borough and a condition is recommended which requires pre and post construction road surveys to be undertaken and for an agreed reinstatement scheme to be undertaken.
- 148. In respect to traffic serving the operational phase of the proposed wind farm, it is indicated that there would be approximately 35 servicing or maintenance visits to the site per annum with no staff being based at the site. The Head of Technical Services considers that the levels of operational traffic are not significant.

Impact on the character of the Landscape

- 149. There are a number of objections to the proposed wind farm based on its impact on the character of the area. These are summarised within the publicity section of this report although, amongst other things, they relate to the scale of the turbines being out of keeping with the area, their dominance on the rural landscape, that they will destroy the currently unspoilt area, that they will be highly visible from many areas and specifically that they will have an unacceptable cumulative impact with other proposed or existing wind farms in the area.
- 150. Guidance for the impact of the wind farm can be taken from a report commissioned by the Association of North East Councils' *Wind Farm Development and Capacity Studies – East Durham Limestone and Tees Plain*' dated 2008 and undertaken by Arup consultants (Arup report). Whilst this report guides on cumulative issues, having zoned the north east into areas, it is only an indicative guide and detailed assessments remain to be the main consideration for this scheme.
- 151. Concern has been raised in respect to the findings of the Arup report which concludes that the Butterwick / Walkway wind farm (17 turbines to the east of Sedgefield) plus one other wind farm would possibly be acceptable in this area. Residents have concerns that they will be surrounded by wind farms whilst concern has also been raised in respect to the proximity to individual and groups of properties, with a significant number of properties in Stillington being within 1 km of the proposed wind farm, suggesting that many properties will lose their currently uninterrupted views.
- 152. Objectors have noted that a Private Members Bill is currently being considered by Parliament which seeks a 2 km separation distance between wind farms and dwellings. Whilst the basic intentions of this Bill are noted, it has not yet been confirmed either in its current or any amended state and as such it is no appropriate to use a 2 km stand off in determining the suitability of this application, but instead consider the individual characteristics of the proposal and its impacts.
- 153. A specific request from Stillington and Whitton Parish Council and residents is that the authorities of Darlington, Stockton and Durham County work together to ensure that the over population of this area by wind farms does not occur. The Parish Council have suggested that the most efficient site should be selected that at the same time has the lowest visual effect on the surrounding countryside and on views from properties.

- 154. In considering this proposal officers have consulted and been in discussions with Darlington Borough, Durham County and Hartlepool Borough Councils. The EIA has detailed cumulative impacts with other existing and proposed wind farms. However, at the time of making a decision, the Local Planning Authority needs to consider material facts of whether other schemes are approved or not and any other authority will need to do the same at the time of making their decisions.
- 155. There has been an indication from Stillington and Whitton Parish Council that there is a mix of views over the appearance of wind farms, some finding their appearance appealing, some not having strong feelings and others not wishing to see the turbines at all. Other residents have expressed their desire not to see the grid connection above ground in order to prevent further intrusion into the local countryside.
- 156. Durham County Council were consulted on the proposed development and their response advised that a careful consideration was required of the cumulative impact of the scheme with the existing wind farm application at Foxton, the recently refused application at Moor House Farm and the existing wind farm at Butterwick / Walkway to the north.

Assessment Guidance

- 157. The applicant's agent prepared a methodology for carrying out Landscape Visual Impact Assessment's (LVIA's) for the proposed wind farm development based on a number of guidance documents. A study area with a radius of 20 km was agreed with officers. Whilst the Head of Technical Services agree with the general principle of the methodology used in their assessment, the assessment has not sort to determine whether views are positive or negative suggesting that these could be subjective. However, The Head of Technical Services considers that any proposed turbine would have a negative impact on a rural landscape and the key issue therefore relates to the extent of the impact and the importance of the landscape.
- 158. Wind farms will always have a notable impact on the landscape, however, it is the sensitivity of the landscape, the magnitude of the effect and the significance of the effect taking into account the sensitivity and the magnitude which defines whether a scheme is acceptable or not.
- 159. Within the 'Wind Farm and Landscape Capacity Studies: East Durham Limestone and Tees Plain (2008) and addendum (2009)', the region is split into 27 zones based on their landscape characteristics, advising on each zones likely capacity for wind farm developments taking into account landscape sensitivity. The boundary of the proposed Lambs Hill wind farm straddles two zones although all four turbines are located within zone 24, which at this point borders 2 other zones (20 and 23) See appendix ref 11.

The report describes zone 24 as follows:

'Sparsely wooded, open, gently undulating landscape of mixed farmland which rises gently in the south to around 73m AOD at the village of Sadberge. Several reservoirs and other water bodies are scattered throughout the zone. A windsurfing centre is located at one of these water bodies near Bishopton. The remains of a Motte and Bailey castle are also located near Bishopton. The villages of Stillington, Bishopton and Sadberge are located in the centre, north and south of the zone respectively, with scattered farms located throughout the zone'. 'The sensitivity of the zone allows only a small – medium - small typology due to the scale grain and pattern of the land cover and settlement.'

160. The circumstances for each of these zones within this locality is detailed below;

Zone	Arup study	Currently	Currently
	reported capacity	proposed	consented
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20	4-9 turbines	3 at Foxton pending	0
		DCC decision	
23	4-6 turbines	10 at Moorhouse	0
		refused by DBC	
		(appeal possible)	
24	4-6 turbines	East and West	0
		Newbiggin (not at	
		application stage).	
		4 at Lambs Hill (this	
		application)	
14	Less than 4 turbines	8 at A1 – pending	0
		decision DCC	
19	Less than 4 or none	2 at A1 – pending	0
		decision DCC	

161. The application for the A1 wind farm is a single application for 10 turbines which straddles 2 of the zones (14 and 19).

Landscape considerations

- 162. The Stockton Renewables Study defines the area of the proposed the Lambs Hill development as having variable constraints, indicating that the area may be suitable for a commercial scale wind farm development. As a high level study this is aimed at giving a broad indication and where commercial scale wind farms may be appropriate.
- 163. Having taken into account the findings of the Wind Farm and Landscape Capacity Study, the Head of Technical Services has advised that the proposed wind farm at Lambs Hill (4 turbines) is broadly in line with the limitations of the zone which it occupies which is detailed as having a medium sensitivity to accommodate a wind farm of 4 to 6 turbines. Whilst the proposal may be in accordance with this broad guidance, it remains essential to consider the impact of the proposed wind farm in detail.
- 164. The applicants Landscape visual Impact Assessment (LVIA) considers that where views are available the significance of impacts would generally be 'major-moderate' up to 700m and 'moderate up to 2.5 km. Sensitive receptors such as footpaths and dwellings would suffer effects of moderate significance up to 4km from the site. Between 4 9 km effects would be medium low and negligible over 9 km. The Head of Technical Services broadly agree with these findings. As with all structures, the closer one gets to it, the greater its impact, partly due to its apparent scale and partly due to a narrowed view being achieved of the wider area. From distance, the achievable viewpoint widens to give a more panoramic view at which point, structures or features in the landscape have a reduced impact.
- 165. Based on the details as submitted and individual assessment of the application site and surrounding area, it is the opinion of the Head of Technical Services that for up to 2 km the proposed wind farm would have a significant local impact on the landscape character with turbines forming prominent features in the landscape. It is further considered that the local impact would vary considerably due to the undulating nature of the landscape and the presence of small areas of woodland, intervening hedges and buildings. Although locations would have uninterrupted views of the turbines, the landscape views of the proposed turbines would be highly variable and fragmented as topography and vegetation screen or filter views. Beyond 2 km from the application site, the Head of Technical Services considers the impact to be reduced to a moderate level.

- 166. There would be significant visual effects on sequential views from footpaths and roads within 4km of the site. The Castle Eden Walkway would experience some visual effects but these would be limited by topography and vegetation. The wind farm would also be visible from the A177/ A689 although due to the low sensitivity of this route and the intermittent nature of views, the impact would not be significant.
- 167. There are no landscape designations on the application site or within 1 km and there are no National Parks or Areas of Outstanding Natural Beauty within 20 km of the site. Natural England suggested consultation with the North York Moors National Park, however this lies over 20 km away and although having views towards the site, these would only be from the higher ground, being seen at considerable distance against the wider landscape with other notable structures in the fore ground. As such, consultation was not considered necessary. The Head of Technical Services considers that the impact of the proposed wind farm upon the North York Moors National Park would be negligible.
- 168. The Head of Technical Services has advised there are two registered Parks and Gardens (Hardwick Hall and Wynyard Park) located around 4km from the application site which would be only negligibly affected due to distance, topography and vegetation.
- 169. Bishopton village located 2 km south of the application site includes a conservation area and a Scheduled Ancient Monument. Although views of the wind farm would be achievable from here, it is considered that the impact of the proposed turbines would not be sufficient to warrant refusal of the application in view of the distance and the intervening topography and vegetation.
- 170. Based on the above, it is considered that none of the designated landscapes in the wider area would suffer significant adverse visual effects due to the construction of the wind farm.
- 171. Whilst the Head of Technical Services agrees with the findings of the LVIA which advises of visual impacts of major-moderate significance being limited to the local landscape at distances of up to 700m, it is considered that the degree of impact should also be assessed against the SBC Landscape Character Study, which adds further guidance in respect to character and capacity.
- 172. The SBC Landscape Character Study details the site as being within the Thorpe and Billingham Beck Valley, a Character Area which extends from Portrack Marshes along the A19, through Billingham Beck and west to Stillington. The study identifies that the proposal would have greatest impact on 3 landscape character units within the SBC administrative area (land to the west of Stillington, land east of Stillington towards Whitton and land to the south of Old Stillington). All three areas are described as having a low capacity to accommodate change which is different terminology from the East Durham Limestone and Tees Plain Study which identifies much of the landscape character of the study area as being of 'sensitive to change'. It should, however, be noted that the SBC Landscape Character Study was not specifically looking at the landscape capacity to accommodate commercial scale wind farms but was indicating a more general capacity to accommodate change of all types.
- 173. As an individual wind farm, although the proposed development would be prominent and highly visible from points within the local landscape, this level of impact is at a local level and is considered to be acceptable.
- 174. These character assessments do not consider impacts on individual properties.

Impacts on views from settlements and properties

175. The rural nature of the proposed application site means that the visual impact of the wind farm is limited to the fringes of rural settlements and isolated dwellings. In order to fully assess the available views and viewpoints towards the wind farms from these receptors, the applicant was requested to provide plan based information which details the available views towards the site and the main angle of views based on the orientation of the main elevations of properties.

Visual Impact on Settlements

176. The closest settlements are (distances approx from the nearest turbine blade swept path);

Old Stillington 0 65 km, Foxton (including Shotton) 0.8 km, Stillington 0.8 km, Whitton 1.7k m, Bishopton 2 km Great Stainton 2.4 km Little Stainton 3.2 km, Carlton 3.2 km, Redmarshall 3.2 km, Thorpe Thewles 3.8 km, Mordon 3.8k m Sedgefield 4.4 km.

- 177. Based on the EIA and officer site visits the Head of Technical Services considers that the settlements suffering greatest impact would be Old Stillington, Foxton (including Shotton), Stillington, Whitton, Bishopton and Great Stainton.
- 178. Foxton (including Shotton) would mainly be affected due to its proximity and the orientation of some properties facing the application site. This impact would be reduced substantially within the settlement by the presence of buildings, trees and hedging however the proposed turbines would become dominant features on approaches to and from within the settlement itself.
- 179. It is considered that the wind farm would become a prominent feature on the approaches to Stillington although the position of various industrial buildings, houses, outbuildings and vegetation means that there are a relatively small number of receptors within the village where the proposed turbines would be clearly seen. The viewpoints within the EIA show that at least two turbines would be viewed from Morrison Street which runs through the centre of the settlement although at this location the proposed turbines are partially screened by buildings, topography and vegetation. The Head of Technical Services considers that the wind farm would not dominate the village to the extent that might be expected and that there would be some uninterrupted views of the wind farm when approaching Stillington by car and on foot, and from the adjacent forest park.
- 180. There would also be some clear views of the wind farm from Whitton, although again, many views will be partially screened by vegetation and buildings.
- 181. Views towards the wind farm from Bishopton would be mainly achieved from residential properties along the northern boundary of the village which forms a solid band of development along its periphery. Due to existing topography, landscaping, woodland and buildings it is considered that only a small number of properties would experience uninterrupted views of the wind turbines, although at this distance the turbines become a smaller part of the wider landscape. Due to the layout of buildings

within Bishopton there would generally be very limited or no views of the turbines from streets within the village.

- 182. Views of the wind farm would be achievable from properties within Great Stainton, mainly on the eastern edge of the village and from upper floors. Even in the worst cases there would be some screening due to vegetation and there should be very limited or no views from streets within Great Stainton. Great Stainton is located 2.4 km from the site where the wider landscape is more notable within view points.
- 183. Little Stainton, Carlton, Redmarshall and Thorpe Thewles are further away from the proposed wind farm and whilst there would be views of turbines from these areas, these are limited and screened or filtered by intervening landform, vegetation and buildings. Those views that are available would mainly be from upstairs windows or from highways on the approach to the villages.
- 184. Views from Mordon to the north west of the site would be very limited with restricted or no views available from within the village centre and only filtered views of the upper parts of the proposed turbines from mainly upstairs windows of a limited number of dwellings. Sedgefield would have similarly limited or no views from within the village or from the residential properties forming its southern periphery. This is mainly due to the intervening topography and vegetation that would screen views.
- 185. Based on site visits being undertaken, both the Head of Technical Services and the case officer consider the comments within the EIA relating to the visual impact upon the settlements to be accurate, although it is recognised that views within settlements will vary considerably depending on the precise position of the viewer in relation to buildings and vegetation. The Head of Technical Services considers that the visual impact from the settlements of the proposed wind farm are considered to be major adverse but locally limited.

Visual impact on Individual Residential Properties

- 186. The Landscape and Visual Impact Assessment Addendum submitted by the applicant provides a supplementary assessment of local resident's visual amenity. This assessment identifies dwellings located on the western edge of Stillington, properties at Old Stillington, and isolated dwellings up to approximately 1 km from the edge of the wind turbine group. The potential views from dwellings were identified and assessed according to whether views were possible, the orientation of buildings and whether the views were from the garden, ground floor, or upper storey windows. Following a request from officers additional drawings were produced to show graphically the extent of such views, using the nearest public access point for visual assessment purposes.
- 187. The residential visual amenity assessment identifies that approximately 10-20 out of approximately 132 dwellings on the western boundary of Stillington would have views of the wind farm. It is considered that this would be at the upper end of that figure although in most cases there would be a significant degree or complete screening at ground floor level by rear yard walls, outbuildings and vegetation. More open views would be achieved from first floor level. The assessment indicates that overall none of these properties would experience the development as being over-bearing or oppressive.
- 188. Isolated farms or hamlets in closest proximity to turbines were assessed of which most would have some views of turbines from one or more windows although there would be some screening/ filtering of views and views would not be available from all windows on the facing side of the property. In some cases the properties are orientated away from the wind farm giving minimal views from within the house. The Head of Technical Services has advised that as a 'rule of thumb' in considering wind

farm constraints, it is considered that dwellings which are not involved in the wind farm application (benefiting from it) should be located beyond a distance equal to 5x turbine height from the closest turbine, which in this case would be 625m. Impacts on the individual properties is considered as follows:

- 189. The Whins is a two storey residential property located 580m from the closest turbine and any views of the turbine from this close distance would be significant. Should these views be created then any visual impact on the amenity of this property would be major and adverse, however, the orientation of the dwelling would result in only oblique views towards the wind farm being achieved from the main habitable room windows. Furthermore, this property is set lower than the adjacent road level, has a detached outbuilding blocking some of the views along with hedgerows and trees further filtering views within the field boundaries bordering the adjacent roadside. The EIA concludes that the wind farm would not be over-bearing or oppressive and taking into account the detailed circumstances of the property, this is considered to be accurate.
- 190. A number of properties at Foxton and Old Stillington would have more direct views of the proposed turbines as several properties face the proposed wind farm at distances of around 750m -1000m. The proposed turbines would become dominant features from windows to the rear of some properties, particularly at Rafferdene and Old Stillington, and the Head of Technical Services consider that unobstructed views of the proposed turbines could result in a major adverse visual impact on the amenity of these residential properties. However, this impact would be reduced by the presence of outbuildings, trees and hedging and it is considered that none of these properties would be affected to the extent that the turbines are unduly "oppressive" or "overbearing". The Head of Technical Services considers this would be a major yet local impact which on balance is considered to be acceptable.
- 191. A number of properties at Stillington and properties of Moor House Farm, and Oaklea are located around 800m from the closest turbine. Viewpoints provided show that views of the turbines would be possible from some habitable rooms in these properties and their associated gardens although screening as a result of buildings, landscaping and the general topography would reduce the impact. Views from Moor House Farm would be achievable although would be partially screened by trees and a hedge. Although the Head of Technical Services considers that the proposed turbines would have a moderate adverse visual impact on the views from these properties, taking into account the intervening distances, various elements of screening and filtering, topography and building orientation, it is considered that these impacts would not be significantly dominating.
- 192. It should be noted that although the consultation response from Durham County Council suggests that the proposed wind farm would be visually acceptable, this is relative to the impact on the landscape and is not considered to represent a detailed assessment on the individual impact on properties.

Cumulative Visual Assessment

193. A number of visualisations in the EIA have been produced which are considered to provide an accurate representation of cumulative impacts that the Lambs Hill Wind Farm may contribute to taking into account other existing and proposed wind farms in the area (cumulative impacts being where more than one wind farm is readily viewable within the same viewpoint). See appendix ref: 14 for wider wind farm proposals map. Whilst it is an extensive task to judge fully all of the possible cumulative impacts of proposed wind farms in the area, it is clear from the large number of wind farms in the planning system that cumulative impacts are an important issue in determining this application.

- 194. At the time of applicants assessment there were 17 wind farms (including Lambs Hill) that are either operational, approved or in the planning system within the 20 km study area. In order to simplify a potentially complex assessment a number of scenarios were simulated in the EIA in which various combinations of wind farms have been assessed for their potential to contribute towards cumulative visual impact. Both combined and sequential views of the various wind farm scenarios were submitted.
- 195. With regard to existing wind farms, the Zone of Theoretical Visibility (ZTV) concludes that cumulative impact would occur if Lambs Hill was developed as this could be viewed together with existing wind farms at Walkway and Butterwick, (17 turbines located to the east of Sedgefield approximately 4.4 km from the Lambs Hill site). Great Stainton is highlighted as being an area where a cumulative view would be achieved although the Head of Technical Services considers that these visual impacts should not occur from any residential properties due to the intervening topography. Were it to occur, it is considered that there is sufficient intervening landscape between the two wind farms to prevent it from being an unacceptable impact as views would be very intermittent.
- 196. Natural England have further advised that the LPA should consider whether the benefits of the proposal will outweigh its landscape and visual impact as detailed within the Arup report. Natural England further considers that the proposal may result in additional cumulative impacts on local landscape character and visual amenity and that the Local authority should consider this in their decision making.
- 197. Numerous objections have been received in respect to the cumulative impact of wind farms in the area, detailing those currently being proposed. Specific concerns have been highlighted by occupants who believe they would in part be surrounded by wind farms and that this would be contrary to the guidance contained within the Arup report on landscape capacity for wind farms.
- 198. Other wind farms currently being proposed within the area are Newbiggin, A1, Moorhouse and Foxton and the Head of Technical Services considers that there would be the potential for significant adverse cumulative visual impacts to arise from the Lambs Hill wind farm if other wind farms in the area were developed. The construction of the Newbiggin scheme south of Bishopton and Foxton scheme are of particular concern in this respect as is a recent announcement for a larger scheme near the A1.
- 199. With regards to the scheme mentioned in a recent press release for a large scale wind farm at the A1 (The Isles), this is not a formal application or one which is at scoping stage and as such it is not appropriate or possible to take this into account in determining this application.
- 200. The EIA concludes that the combined Foxton and Lambs Hill schemes would contribute to significant cumulative effects on views and landscape character around Foxton. The EIA concludes that there may be unacceptable cumulative effects on Rafferdene (a single property at Foxton) but all other cumulative effects on residential properties would not be overbearing' or 'oppressive'. The Head of Technical Services disagrees with this finding and believes that the visual impact of both wind farms would be overbearing and oppressive to Foxton as a whole. It is noted that in such a scenario properties within Foxton would be less than 1 km from 2 wind farms, the village would effectively be located within a wind farm. With a single access road, travellers to Foxton would pass within 400m to the east of the Foxton wind farm and then view the Lambs Hill turbines. It is considered that only one of these two wind farms should be built as the impact upon Foxton could be unacceptable. Objections have raised specific concern in respect to the cumulative impact of wind farms on properties along Foxton Lane.

- 201. There is the potential for a similar enveloping affect upon Bishopton should both the Newbiggin and Lambs Hill wind farms be built. In this instance Bishopton would be located within 2 km of 2 wind farms, one to the north and the other to the south. This would be considered unacceptable given that the village is a conservation area with an ancient monument just to the south. The construction of both farms would also exceed the perceived capacity of this area as detailed in Arup's Landscape Capacity Study. Cumulative effect would be increased further should the Moorhouse Farm proposed 2 km to the south west of Bishopton be approved at appeal (Moorhouse was recommended for approval by DBC officers although Planning Permission was refused by committee on the 10 November 2010). An appeal has not been lodged to date.
- 202. It is further indicated that should 3 or more of the 5 wind farms be constructed then a new local character area would be established. The Head of Technical Services concurs with this conclusion and considers that this level of cumulative impact would create an unacceptable wind farmed landscape as large areas of countryside to the north and west of the borough would be dominated by wind farms being experienced as 'prominent' landscape features. Sequential views from local footpaths and roads would give the impression of a wind farm landscape even if views from individual properties were limited. Whilst DCC have no objections to the principle of the development on the subject of cumulative impacts they note:

'Bearing in mind the close proximity of the proposed wind farm at Stillington to the existing planning application at Foxton the cumulative impact of these proposals needs to be very carefully considered, as would the relationship of this proposal with Moor House to the south and Butterwick / Walkway to the north.'

203. Objection has been raised in respect to views from further afield such as Trimdon and Ferryhill, (areas in County Durham where there are public vantage points at high ground and where clear views across the Tees Plan can be achieved). Whilst these views are achievable on a clear day, and the views will take in a cumulation of several wind farms, it is considered that these views are at distance where the view of the landscape is particularly wide and where the apparent scale of the wind turbines is reduced. The visual impact on the landscape from these view points would be more detrimentally affected were all proposed wind farms to be constructed, although taking into account those already operational or consented, which include ones further north, it is considered that the proposed wind farm at Lambs Hill would not unduly affect the landscape as viewed from this position.

Visual impact of other parts of the wind farm

The construction phase of the development will have a notable impact on the 204. appearance of the site from a local perspective although much of this will be as a result of the activity on site which is temporary, including the construction However, the proposed scheme includes for ancillary compound area. development such as transformer cabinets, control building, met masts etc. Having considered the indicative scale of these ancillary parts of the development (detailed within the proposal section of this report), along with their proximity to properties and highways and their position in the landscape, it is considered that subject to careful control of materials where necessary, that these would not unduly affect the character of the wider area. Two of the masts being proposed are temporary 80m monitoring masts which the applicant has advised would be required for a 12 month period. Conditions have been recommended to adequately control all details relating to these ancillary structures including the removal of the temporary masts.

Clashing Blades

205. The EIA establishes that there would be a number of locations where views would include turbines with overlapping blades. Whilst it is inevitable that this would occur from certain views, the degree of impact is considered by the Head of Technical Services to be limited. As such this is not considered to be a significant adverse impact.

Public Rights of Way

- 206. There are several public rights of way (PROW) within the surrounding area and which pass through the wind farm site. Appendix Ref: 12 Public Rights of Way. It is considered that a number of these would be affected by the proposed wind farm, particularly those that lie within 1 km of the site. Where views of the turbines are possible the visual effects would be of a major magnitude and therefore significant. The most severely affected right of way is the footpath between Old Stillington and Foxton (FP5) as this passes within 90m of the base to turbine T1. Other footpaths and Bridleways lie in excess of 200m from the base of any of the turbines.
- 207. The Ramblers Association objected to the development based on the proximity of turbine T1 being within 90m of Footpath FP Stillington 05 and that approximately 160m of it lies within 'fall over' distance of the turbine. The association referenced the companion guide to Governments Planning Policy Statement 22 which advises that there is no statutory separation distance between a wind turbine and a public right of way although often, fall over distance (turbine height to tip) is considered to be an acceptable separation and that the minimum distance is often taken to be that the turbine blades should not over sail a public right of way. They also reference the British Horse Society who generally advise of the need for a 200m set off distance from wind turbines to bridleways.
- 208. Since these initial comments, the Ramblers Association have advised that they would withdraw their objection subject to turbine T1 achieving a 125m stand off from footpath 05 by either being moved away from it or by the footpath being realigned. The Head of Technical Services recognises the desirable distances between footpaths and proposed wind turbines although accepts footpaths closer than this provided that the turbine blades do not over sail the footpath which is stated in PPS 22 as being a minimum suitable distance. Taking into account that this is a rural footpath which itself is likely to be used infrequently in comparison to a more urban footpath, as well as the guidance contained within PPS 22 and the proposed wind turbine achieving a separation distance of 90m at its closest point to footpath 05, and in excess of 200m from other public rights of way, it is considered that the spacing of the footpath from the wind turbines is acceptable. The Head of Technical Services considers it appropriate to ensure Turbine T1 does not move any closer to Footpath 05 than it currently is. Whilst the guidance of PPS 22 is noted, it is considered that the usability of the footpath could start to be undermined due to perception of safety were the turbine to be located any closer to the footpath. As such, it is considered appropriate to impose a condition as recommended by the Head of Technical Services to limit the proximity of the turbine to the footpath.
- 209. The Ramblers Associations requests are noted and the applicant has agreed to attempt to move turbine T1 through the limitations of micro siting, which in itself would move the turbine further away from properties in Stillington, or to divert the footpath. However, the application needs to be considered as submitted and in view of all of the above the impact on the Public Right of Way is considered to be acceptable.

Summary of Landscape and Visual Impact Analysis

- 210. Taking into account the proposed scheme and existing or approved wind farm schemes, the Head of Technical Services considers that the proposed Lambs Hill wind farm would have a major and adverse degree of change although only to a small number of properties, affecting their residential amenity. This is limited to a local level impact. The development impact upon the character of the landscape would also be limited to a local area although it should not lead to a change in the character definition of the wider landscape. In accordance with recognised LVIA methodology the degree of visual impact is not significant as such no objection is made to the application on these grounds.
- 211. Should other schemes be approved by neighbouring authorities that are currently in the planning system, the cumulative impacts may become unacceptably adverse, potentially changing the character of the wider landscape and affecting a greater number of properties and to a greater degree with more than one wind farm being viewable from individual viewpoints and wind farms being located at relative close proximity to more than one side of a property.
- 212. Durham County Council have advised of their agreement with previous comments made by Stockton Borough Council in response to the consultation exercise for the Foxton Wind Farm in that were permission to be granted for both wind farms, due to their close proximity, to gain some semblance of appearance, a condition should be added to require the turbine type and tower heights to be agreed so that both schemes match. Although the Head of Technical Services considers that cumulation of impacts from both the Lambs Hill Wind Farm and the Foxton Wind Farm would be unacceptable, it is considered appropriate to control turbine details by condition which would allow for consideration to be given to gaining consistency of appearance. The proposed tower heights for the Foxton scheme are below that being proposed by this scheme although in view of the distances involved, consistency of hub heights would not be of greatest importance, more the actual design of the turbine (3 blades) and the colour. A condition is recommended accordingly.

Ancillary landscape impacts

213. In respect to transporting abnormal and other loads to site, it is noted that in several locations will be a requirement to remove areas of grass verge and a number of small trees and shrubs. The Head of Technical Services has advised that should any hedges or trees need to be removed, they should be replaced with semi mature standard stock of the same species. Grass verges and shrubs should also be fully reinstated. The proposal seeks provision of two separate access points which would require the removal of 68 linear metres of mature hedgerow with the section running through the forest park requiring some clearance works. New hedgerows are proposed along a number of the surrounding roads. Generally these infill gaps in existing hedges and would serve to further restrict views that could be gained of the proposed wind farm from travellers on the roads. Conditions are recommended to achieve satisfactory landscaping mitigation which would include provision to screen, where necessary, the ancillary structures on site such as the control building.

<u>Noise</u>

214. The consideration of noise and its impacts on the amenity of the surrounding area and residents is a material planning consideration. A number of objections have been raised in respect to noise pollution as a result of the operation of the turbines, the cumulative impact of noise from this and other wind farm schemes within the area and noise associated with construction traffic and operations.

Construction traffic noise

215. The applicant has indicated that the temporary impact of construction noise could be minimised and controlled through careful construction practices and by suitable

condition and have therefore not undertaken a direct assessment of construction related noise.

- 216. The majority of the vehicles accessing the site will be standard road vehicles such as vans and Heavy Goods Vehicles (HGV's). Traffic to the site will impact on the area in a similar way as to the existing traffic within the area, albeit increasing numbers of traffic movements during the construction phase. Site traffic will be more notable as it will be more focussed at the point of access from the highway and leading up towards the turbines. This is likely to have the greatest impact on the properties at Old Stillington that are in close proximity to the southern access point and those overlooking the forest park. However, the site is within a rural area although lies in close proximity to Stillington Industrial Estate and an active railway line. Although there will be notable disruption from both the construction and decommissioning phases of development, this will be limited to a 10 month period at either end of the 25 year operational life of the wind farm. The submitted information predicts the maximum daily HGV flow as 47 per working day with the overall increase in daily traffic during the busiest month being 69 vehicles. It should be noted however that for the final 4 months of the construction phase that the monthly HGV movements would be 50 or less.
- 217. In order to reduce the impact of construction related noise, the Councils Environmental Health Officer has recommended a condition be imposed limiting working hours.

Operational noise

- 218. The relevant guidance document to assess wind farm noise in the UK is the ETSU-R-97 'The Assessment and Rating of Noise from Wind Farms (1996)' which provides a framework for the measurement of noise from wind farms and its impact on amenity, having limits for amenity hours and night time periods, recommending that wind farm noise for amenity hours should be limited to 5 dB(A) above the prevailing background noise level or a fixed minimum between 35 – 40 dB(A) (whichever is greater). For night time the limits are 5dB(A) above prevailing background or a fixed minimum level of 43 dB(A) whichever is higher. Objectors consider this to be outdated guidance in respect to modern wind farms. Whilst this is noted, ETSU-97 remains to be governments benchmark for assessing noise in respect to wind turbines.
- 219. Although the precise turbine model and size would be for future agreement, the predictions for wind turbine noise have been made based on the REpower MM92 2 MW turbine which has a hub height of 78m. Applications for wind farms do not usually specify a precise model of turbine during the application process in order to retain flexibility in this regard. Instead, they specify a maximum height and maximum noise levels predicted. In instances where the scheme and its predicted noise levels are deemed to be acceptable, it is normally considered appropriate for the Local Planning Authority, where recommending approval, to condition the maximum noise levels allowable from the turbines and for monitoring surveys to be undertaken following commencement of operation should complaints be received.
- 220. A noise survey has been undertaken by the applicant to consider the impact of the proposed scheme as well as a cumulative impact with the proposed wind farm at Foxton. Six noise monitoring locations were selected which included areas within both Stockton and Durham County and were agreed in advance with the Environmental Health Departments of both authorities. The locations are considered to be those most likely to be affected (the closest), and include the settlements of Stillington, Old Stillington, Foxton and the properties of The Whins, Moor House Farm and Foxton Farm. The Whins is detailed as being the nearest property to the wind turbines at 541m.

- 221. The noise surveys measured existing background noise levels at the six locations, taking readings every 10 minutes for a 2 month period. Wind speed, shear and direction and rainfall were measured from the application site and a site approx. 5 km away. The wind shear results have then been used to predict turbine noise levels relative to wind speed taking into account noise data provided by the turbine manufacturer.
- 222. The results show that the wind farm would not increase the quiet day time or night time background noise levels beyond the 5 dB(A) tolerance and therefore meet the criteria proposed within ETSU-R-97. The EIA advises that should planning permission be granted, further data should be provided for the final choice of turbine model by the supplier to demonstrate compliance with the noise limits derived within the report.
- 223. A number of objections were received in respect to noise, residential amenity and the tranquil nature of the area, and affecting the use of the footpaths in the area with the CPRE advising tranquillity mapping has indicated this area as being one of the most tranquil in the Borough. In view of the potential noise assessments for residential receptors, the councils Environmental Health Officer considers the resultant noise levels to be in accordance with guidance and therefore being acceptable. Although the wind farm may affect the tranquillity of the immediate site and be more audible from the nearby Public Rights of Way, it is considered that this would be a short term impact for users of the footpath as they use a particular section and as such would not unduly affect the amenity of these recreational routes.
- 224. The submission has also considered the cumulative impact of noise from this proposed wind farm and the proposed wind farm at Foxton Lane located to the north of the site (currently being considered by Durham County Council). The application at Foxton Lane is for 3 REpower MM82 2 MW turbines with hub heights of 69m. The cumulative assessment showed that the predicted cumulative wind farm noise emission levels meet the ETSU-R-97 derived noise limits at the receptor locations surrounding the proposed Lambs Hill Wind Farm.
- 225. Stillington and Whitton Parish Council have asked for reassurance that residents will not have their quality of life affected in any way by noise coming from the turbines and during times of the turbines not operating correctly or generating a louder noise or causing any other disruptive problems, then the turbines be repaired or turned off more or less immediately.
- 226. In view of all of the above, the predicted noise levels are considered to be acceptable. Conditions are recommended to restrict noise levels, require mitigation for any increased noise levels above those predicted and also to require new predictions to be undertaken following selection of the precise turbine model.

Low Frequency Noise

227. Due to the typical separation distances between wind turbines and residential receptors the levels from infrasound from wind turbines are well below the level at which would be noticed by humans.

228. Planning Policy Statement 22 states:

'There is no evidence that ground transmitted low frequency noise from wind turbines is at a sufficient level to be harmful to human health. A comprehensive study of vibration measurements in the vicinity of a modern wind farm was undertaken in the UK in 1997 by ETSU for the DTI (ETSU W/13/00392/REP). Measurements were made on site and up to 1 km away in a wide range of wind speeds and direction. The study found that:

- Vibration levels 100m from the nearest turbine were a factor of 10 less than those recommended for human exposure in critical buildings (i.e. laboratories for precision measurement).
- Tones above 3.0 Hz were found to attenuate rapidly with distance the higher frequencies attenuating at a progressively increasing rate.
- 229. Although objection has been raised in respect to low frequency noise, view of this guidance and there being no sensitive properties within 100m of any turbine it is considered that the proposed wind farm would not unduly compromise residential amenity, health or similar as a result of low frequency noise emission.

Nature, Conservation and Ornithology including the Stillington Forest Park

- 230. The application has been submitted with ecological survey work including an ecological desk based study which has assessed land within both the application site boundary as well as a 2 km area surrounding it including field surveys, an extended Phase 1 Habitat Survey and an assessment of the route through the Forest Park and the access to the north and south of the site.
- 231. The application site is described within the EIA as being predominantly large arable fields with some semi-improved grassland to the west and south-west and small areas of scrub to the south. Boundaries within the site are defined as being largely hedgerows and lines of trees with mature scrub and some fence lines. The north and west of the site are bound by Foxton and Stillington Beck's which are lined with trees and scrub. Parts of Stillington Forest Park are within the application site boundary, providing the access route to Turbine 4. The Forest Park is a designated Local Nature Reserve, the habitat of which is described as including broadleaved woodland, ponds and semi improved neutral grassland. The Local Nature Reserve at Stillington Forest Park is a former industrial tip, reclaimed in the 1990's to form a natural park with ponds, woodland and wildflower meadow. The EIA advises that the designation was primarily for its public amenity and education value although recognises that it also has locally important nature conservation value.
- 232. The submission considers the impacts on species especially protected by law and specific site visit survey work was undertaken in respect to Otter, Voles, Badgers, Great Crested Newts, Reptiles, Bats, Birds and other species. Surveys were undertaken over numerous days of water bodies, ditches, beck's, lake edges both in and around the application site boundary.
- 233. The EIA advises that Otters, Water Voles, Badgers, Great Crested Newt and Reptiles were all absent from the proposed development site although notes that the site and surrounding area does offer the potential for the area to act as a habitat for such species in the future. There were no bat roosts within the site although foraging bats were recorded and the site is considered to be of local value for bats. Although the EIA advises that Brown Hare and Roe Deer are likely to use the area, no surveys were undertaken in respect to these animals as they are not legally protected and both species are very mobile and therefore any disturbance would not unduly affect such species.
- 234. The EIA advises that studies undertaken did not reveal any records of Otter, Water Vole or Badger within 2km from the centre of the site and no records of Great Crested Newts apart from at a residential property located beyond Whitton Village. Bat records showed that there is bat activity in the area with roosts within the Forest Park and at Stillington.

- 235. The impact on bats is considered to be low as a result of their being no roosts within the site and the limited impact to the existing hedgerows although there is acknowledgement that there may be some fragmentation of foraging routes. The overall impact on bats is detailed within the EIA as being not significant.
- 236. The survey work has highlighted that Local Biodiversity Action Plan habitats could be present within the application area boundary such as the hedgerows, woodland, ponds, meadow and field margins.
- 237. There is a SSSI at Whitton Pastures, designated due to its species rich unimproved grassland, however, this is located approx. 1.7 km from the site and such is not considered to be affected by the proposal.
- 238. Within the EIA the nature conservation value of arable land, the poor semi improved grassland, amenity grassland, short perennial vegetation, semi natural broad leaved woodland and plantation, individual trees and scrub and areas of standing water within and around the application site is classified as being of less than local importance. The neutral semi-improved grassland, watercourses and ditches are considered to be of local value and the boundaries within the site boundary (hedges etc) are also considered to be of local importance, partly as a result of there being opportunity for them to be improved through additional works such as gapping etc.
- 239. The Environmental Statement has considered the impacts of the scheme on birds following surveys being undertaken in 2009 and 2010. A total of 73 species were recorded within the site, 51 species of which are either probable or possible breeders. Breeding birds Species of Conservation Concern (SoCC) are classified on a traffic light system (Red, Amber). There were 8 confirmed, 1 probable and 2 possible breeders classified as Red (SoCC) and 9 confirmed, 1 probable and 6 possible breeders classified as Amber (SoCC). A total of 49 non breeding species were recorded of which 11 were Red (SoCC) and 14 were Amber (SoCC). Five 'target species' for wind farms were recorded in the area, including heron and peregrine. The breeding bird assemblage is classified within the EIA as being of a Unitary Authority Importance, principally due to one specific species being on site whilst the non breeding bird survey is assessed as being of local importance.
- 240. The impacts on birds during the construction and decommissioning phases will be the loss of habitat (principally along hedgerows) and disturbance. The loss of an estimated 1.69% of hedgerows on the site and the loss of arable land beneath the turbines is detailed in the EIA as being an impact of minor significance whilst the short term impacts of disturbance through the construction phase is assessed as being not significant.
- 241. In respect to the operation of the wind farm the EIA advises that this will not result in an impact on habitat. With regards to wildlife, it advises that minimum 50m buffer zones have been applied from hedgerows where bats may forage in accordance with Interim Guidance published by Natural England although where trees exist the buffer zone would vary. The turbines are illustrated as over sailing the hedgerow buffer zones although at the point of the blades over sailing the buffer zone, the turbine blades are approximately 35m or more above ground. As such, the turbines in the positions shown achieve the 50m buffer from hedgerows. In instances where trees exist within hedgerows the position of the 50m buffer will alter accordingly.
- 242. The main types of bats noted either forage low to hedgerows or would fly higher. The higher flying bats are the ones at greatest risk of collision with the turbines (Nathusius Pipistrelle and Noctule). Only the Nathusius Pipistrelle was recorded at the site, as foraging individuals although there was a Noctule roost 9 km away. As these higher risk species have not been noted in any numbers at the site and in view of buffering

of turbines from hedgerows in respect to lower flying species the EIA considers the risk to bat mortality to be not significant.

- 243. The proposed development has a relatively limited land take in relation to the application site area, however, the construction and decommissioning phases, their related activity, compound creation, underground cabling, new access tracks, general noise and disturbance, the works within the forest park and the 25 years of operation will all have an impact on the nature and conservation value of the site. It is anticipated that the impact of the development will mainly be the loss of habitat, loss of fauna, displacement of birds, disruption to foraging routes and pollution and silting of watercourses.
- 244. The EIA indicates that the turbines and infrastructure such as the site compound and permanent monitoring mast are located within arable farmland which has a less than local value whist suggests that areas of temporary use such as the construction areas and where there is vehicular activity will recover rapidly.
- 245. The impacts of the proposed development are detailed within the EIA as being limited to the Forest Park (considered separately), to the loss of hedgerows associated with the two new accesses (9m loss southern access and 25m loss northern access) and the internal tracks in approximately 7 places. The total loss of hedgerows associated with the development is estimated as being 99m, 62m of which are considered to be historic and of a value which is locally important. It is indicated that there are 5.87 km of hedgerows within the application site and the development would therefore result in a 1.69% loss. The EIA findings indicate that this is not significant.
- 246. The EIA indicates that only 3 water courses would be affected which is where the access tracks cross ditches. Its findings are that these ditches are either already culverted or of low value, being dry in part. The EIA advises that the construction activity is away from both Stillington and Foxton Becks to the northern and western boundaries of the site. As such, the EIA findings are that the developments impact on water courses is not significant.
- 247. Objections to the scheme have been received in respect to the disruption and disposition impact on wildlife, specifically seeking the safeguarding of a colony of Sand Martins within the disused quarry to the north of the site and advising that birds such as Swans, Geese and Ducks use the area which are not noted in the surveys undertaken.
- 248. The Teesmouth Bird Club consider the position of the nearest turbine (80m) from the disused quarry to be an acceptable distance although have requested that protection be afforded it from construction traffic. A condition has been recommended accordingly. It has further been requested that from the bird club that bird strike monitoring be undertaken for a 5 year period following operation of the turbines commencing. Whilst this monitoring will allow a positive and greater understanding of the impacts of wind farms on bird movements, taking into account their being no objection to the scheme in this regard, it is not considered appropriate to require this by condition. Instead, an informative is recommended which would advises the applicant of this request.
- 249. Natural England has considered the information submitted which includes the survey work and proposed mitigation which includes for the provision of hedgerows and other habitat related features. Natural England do not object to the proposed development, considering that the scheme would be unlikely to have an adverse effect in respect of Bats, breeding and wintering birds, badgers, otter and water vole, great crested newts and habitats. However, they have recommended conditions be imposed in respect to undertaking survey and mitigation work. The guidance

contained within PPS 9 seeks to improve habitats and opportunities. The proposed development will affect the nature, conservation and ornithological value of the application site and its immediately surrounding area. Furthermore, the EIA considers that there is the potential for the habitat on site to improve. It is therefore considered appropriate to require mitigation of the schemes impacts on nature, conservation and ornithology and, subject to the conditions as recommended, it is considered that the proposal would be in accordance with relevant guidance in respect to nature, conservation and ornithology.

Impact on Stillington Forest Park Local Nature Reserve

- 250. One of the more notable impacts of the proposed development would be on the Stillington Forest Park Local Nature Reserve (LNR) which the northern access track would run through. See appendix ref: 13 - Access route through the forest park. The Forest Park is owned and run by Stockton Borough Council and the applicant's ability to run the access track through the Forest Park would rely on both the granting of planning permission for this scheme as well a legal agreement to use the land. Question was raised by both officers of Stockton Borough Council and Teesmouth Bird Club as to whether the proposed access track serving Turbine 4 running through the Stillington Forest Park could be located to the north of its indicated position. outside of the forest park on the arable farm land. The applicant has advised that access through the Industrial Estate is unable to accommodate the movement of the vehicle types and sizes required and that the owner of the land to the north is already in an exclusive agreement with another company and as such they are unable to agree any rights over that land. As such, there is a need for the access through the forest park to access Turbine T4.
- 251. Whilst the majority of the impacts would be short term, (10 month period associated with construction and a similar period associated with decommissioning 25 years later), they require detailed consideration as it is a publicly accessible park which has an ecological, ornithological and biodiversity value. The main impacts of the proposed development would relate to the laying of new tracks, associated tree removal, general traffic, noise and disturbance and the perceived severance for users of the recreational area.
- 252. The EIA advises that the works in the forest park would result in the loss of 0.11 ha (1100 sq m) broadleaved plantation woodland and 0.08 ha (800 sq m) of grassland and the temporary disturbance of approx. 0.03 ha (300 sq m) of woodland and 0.05 ha (500 sq m) of grassland, suggesting that in view of the park being 8.7 ha (87,000 sq m) in size, that these affected areas constitute a small proportion of the total resource therefore having a low impact.
- 253. The forest park borders the northern boundary of Stillington with, open countryside to the north and in part to the east and west of the park with housing and industrial premises to the south. The park is laid out having access points at its south east and north west corners, ponds located centrally and adjacent to the southern boundary, groups of trees and woodland mainly around the northern part of the park and several paths running throughout.
- 254. In order to ensure sufficient detail has been submitted to allow an appropriate level of consideration in respect to the impact of the proposed access track on the forest park, additional information has been supplied following request. The additional information showed the detailed route of the track in relation to the existing footpaths, and has detailed a temporary diverted footpath along with protective fencing running alongside the route of the track with crossing points where necessary. The applicant proposes to store soil used in providing the access track and reinstate it along the edge of the track. It is advised that loss of habitat through track widening would be

mitigated by new planting elsewhere within the park taking into account areas of need and species requirements.

- 255. Stillington and Whitton Parish Council have advised that the forest park is regularly used by residents for recreation and that were planning permission to be given that it should be conditioned that the traffic should only use this track between working hours of 9 am to 5 pm of the working week, suggesting that the council should consider the need to fence it off.
- 256. A number of objections have been received in respect to the impact of construction traffic on the park and the disruption and damage it will cause for wildlife and its use as a recreational area.
- 257. The Parks and Countryside Service within Councils Care for Your Area Team are responsible for the forest park and have considered all of the information supplied as well as comments made from third parties. The Parks and Countryside Service have advised that the temporary disruption caused by the proposed access would have significant short term visual impacts although would not have a long term detrimental impact and they are therefore not opposed to the proposed track. It is indicated that the route chosen incorporates much of the existing footpath whilst areas where trees would need to be removed are already ear marked in the sites management plan for thinning and that these areas are not of a high ecological or amenity value, supporting limited under storey ground flora.
- 258. A scheme of mitigation works has been recommended by the Parks and Countryside Service which following implementation would provide an improved network of paths making it easier for pedestrians to access previously unused parts of the site for recreation whilst enhancing opportunities for wildlife. It is indicated that funds received would allow improvement of the park infrastructure. In discussion with the Land and Property team responsible for the agreement for the applicant to use the park it is noted that there would be a requirement for them to pay a disturbance fee in connection with the use. However, having considered the suggested list of improvements made by the Parks and Countryside Service and the fact that the development will detrimentally affect the recreational value over a period of time, it is considered that a condition should be imposed requiring the applicant to agree a scheme of forest park improvement works which is above and beyond other requirements in respect to landscaping etc elsewhere on or around the site. A condition is recommended accordingly.
- 259. Natural England advised that that a detailed management plan and landscaping scheme should be developed and suitably managed for the forest park. The Stillington Forest Park is the responsibility of Stockton Borough Council and as such, it is not necessary to require the applicant to provide a management plan for the forest park although improvements are required to the forest park as part of this proposal. The Teesmouth Bird Club has withdrawn their initial objection subject to the production of an Environmental Action Plan which mirrors a request from Natural England.
- 260. In order to allow a degree of flexibility with the exact location of the proposed track through the forest park the applicant has requested a micro siting allowance of up to 10m. In order to ensure the impacts on the forest park do not unduly increase beyond what has been considered, it is appropriate to control by condition any possible alteration to its course. A condition has been recommended accordingly.
- 261. With regard to the use of the track, with the aim of limiting its impact on the recreational value of the forest park, a condition is recommended limiting hours of use for construction traffic and requiring the cessation of use during the parks busier

times (outside the hours of the working week and at weekends). A condition is recommended to address this but which retains flexibility in recognition that there may be some need to work outside of these hours for specific construction functions.

Cultural Heritage and Archaeology

- 262. A desk based assessment of cultural heritage and archaeology has been undertaken as well as a site walk over which has allowed the applicant to assess direct and indirect impacts of the proposed development using a 10 km radius. The sensitivity of cultural heritage and archaeological sites within the 10 km zone were classified as part of the assessment ranging from negligible to very high (high being of international importance). In addition, the definitions of the magnitude of impact range from negligible to high. It is these definitions which the EIA uses to determine whether the proposed development would have a major, minor, or other impact on cultural heritage or archaeology.
- 263. The following tables detail the definitions used in the EIA.

Level of Sensitivity	Designation Status	
Very High (International)	World Heritage Sites, which are of international importance.	
High (National)	Scheduled Monuments, Grade I Listed Buildings, Registered Battlefields, Registered Parks and Gardens, Registered Battlefields, which are considered of national importance.	
Medium (Regional)	Grade II* Listed Buildings, regionally important archaeological receptors and areas (as defined in the Historic Environment Record).	
Low (Local)	Grade II Listed Buildings, Conservation Areas, locally important archaeological receptors and areas (as defined in the Historic Environment Record).	
Negligible	Badly preserved/damaged or very common archaeological receptors/buildings of little or no value at local or other scale.	

a. Table 9.1 Sensitivity of a Cultural Heritage Receptor.

b. Table 9.2 Definitions of Magnitude of Impact.

Level of Magnitude	Definition
High	Major loss or alteration of a feature, such that these cause a total or substantial loss of a feature or complete loss of the characteristics of a receptors setting
Medium	Partial loss or alteration of a feature. Substantial change to the key characteristics of a receptors setting (within 2.5 km), or a more total loss which is temporary and/or reversible.
Low	Minor loss or alteration of a feature. Changes to a setting which does not affect the key characteristics (between $2.5 - 5$ km), or which is short term or reversible.

Negligible	Minor alteration of a feature. Minor and short term, or very minor and reversible changes to its setting (5 km+) which do
	not affect the key characteristics.

e	High	Minor	Minor	Moderate	Major	Major
nitud	Medium	Minor	Minor	Minor	Moderate	Major
Mag	Low	Not significant	Not significant	Minor	Minor	Moderate
264.	Negligible	Not significant	Not significant	Not significant	Not significant	Minor
		Negligible	Local/ Low	Regional/ Medium	National/ High	International/ Very High
	Importance/Sensitivity					

c. Table 9.3 Significance of Impact

- 265. The EIA advises that there are no World Heritage Sites, Scheduled Monuments, Listed Buildings, Registered Parks and Gardens, Registered Battlefields, Conservation Areas or Archaeologically sensitive areas within 1 km of the site, although advises that a listed bridge (Accommodation Bridge) which carries Foxton Beck under the railway line, is located to the north western boundary. The EIA considers there to be no impact to Accommodation Bridge due to its position away from the turbines. The EIA advises that there are no Prehistoric, Romano – British or early Medieval finds or features within the site although the ridge and furrow cultivation and the quarry within the site boundary may have originated from the Medieval period. Post Medieval features within the site are detailed as being Stillington Station (now demolished) and Davison Bridge which were constructed in the 1830's. The proposed access tracks and compound areas will affect two of the known sites of archaeology these being the ridge and furrow and the former quarry. These receptors are considered to be of low sensitivity although the magnitude of impacts from ground works would be high. The resultant assessment is that this would be a minor significant of impact (due to the sensitivity).
- 266. The potential for encountering unknown archaeological finds or features is considered to be low as the site of the turbines positions appears to have historically been used as pasture showing little evidence for archaeological finds although thee is some evidence for possible early pre historic activity in the east of the study area.
- 267. A further 89 archaeological sites, receptors and listed buildings identified within the 1 km of the search area have been reviewed.
- 268. The EIA has considered the potential affect on the 4 Scheduled Ancient Monuments within 5 km of the site (Manorial settlement 200m southwest of Layton House, St Thomas a Beckets Church, Mott and Bailey Castle 400m south of Bishopton, Deserted Village). It advises that the sensitivity of the monuments is high due to their national importance although indicates the impact as low due to the distance from each and the nature of the scheme.
- 269. There are 5 Grade I or II* listed buildings which lie within a 5 km radius of the site, these being the Ruins of Thomas a Beckett Church Grindon, St Edmunds Church

Sedgefield, St Cuthbert Church Redmarshall, Magistrates Court House Sedgefield and Gothic Gatehouse Hardwick Park Sedgefield. (nearest being 3.5 km away). The EIA considers that the proposed wind farm would have no significant impact on any of these listed buildings as a result of there being limited or no visibility of the wind farm from them.

- 270. There are 4 registered Historic Parks and Gardens within 10 km of the proposal, these being Wynyard Park, Ropner Park, Hardwick Park Sedgefield and Ceddasfeld Hall Sedgefield. The EIA considers that there would be no visibility of the wind farm from either Ropner Park or Ceddasfeld Hall thereby having no significant impact. The EIA further consider that the upper part of the turbines would be visible from Hardwick Park and Wynyard Park although these would be intermittent due to existing tree cover and topography and the significance of the impact is suggested as being minor due to the distance from the wind farm (Wynyard 4km and Hardwick 5 km away)
- 271. English Heritage have considered the proposed development and have advised that the scheme would have no direct impact on any historic environment asset, confirming that initial pre application concerns over the impact to Scheduled Ancient Monuments at both Bishopton and Layton have been addressed. Tees Archaeology have considered the information as submitted and have noted that the report states that the proposal may have an adverse affect on as yet unrecorded prehistoric or Roman features. Tees Archaeology support the recommendations of the report which advise that further archaeological assessment be undertaken in the form of a geophysical survey and excavation trenching. It is considered that, in view of the distances involved between the proposed wind farm and the Ancient Monuments and Listed buildings of high or medium sensitivity and there being intervening landscape, and taking into account the responses from both English Heritage and Tees Archaeology, the scheme would have a low or no significant impact as detailed in the EIA, therefore according with relevant policies. However, a condition is recommended requiring further works as requested by Tees Archaeology.
- 272. There are 16 grade II listed buildings within 2.5 km of the site, however, Grade II listed buildings, for the purpose of the EIA assessment are deemed to have a low sensitivity. Of these sixteen, 11 lie within Bishopton and Great Stainton and will have potential views of the wind farm which could be of a high magnitude, however, as the buildings are grade II and of a low sensitivity, the effect is deemed to be of minor significance. All of these are in excess of 500m from the nearest turbine. In view of the distances involved and there being intervening topography, it is considered that there would not be an undue impact in this regard.
- 273. Three Conservation areas lie within 5 km of the boundary, Bishopton, Mordon and Sedgefield. A further 4 lie just beyond the 5 km radius, Aycliffe Village, Sadberge, Coatham Mundeville and Norton. The key characteristics of the conservation areas is detailed as being specific buildings such as Church's, their relationship with one another and historic patterns of development. The EIA considers that these defining parts of the conservation areas will not be unduly affected whilst views towards the wind farm from within conservation areas will be intermittent at best due to tree cover and other more modern developments surrounding the conservation areas. The EIA assessment indicates no significant impact on the conservation areas. This assessment is considered to be an accurate representation and it is considered that there would not be an undue impact in this regard.
- 274. Historic hedgerows are indicated as being of only local importance and it is noted from the EIS that to date there has been no invasive site work. The impact on hedgerows has been considered generally in relation to the impact on the landscape and partially in respect to them being habitats. Whilst there will be some impact on

hedgerows, additional planting will be achieved via condition and the overall impact in this regard is considered to be acceptable.

Aviation

- 275. Wind turbines and wind farms can affect military and civil air traffic movement and safety as either a physical obstruction to low flying aircraft or through effects on aeronautical radar systems. Physical obstructions may necessitate mitigation either by the wind farm developer or by the aviation sector if deemed necessary where as impacts on radar pictures manifest themselves as 'radar clutter' which when produced from multiple turbines can appear as fast moving objects, mimicking the returns from aircraft themselves. Whilst turbines can impact on radar, such effects can often be acceptable or can be mitigated against sufficiently to allow a development to be consented.
- 276. The EIA has suggested that aviation facilities at Durham Tees Valley Airport, RAF Leeming and the Great Dun Fell Radar operated by National Aeronautical Traffic Services (NATS) have the potential to be affected by this development. Durham Tees Valley Airport is a commercial airport whilst Leeming Bar operates both civil and military aircraft whilst the Great Dun Fell Radar 65 km east of the site provides air traffic services to civil and military traffic across northern England and southern Scotland.
- 277. The Civil Aviation Authority has advised that the Council seek the comments of the Durham Tees Valley Airport, The MoD, Newcastle Airport and NATS who are charged with permitting access to airspace on the part of all users, whilst making the most efficient overall use of airspace. All of these operators and organisations have been consulted with as part of this application.
- 278. The Ministry of Defence have advised that they have no objection to the scheme although have requested to be informed of specific details if planning permission is granted such as date of construction, final height and final position of turbines. A condition is recommended accordingly. In addition, the MOD have advised that any slight variation to the approved details could make the scheme unacceptable to them and therefore any proposed future micro siting will need to take account of this. A condition is recommended relating to micro siting which addresses this point.
- 279. Newcastle International Airport have advised that the site lies at a position where it would not affect trafficking aircraft or their navigational aids and has therefore raised no objection.
- 280. Durham Tees Valley Airport is stated to have three 3 dimensional zones to protect aircraft from collision. The Lambs Hill wind farm is located beneath the outer horizontal zone which is at a height of 185m above ordnance datum (AOD). The highest part of the turbine tips when taken into account the ground levels for the turbines would be between 174m and 185m AOD and would therefore not breach the surface of the airports zone. In addition, the EIA findings indicate that the wind farm would not affect low flying entry into the airport when taking into account minimum heights to which aircraft could descend, and is located outside of the 'circling' area for aircraft using the airport. It is advised that aircraft flying visually in the airports airspace would have to abide by air traffic control instructions which normally require aircraft to fly at 457m AOD and to not fly above the area where the wind farm is being proposed. Aircraft taking off and landing at the airport would fly over part of the wind farm although these aircraft are expected to be at 457m AOD. The EIA suggests that within the 'Rules of the air for aircraft' a 152m distance from obstacles should be maintained. The Lambs Hill Scheme would achieve 272m clearance.
- 281. The EIA goes on to advise that the Lambs Hill scheme would be visible on the DTVA radar and during initial discussions DTVA indicated that this 'clutter' on the radar would make the job of air traffic controllers harder. The EIA advises that this impact

has been minimised by compacting the wind farm layout thereby narrowing the horizontal radar view and as a result of all aircraft within this zone having to be known to the airport radar control thereby being able to assume that there is no aircraft within the area covered by the wind farm and furthermore, aircraft would not be in the clutter of the radar for long whilst the majority of aircraft are fitted with secondary surveillance radar. The EIA also advises that the Lambs Hill Wind Farm is unlikely to have any cumulative impacts on radar with other wind farms in the area as there are different procedures in place for those within controlled air space and those outside. The EIA suggests that aviation lighting is fitted to some or all of the turbines to make them more visible in marginal weather.

282. The operator of Durham Tees Valley Airport initially lodged an objection to the scheme due to the impact of the development on their operations. However, following discussions with the applicant, the Airport have withdrawn their objection subject to the imposition of two conditions which relate to the applicant providing additional radar information and its associated testing from an additional radar. In the interests of aviation safety, these conditions have been recommended. In addition, in the interests of aviation safety, it is considered appropriate for the applicant to inform Durham Tees Valley Airport of the date of commencement of the scheme along with final positioning and turbine heights. A conditional requirement has been recommended.

Wind Turbine Icing

- 283. A number of objections have been raised with respect to the potential for ice forming on the turbine blades and this ice becoming detached once the turbines start rotating and building speed.
- 284. Planning Policy Statement 22 states:

'The build up of ice on turbine blades is unlikely to present problems on the majority of sites in England. For ice to build up on wind turbines particular weather conditions are required, that in England occur for less than one day per year. (Wind Energy Production in Cold Climates (WECO) (ETSUW/11/00452/00/REP). In those areas where icing of the blades does occur, fragments of ice might be released from the blades when the machine is started. Most wind turbines are fitted with vibration sensors which can detect any imbalance which might be caused by icing of the blades, in which case operation of machines with iced blades could be inhibited'.

- 285. In view of Government guidance, it is considered that icing of blades would not be a significant risk to health or safety subject to the imposition of a condition requiring sensors, which would detect ice build up on the blades and mitigate against this. A condition has been recommended accordingly.
- 286. In view of the guidance from PPS 22, it is considered that the issue of ice throw from moving turbines could be dealt with by a control system to prevent the turbines operating when there is an ice build up on the blades. With regard to ice throw from static turbines, this would not be significantly different from ice formation on structures such as pylons or tall buildings which themselves are located much closer to public areas or rights of way. The turbines are sited to accord with the set off distance from public areas as detailed within PPS 22 and as such, it is considered that risk of ice throw would not be a significant issue.

Shadow Flicker

- 287. Under certain conditions the sun's light shining on the turbines rotor blade as it turns can produce what is known as shadow flicker, whereby shadows can give the natural light entering a room within a building an on/off effect.
- 288. Objection has been raised in respect to shadow flicker from the turbines and its affects on properties. One specific objection to shadow flicker is raised by the occupiers living at Stillington Moor House, a dwelling located to the west of the wind farm, adjacent to the railway lines. The point of objection relates to the occupants daughter who suffers from a condition of spacism which is a visionary condition which causes inability to judge distances. The objection suggests that the potential shadow flicker effect will no doubt cause problems such as dizziness, loss of balance etc.
- 289. In order to assess the impacts of shadow flicker, guidance is taken from the companion guide associated with Governments Planning Policy Statement 22 Renewable Energy which advises;
 - a. A single window in a single building is likely to be affected for a few minutes at certain times of the day during short periods of the year. The likelihood of this occurring and the duration of such an effect depends upon:
 - b. the direction of the residence relative to the turbines;
 - c. the distance from the turbines;
 - d. the turbine hub-height and rotor diameter;
 - e. the time of year;
 - f. the proportion of daylight hours in which the turbines operate;
 - g. the frequency of bright sunshine and cloudless skies (particularly at low elevations above the horizon); and,
 - h. the prevailing wind direction.
- 290. Only properties within 130 degrees either side of north, relative to the turbines can be affected at these latitudes in the UK turbines do not cast long shadows on their southern side. The further the observer is from the turbine the less pronounced the effect will be. There are several reasons for this:
 - a. there are fewer times when the sun is low enough to cast a long shadow;
 - b. when the sun is low it is more likely to be obscured by either cloud on the horizon or intervening buildings and vegetation; and,
 - c. the centre of the rotor's shadow passes more quickly over the land reducing the duration of the effect.
- 291. PPS 22 further advises that shadow flicker can be mitigated by siting wind turbines at sufficient distance from residences likely to be affected. Advising that flicker effects have been proven to occur only within a distance of ten rotor diameters of a turbine. Therefore if the turbine has a max. 92.5m blade diameter as being proposed, the potential shadow flicker effect could be experienced up to 925m from anyone of the turbines. It is understood that the impact of the shadow flicker would get weaker the further away from the turbines (for any given weather condition).
- 292. The EIA has produced a study which takes into account properties falling within 925m of any of the turbines and those which are 130 degrees either side of north. It is advised that 6 residential receptors met both of these criteria, 5 individual properties and a one group of properties on the western edge of Stillington. The studies detailed within the Environmental Statement represent a worst case scenario as no account has been allowed for ground undulations, landscaping, trees and other intervening features, cloud cover and other factors which will affect whether a shadow is created and its strength. In addition it is advised that turbines tend to operate between 70 and 85% of the time due to wind speeds being either too high or too low

for their operation. Based on Met Office Data for sunshine hours, it is estimated that the occurrence of shadow flicker would half from the calculated levels whilst turbines rotate to face into the wind in order to maximise their wind capture which itself will affect the direction where shadows are being cast. As such, the true impact of shadow flicker is always expected to be less than that estimated.

293. The Environmental Statement has confirmed that there would be no overlap of shadow flicker form the wind farm being proposed and that being proposed at Foxton.

Assessment Location	Frequency of Shadow Occurrence (days/year)	Max Hours Shadow per Day	Mean Hours of Shadow per Day	Total Theoretical Hours per Year
H1 – Foxton Farm	0	0	0	0
H2 – South Farm	0	0	0	0
H3 – West Street, Stillington	38	0.48	0.38	14.3
H4 — The Whins	98	0.68	0.47	46.4
H5 – Oaklea	38	0.5	0.39	14.7
H6 – Moor House Farm	46	0.52	0.41	18.7

Table 14.1 of the Environmental Statement.

Maximum theoretical Shadow Flicker Occurrence at assessment locations.

- 302. As the table shows, different properties vary in distance from each turbine and effects therefore vary. The nearest property to the turbines is detailed within the EIA as being 'The Whins' approx. 541m from the nearest turbine with Old Stillington being 711m, Moor House Farm and Oaklea approx. 724m, West Street Stillington approx. 796m and Foxton and South Farm approx. 874m. The worst case scenario for the impact of shadow flicker to a single receptor is 46.4 hours per year (less than half an hour per day for 98 days of the year). The next highest impact is for 18.7 hours per year. The dwelling where there is most impact is The Whins, this being the closest property to the turbines. The Whins is a dormer bungalow set on the opposing side of a highway to the wind farm, set slightly below the highway with a hedgerow adjacent to the dwelling forming the curtilage / roadside boundary. There are also trees within this boundary and on the opposing side of the highway.
- 303. The applicant considers the impacts of shadow flicker are not significant and has advised that there are no UK guidelines which quantify what exposure levels would be expectable, suggesting that were shadow flicker found to cause nuisance, mitigation measures can be implemented to reduce its occurrence such as planting tree belts to block shadows and shutting down turbines through control systems.
- 304. Taking into account the location of properties, the array of factors which impact on whether shadow flicker would occur, and the limited duration of impact, it is considered that shadow flicker would at most have a low level of impact. In view of the maximum impact that shadow flicker would result in, and this being particularly limited, it is considered no such controls are required as part of this scheme.
- 305. In considering the specific concerns of health and noting the concerns and objections in respect to the impact on persons suffering spacism and being prone to epilepsy it is noted that the likelihood of impact is already minimal due to the circumstances of

the site, its layout and position in respect to properties and variable weather conditions. In addition to this PPS 22 advises that;

'Around 0.5% of the population is epileptic of which 5% are photosensitive. Of photo sensitive epileptics less than 5% are sensitive to lowest frequencies of 2.5 - 3 Hz, the remainder are only sensitive to higher frequencies. The flicker caused by wind turbines is equal to the blade passing frequency. A fast moving bladed machine will give rise to the highest levels of licker frequency. These levels are well below 2 Hz. The new generation of wind turbines is known to operate at levels below 1 Hz'.

306. In view of the above it is considered that the proposed scheme would not unduly affect health in this regard.

Radio and Microwave Communications including Television link interference

- 307. Wind farms and individual turbines can interfere with radio communications links and broadcast transmissions. Despite careful siting of turbines to reduce this risk, impacts can remain uncertain until turbines become operational. There are normally several options for addressing such interference including realigning the television ariel and retuning televisions or through the provision of digital television to households.
- 308. Within the EIA the applicant has highlighted the communication links that operate near the site which relate to an NEDL Microwave link and a Vodaphone link and indicated that up to 2983 homes may have their television signal affected although none of these would have no alternative signal.
- 309. Following consultations being undertaken with telecoms providers and those responsible for managing fixed link communications for UK fuel and power companies, there have been no objections raised in respect to the proposed development. The Joint radio Company (JRC) have raised no objection to the proposed scheme, on behalf of the UK Fuel & Power Industry having assessed the scheme for the potential interference with radio systems operated by utility companies in support of their regulatory operational requirements. However, it is noted that the scheme is located within close proximity to an NEDL operated link and as such any changes to the position of turbines could affect this link. Adequate account of this has been reflected within the recommended condition relating to the micro siting of turbines.
- 310. Arqiva (formerly Crown Castle UK) is responsible for providing the BBC and ITV's transmission network and is responsible for ensuring the integrity of Re Broadcast Links. They have no objection to this application although indicated that both the BBC Research Department and OFCOM are interested in the effects of wind farm interference on domestic television reception indicating enquiries to the BBC or OFCOM now result in the enquirer being directed to the BBC's web based tool. The BBC have been consulted via their web tool which advises that there are no dwellings which would be affected by the wind farm for which their would not be an alternative option to gain a signal and up to 2017 homes affected for which there is an alternative off air service. The precise impacts on television reception cannot be fully known until the wind farm becomes operational and as such a condition is recommended that requires a survey of signals to be undertaken and for a scheme of mitigation to be provided which requires any signal interference problems to be rectified by the developer.

Other Material Planning Considerations

Ground Conditions and Contaminated Land

- 311. As part of the submission the applicant has undertaken assessments in respect to soils, land use, hydrology (including flood risk), hydrogeology and contaminated land. Similar to other assessments of an EIA, assessment takes into account the sensitivity, the scale of impact and the significance of the effects and applies standard values for each.
- 312. The soil is defined as being of Grade 3 quality (good quality) and suitable for both dairy farming as well as arable farming in the drier areas. The geology of the site shows it to be predominantly underlain with Magnesium Limestone with superficial glacial till, glacial sands and gravels being present along the southern site boundary. There is made ground present towards the eastern section of the site adjacent to Stillington and expected where the forest park lies as spoil heaps once existed here. There are no geological SSSIs in the area. A small-scale open pit (former quarry) lies to the north west of the site with unknown extraction.
- 313. The ground is classified as having permeable layers capable of supporting water supplies at a local scale which can form an important source of base flows to rivers. Much of the solid geology beneath the site is classified as a principal aquifer with secondary aquifers elsewhere in the site, these being rock formations that have high water storage capability. The western part of the site is located within an Environment Agency designated groundwater source protection zone (SPZ) and all four turbines fall within this area designated to protect groundwater extraction. Water abstraction is currently licensed by Northumbrian Water for public water supply at a rate of 10,000 cubic metres per day via three separate bore holes. The site is further reported to be within a drinking water protected area.
- 314. The Environment Agency has considered the submission in respect to the principal aquifer that lies beneath and has suggested that the application should only be approved subject to certain conditions being imposed. The suggested conditions relate to the provision of a contamination land assessment, restrictions on foundation types and foundation implementation works. In view of the sites position over the principal aquifer it is considered that these conditions are appropriate and have been recommended accordingly.
- 315. The site falls within Flood Zone 1 (areas at the least risk of flooding) although Zones 2 and 3 lie adjacent to the site boundary. The Environment Agency have advised that as the tracks will be constructed of permeable material and there is very limited impermeable area associated with the development, they have no concern over risk to increased flood risk.
- 316. With regards to contaminated land and its associated risk there needs to be three elements present, a source of contamination, a pathway and something to be affected by the pollutant (receptor). The sources highlighted within the EIA include the former iron works, spoil mounds, slag wool, contamination associated with the railway line, the former filled quarry, access tracks and field entrances and agricultural use of land. Pathways mainly related to ground and surface water and receptors will be animals, plants and human exposure including construction workers, off site users of drinking water etc. The EIA considered all the pollutant sources as a result of the proposed development.
- 317. In order to mitigate against increasing risk of pollution the proposed development has, where possible located structures and turbines away from water courses, with new drainage channels being provided along access tracks into existing ditches. Stockpiled material will be sited on impermeable ground with bunded sides and

covered with sheeting and not be over the ground source protection zone. The EIA considers that there will be no significant affect in the majority of cases in respect to risk of pollutants and suggests the possibility of concrete from foundations reaching and getting into ground water, if occurs would be a minor adverse significant affect. The Environment Agency have been asked to specifically comment on the issue of foundation contaminants leaching into ground water and they have advised that a condition be imposed to deal with this matter. A condition has been recommended accordingly.

- 318. In summary, the overall site is located on part green field, part brown field land, and partly above a groundwater source protection zone. The access track to T4 will impinge on the contaminated land associated with the Stillington Forest Park and ground disturbance in this area will be carefully monitored. The EIA considers there to be no significant affects through the construction, operation and decommissioning phases subject to careful working, appropriate assessment and as a result of the positioning of turbines, tracks and other infrastructure.
- 319. In view of all of the above, it is considered that the proposed development is in accordance with relevant policies.

Impact upon Tourism

- 320. Whilst the site is located within reasonable proximity to several settlements and areas of cultural heritage, none of these are considered to be significant tourist destinations and as such, although there would be relatively clear views from the wider area, it is considered that the turbines would not unduly affect the surrounding area in terms of its value or capacity in respect to tourism.
- 321. Visit Tees Valley and Durham Tourist Information have both been consulted on the application although no responses were received.

Impact on National Grid's High Pressure Gas Pipeline

322. An initial objection was received from the National Grid; however, following reassessment of the precise position of the pipeline, the proposed positions of the turbine and the proposed hub height, they have since withdrawn their holding objection. The National Grid has advised that the proposed scheme will not breach their current guidance. The recommended separation distance between turbine masts and the pipeline is 1.5 x turbine tower height. The proposed hub / tower height is 80m, which would require a minimum separation distance of 120m. The National Grid have quoted the following distances between turbine towers and the pipeline;

T1: 436306, 523495 = 484 metres away T2: 435930, 523343 = 131 metres away T3: 435704, 523679 = 133 metres away T4: 436126, 523930 = 255 metres away

- 323. In order to adequately control any approval, micro siting of turbines or change to the turbine specification would need to be carefully considered. These matters have been taken into account in producing the conditions as recommended.
- 324. Three of the turbines and all the plant is proposed to be located to the east of the existing pipeline with one turbine being located to the west of the pipeline. As such, HGV's, site operations and on site cabling will need to cross the pipeline. The National Grid advised that there would be constraints in respect to carrying out operations in the vicinity of the pipeline in respect to cable crossings, HGV crossings, lay down areas as well as for interference testing etc. The National Grid has advised that these requirements are a statutory requirement for the developer and as such, the Local Planning Authority need not include conditions to control them. However,

some of these works will impact on the character and appearance of the area for a period of time such as the installation of protective fencing. As such, in order to control the impact of such works it is considered appropriate to impose a condition to agree the precise details of any such built part of the development.

Grid Connection

- 325. The Environmental Statement advises that the grid connection for the wind farm would be the subject of a separate application under Section 37 of the Electricity Act 1989 and that following the commission of a grid connection study the preferred option is to connect to the grid at Norton, approximately 5 km from the site. This connection could be made via overhead cables carried by wooden poles or underground cables. The final decision on connection would be subject to further discussions with the distribution network operator NEDL. See appendix Ref: 6 Potential grid connection corridor.
- **326.** Whilst comments are noted about the impact of connecting the wind farm to the national grid, this is a form of development that would not in itself require the approval of the Local Planning Authority. However, taking into account the provision of connection being either underground or on wooden poles, it is considered that this link, in principle, would not be unduly dominating on the surrounding area, being a common form of development in such areas.

Property Prices

- 327. The impact of the development on property prices has been the basis for objections to the proposal Comment has been made in respect to advice within what was described as a National Planning Policy Statement E26 suggesting that impact on property prices was a material planning consideration. Further to this, objection has been made about the influence of the development upon property prices within the area.
- 328. The reference to Policy E26 was actually a reference to a policy within the Darlington Borough Local Plan, which in itself does not reference the effect of a development on property prices as a material planning consideration. The impact of a development on property prices is not a material planning consideration.

Energy Savings and Viability of the Site

- 329. The applicant has predicted the energy output for the site would be between 21,000 and 26,200 MWh using an assumed capacity factor of 30% which is to take into account times when the turbines would not be operational. It further advises that the annual output of the wind farm would offset between 7778 and 9723 tonnes of CO2 per year. The Environmental Statement advises that this will be sufficient to supply between 4400 and 5500 homes (5 7% of homes in Stockton Borough).
- 330. Output figures are contested by objectors as being unrealistically high suggesting that they are inefficient and that the assumed load factors (efficiency rates) are not being achieved on other wind farms within the area. Other objections relate to the overall viability of the site and the fact that they have to be subsidised by Government. Whilst these concerns are noted, the predicted electricity generation information is only background information. Milton Keynes Council was challenged on their decision to grant permission for a wind farm consisting of 7 turbines. The challenge failed after the high court held that the viability of the scheme was a matter for the developer and not the Local Authority. In view of this decision, it is considered that the economic viability of the proposal is not a material planning consideration.
- 331. A specific concern of objectors relates to the inefficiencies of wind turbines as against other forms of energy generation although whilst this is noted, wind turbines and their

associated efficiency is an accepted part of National Planning Policy which this application needs to be considered against.

Trust Fund

- 332. Separate to the planning application, it is relatively common practice for wind farm developers to set up and manage 'Community Trust Funds' where monies are paid into the fund by the owner of the wind farm which are then used in association with development works which benefit the communities local to the site of the wind farm. The community funds are not normally a requirement of the planning system as the planning process is already required to consider the impacts of any development and ensure adequate mitigation is made via imposition of conditions or legal agreements. Therefore, the community funds are undertaken by the wind farm operators above any requirements of the planning system.
- 333. The Council have been made aware that the developer has been in touch with Stillington Parish Council in this regard and local residents in respect to this. Whilst Stillington Parish Council are aware of the trust fund, they have requested the Local Planning Authority to determine the application based on its own merits and would not like to see the application approved mainly because of any financial gain from the trust fund as the scheme will reduce the quality of life for local residents and no amount of funding for community projects would make up for this.
- 334. The provision or otherwise of a trust fund is not a material planning consideration and cannot be taken into account when considering the merits of the planning application

Decommissioning

- 335. The EIA advises that the decommissioning would result in the removal of above ground structures, although tracks to be used for on going agriculture and land management operations would be left in situ with other tracks being allowed to revegetate. It is indicated that the turbine foundations would be left in place and top soiled over following the removal of the turbines.
- 336. In order to ensure the turbines are not left as a landscape feature when their effective life has ceased it is considered necessary to condition the requirement for their decommissioning and removal (including ancillary works) and for the reinstatement and restoration of the site following the expiration of their anticipated life span which is indicated as being 25 years. Whilst the comments within the EIA are noted it is considered appropriate to consider the scale and extent of decommissioning at the time of a detailed scheme being submitted which would be required by condition.
- 337. It is further considered appropriate to require the decommissioning of the site in instances where the site becomes inoperable on a long term basis as the significant impact of the turbines would no longer be justified on the character and appearance of the landscape and its surroundings and on the amenity of local residents. This would again be controlled by an appropriate condition as recommended.

Turbine Positions – Micro Siting

- 338. The assessments undertaken in respect to the proposed wind farm are relative to the scale of the scheme and the wide ranging impacts of such a development. There may be a requirement for a degree of flexibility for the absolute final siting of the turbines should unknown ground conditions or other variables come to light. The term given to this slight movement of the turbines from the positions as shown is micro siting. The micro siting of turbines and associated features is a common feature of planning approvals.
- 339. The applicant was asked to submit a micro siting plan which excludes areas where there are known constraints. The resultant plan showed that the areas for micro

siting is relatively restricted. A condition has been recommended which suggests micro siting the turbines up to a maximum of 50m, first requiring agreement with the Local Planning Authority so that adequate account can be taken of constraints and impacts such as landscape and visual, wildlife, amenity, noise, aviation etc and in order to ensure the scheme remains in broad compliance with the details of the Environmental Assessment as considered.

Turbine Safety

340. A number of objections have been received in respect to the safety of the turbines in respect to collapse, blade failure and them catching fire. The companion guide to governments PPS 22 advises that;

[•]Experience indicates that properly designed and maintained wind turbines are a safe technology. The very few accidents that have occurred involving injury to humans have been caused by failure to observe manufacturers' and operators' instructions for the operation of the machines. There has been no example of injury to a member of the public. The only source of possible danger to human or animal life from a wind turbine would be the loss of a piece of the blade or, in most exceptional circumstances, of the whole blade. Many blades are composite structures with no bolts or other separate components. Blade failure is therefore most unlikely. Even for blades with separate control surfaces on or comprising the tips of the blade, separation is most unlikely. The minimum desirable distance between wind turbines and occupied buildings calculated on the basis of expected noise levels and visual impact will often be greater than that necessary to meet safety requirements. Fall over distance (i.e. the height of the turbine to the tip of the blade) plus 10% is often used as a safe separation distance.

- 341. Cleveland Fire Brigade have offered no representations in respect to the proposed development.
- 342. The Health and Safety Executive have advised that they do not have control over such sites until it becomes an operational work place and as such does not get involved in the planning stages of such developments. However, the HSE normally expect potential risks to public safety to be assessed to an appropriate level within the planning framework which is essentially PPS 22 and its associated companion guide.
- 343. It is considered that the impacts of the scheme have been assessed adequately against the guidance contained within PPS 22 and its companion guide, specifically in respect to proximity of turbines to publically accessible areas and taking into account the above, it is considered that the proposed scheme would not unduly compromise safety in association with the concerns raised including blade failure, turbine collapse, ice throw or fire.

Loss of agricultural land

344. Whilst there will be a loss of agricultural land as a result of the proposed development, the loss will be limited and agricultural operations will be able to continue to occur beneath the turbines without affecting the turbine operation. The proposal would therefore only result in a negligible loss of land and is accepted in this regard.

Surface Water Drainage

345. Network Rail has requested that surface water drainage be controlled and that there is no additional impact on the railway line or the associated embankment as a result

of surface water run off. The recommended conditions require a scheme of surface water drainage to be agreed with the Local Planning Authority to address this matter.

Earthworks

346. Network Rail have requested that any excavations or earthworks to be carried out in the vicinity of Network Rail property or structures must be designed and executed such that no interference with the integrity of that property / structure can occur and that if temporary works compounds are to be located adjacent to the operational railway, these should be included in a method statement for approval by Network Rail. Having considered the proposed site layout plan and the minimal scope for movement of the proposed infrastructure as would be achievable through the conditions as recommended, it is considered unnecessary to impose a controlling condition in this regard. However, an informative is recommended to advise the applicant of Network Rails comments in this regard.

Lighting

347. Network Rail have requested that any lighting of the proposed site is controlled to prevent undue impact on the safe operation of the railway line to prevent train drives being dazzled or to prevent confusion with line signalling. A lighting condition has been recommended to address this which requires any fixed lighting for either the construction or operational phase of the wind farm to be agreed with the Local Planning Authority.

Setting a precedent for Wind Farm Development and cumulative impact

- 348. A number of objections have been received in respect to approval for this wind farm setting a precedent for other wind turbines either at the same site or elsewhere. Whilst these comments are noted, all applications have to be considered on their own merit and any subsequent proposals for wind turbines either at this site or other sites, would need to be considered at the time of submission, against all relevant policy and guidance.
- 349. Correspondence was received from the chair of the Seven Parishes Action Group relating to the need for the authority to consider the cumulative impact of the wind farm alongside a recently reported story in respect to the provision of a large scale wind farm proposal on land adjacent to the A1 between Junctions 59 and 60 (west of Newton Aycliffe) as detailed in the publicity comments within this report. Whilst the comments are noted, the proposal is not currently within the planning system and as such cannot be considered as having a cumulative impact with this current application as it may never materialise.

Sustainability of the Stillington

- 350. Stillington and Whitton Parish Council are concerned that the proposed scheme may result in residents leaving the village and new ones being put off from moving into the parish, thereby affecting its viability, this being a situation that the Parish Council would not wish to experience.
- 351. The sustainability of the village is based on the services and employment located there rather than the extent of residents although the concern is noted. The proposal is being considered based on its direct impacts and there is no evidence to indicate that the proposed scheme would result in any notable migration from the village. As such, the proposal is not considered unacceptable or contrary to any policy in this regard.

Planning Obligations

- 352. Stillington and Whitton Parish Council have suggested that were the application to be approved, there may be additional work for local contractors during the construction phase and local businesses should be given the opportunity from Banks to bid for such contracts where appropriate. In addition, the Councils Labour Market Co-ordinator has requested that a condition be imposed requiring the applicant to use its best endeavours for 10% of the labour force and 10% of the supply chain materials to be provided from the local area.
- 353. Having discussed this with the applicant and taking into account that part of the works would require the employment of specialist operatives, it has been agreed that the applicant will enter into a legal agreement to use their best endeavours for 30% of the labour force and 30% of the supply chain materials to be provided from the local area (excluding specialist areas).
- 354. One letter of support was received based on all of the design, construction, parts and maintenance being from British businesses. Whilst this is noted, it is not considered appropriate for the Local Planning Authority to limit the applicant in this regard.
- 355. The form of development, having no floor area and no on site employees following construction is one which would not require other planning obligations with the Local Authority. The proposed development is considered to adequately comply with Policy CS 11 *Planning Obligations* of the Core Strategy.

Environmental Statement.

356. The Local planning authority is responsible for evaluating the Environmental Statement to ensure it addresses all of the relevant environmental issues and that the information is presented accurately, clearly and systematically. It is considered that the authority has in its possession all relevant environmental information about the likely significant environmental effects of the project to make a decision whether to grant planning permission.

CONCLUSION

- 357. The proposed development has been considered in the context of the Environmental Statement and its associated impacts, in particular in respect to traffic and transport, noise, landscape and visual, wildlife, ground conditions, cultural heritage, safety, surrounding settlements and residential amenity and aviation. The impacts of the proposal have been considered against national, regional and local planning guidance and whilst it is considered the erection of wind turbines of the scale proposed will have an impact on many of the above referenced matters and in particular on the character and appearance of the landscape, it is considered that the impacts are acceptable for the reasons cited within the main body of this report. It is considered however, that in order to adequately control and mitigate the impacts of the development that a wide range of conditions are required to be imposed.
- 358. It is considered that the proposals accord with the guidance of PPS 1, PPS 7, PPS9, PPS 22 and PPS 24, Regional Spatial Strategy Policies 39, 40 and 41 and Saved Local Plan Policy EN4.

Corporate Director of Development and Neighborhood Services Contact Officer Mr. Andrew Glossop

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Financial Implications - As report

Environmental Implications - As report

Legal Implications - As report

Community Safety Implications – As report

Human Rights Implications -

The provisions of the European Convention of Human Rights 1950 have been taken into account in the preparation of this report

Background Papers

Planning Policy Statement 1: Delivering Sustainable Development and Companion Guide: Planning and Climate Change Planning Policy Statement 7: Sustainable Development in Rural Areas Planning Policy Statement 9: Biodiversity and Geological Conservation Planning Policy Guidance 15: Planning and the Historic Environment Planning Policy Guidance 16: Archaeology and Planning Planning Policy Guidance 21: Renewable Energy Planning Policy Guidance 24: Planning and Noise Regional Spatial Strategy Adopted Stockton on Tees Local Plan (June 1997) Stockton on tees Core Strategy Development Plan ODPM Circular 06/2005 Biodiversity and Geological Conservation Wind Farm Development and Landscape Capacity studies – East Durham and Tees Plain and the Addendum SBC Landscape Character Study.

Ward and Ward Councilor

WARD	Western Parishes
Ward Councillor	Councillor F. G. Salt,