Appendix 1: Introductory letter to Key Stakeholders – January 2023

Renewable Energy Systems Limited
Third Floor, STV, Pacific Quay
Glasgow G51 1PQ, United Kingdom
+44 (0)1414 045 500 | info@res-group.com

Joanna McGrath
Chair to Moorfoot Community Council
Sent by email to: _____

16 January 2023

Dear Ms. McGrath,

RE: Torfichen Wind Farm proposal

I am writing to inform Moorfoot Community Council, that RES is in the early stages of exploring a potential wind farm and energy storage proposal near Torfichen Hill, approximately 6km south of Gorebridge.

The site is located within Moorfoot Community Council's area in Midlothian Council however lies along the boundary which adjoins to The Scottish Borders to the south east. We have also written to Heriot Community Council, whose boundary lies close to the site, in addition to local ward Councillors, to help raise awareness of the proposal at this early stage.

About RES

RES is the world's leading independent renewable energy developer with operations across Europe, North America and Asia-Pacific. We grew out of Sir Robert McAlpine, a British family-owned firm with over 140 years of experience in construction and engineering with a proud history in Scotland stretching from the Glenfinnan Viaduct in the Highlands to the Emirates Arena and Sir Chris Hoy Velodrome in Glasgow.

We have been at the forefront of wind energy development for over 40 years and developed and/or built more than 23GW of renewable energy capacity worldwide. In the UK alone we are responsible for approximately 10% of the current wind energy capacity. We have developed and/or built 21 wind farms in Scotland with a total generation capacity of 597MW and have recently finished constructing Blary Hill Wind Farm in Argyll and Bute. From our Glasgow office we have been developing, constructing and operating wind farms in Scotland since 1993.

Scoping Report submission

Having undertaken some initial site feasibility work we are now preparing for more detailed environmental and technical site survey work which will be carried out carefully over the next few months to help inform the design. In line with this we submitted a Scoping Report to the Scottish Government's Energy Consents Unit (ECU) this week, which sets out and seeks feedback on the proposed scope of environmental assessment work.

The ECU will contact Moorfoot Community Council separately to inform you about the Scoping Report submission as well as the process and timescales for feedback. In the meantime, an electronic copy of the Scoping Report can be viewed on the Torfichen project website at www.torfichen-windfarm.co.uk.

Project overview

The Scoping Report includes an early design for the proposed scheme comprising 19 turbines at a tip height of up to 180m, resulting in an overall site generating capacity of around 114MW. Turbine technology has advanced considerably in recent years, meaning that turbines are now taller and more

efficient which enables them to generate a significantly greater amount of renewable electricity per turbine. If consented, Torfichen Wind Farm would be capable of generating clean, low-cost renewable electricity for around 85,000 homes[1] each year (based on the scoping layout).

New onshore wind, together with large scale solar and offshore wind, is the cheapest form of electricity generation[2]. It also increases energy security by reducing reliance on imports and builds our resilience to sudden fossil fuel price fluctuations and the uncertainties of global markets. With the ever-growing threat of climate change and the catastrophic impacts that it could have, as well as the current cost of living crisis and energy security considerations, it is imperative to deliver clean, low-cost, home-grown electricity. This makes developments like Torfichen Wind Farm not just good for the environment but also the consumer.

We also believe that onshore wind should provide direct, lasting benefits to local communities. RES takes a tailored approach and works directly with the community to understand the local priorities, needs and community projects which the community would like the wind farm to support in the local area. RES is proposing that the package of community benefits from Torfichen Wind Farm will be up to £5,000 per MW (or equivalent) of installed capacity per annum, and this support from the wind farm could create positive social and economic impacts which provide a lasting legacy in the local area.

Next steps

RES believes in meaningful and effective consultation, and we aim to engage early with the local community and key stakeholders in order to facilitate constructive consultation. This helps to identify issues and concerns, as well as benefits and opportunities, which we can then consider when developing the design.

We will be looking to hold a public exhibition in the next couple of months in order to engage early with the local community and listen to people's feedback and will be in touch shortly with further information.

We would also be happy to organise an introductory phone-call or video-call with you (and any other representatives of the Community Council) to discuss the project and answer any initial questions that you may have at this stage, with the view to attending a formal Community Council meeting around (or after) the public exhibition events when we will have more information available on the proposal.

In the meantime, if you have any questions or would like further information please don't hesitate to get in touch.

Yours sincerely

Danny McLean
Development Project Manager
E danny.mclean@res-group.com
M +447769 388725

[1] The 85,000 homes equivalent figure has been calculated by taking the predicted annual electricity generation of the site (using the Department for Business, Energy & Industrial Strategy's average load factor for [onshore and offshore] wind of 31.84% and RES' predicted site generation capacity of 114MW) and dividing this by the annual average electricity figures from the Department of Business, Energy and Industrial Strategy showing that the annual UK average domestic household consumption is 3,748 kWh (December 2021). Final wind farm capacity will vary depending on the outcome of planning permission and the turbine type selected.

[2] Electricity Generation Costs - Department for Business, Energy & Industrial Strategy, August 2020.

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The resident

16 January 2023

Dear Sir or Madam

RE: Torfichen Wind Farm proposal

I am writing to inform you, as a local resident in the area, that RES is in the early stages of exploring a potential wind farm and energy storage proposal near Torfichen Hill, approximately 6km south of Gorebridge.

About RES

RES is the world's leading independent renewable energy developer with operations across Europe, North America and Asia-Pacific. We grew out of Sir Robert McAlpine, a British family-owned firm with over 140 years of experience in construction and engineering with a proud history in Scotland stretching from the Glenfinnan Viaduct in the Highlands to the Emirates Arena and Sir Chris Hoy Velodrome in Glasgow.

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We will be looking to hold a public exhibition in the next couple of months in order to engage early with local residents like yourself, as well as the wider community, and listen to people's feedback. Further details will be confirmed in due course.

If you have any questions in the meantime, please don't hesitate to get in touch.

Yours faithfully

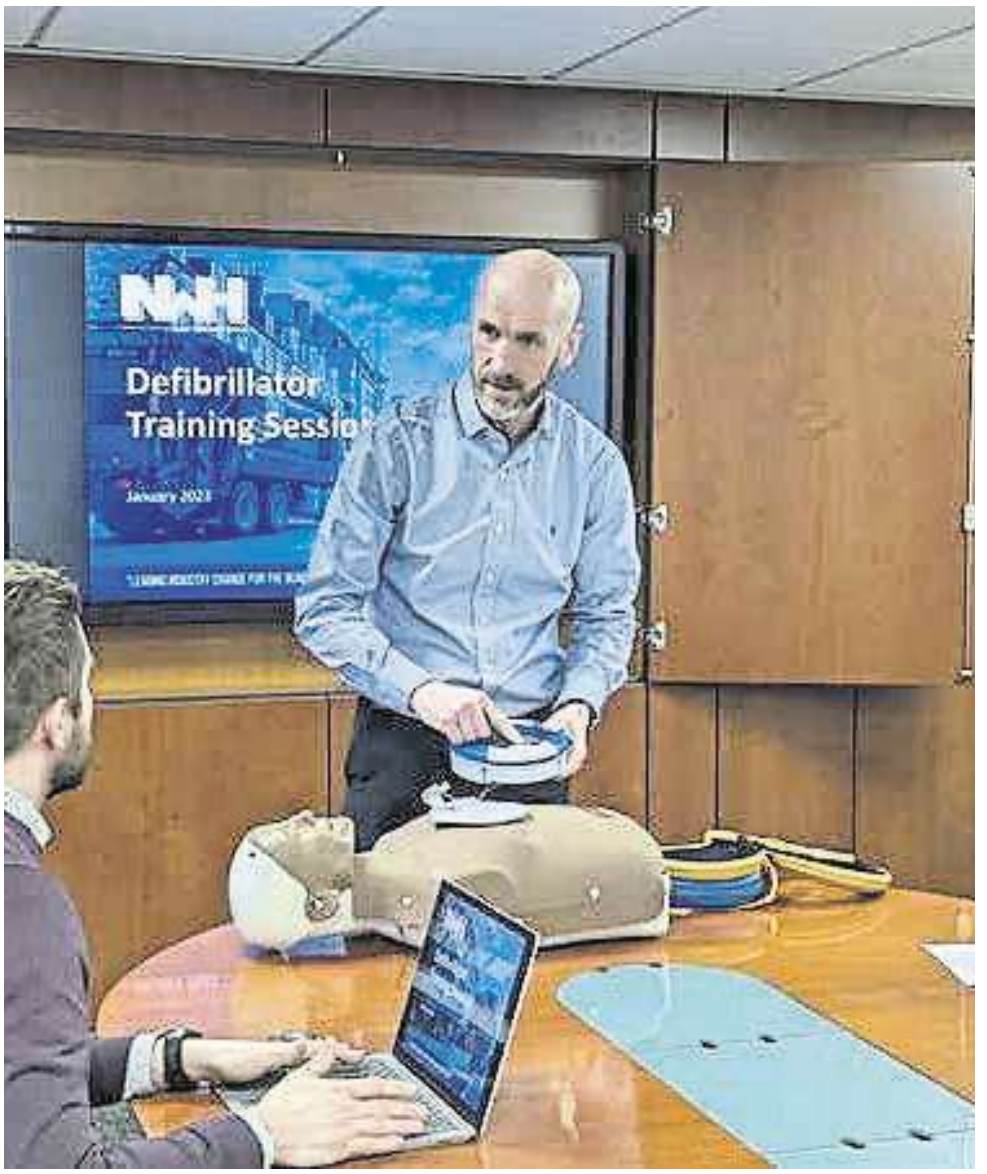
Danny McLean
Development Project Manager
E danny.mclean@res-group.com
M +447769 388725

[1] The 85,000 homes equivalent figure has been calculated by taking the predicted annual electricity generation of the site (using the Department for Business, Energy & Industrial Strategy's average load factor for [onshore and offshore] wind of 31.84% and RES' predicted site generation capacity of 114MW) and dividing this by the annual average electricity figures from the Department of Business, Energy and Industrial Strategy showing that the annual UK average domestic household consumption is 3,748 kWh (December 2021). Final wind farm capacity will vary depending on the outcome of planning permission and the turbine type selected.

[2] Electricity Generation Costs - Department for Business, Energy & Industrial Strategy, August 2020.

Appendix 2: Newspaper adverts – February 2023

NEWS



NWH Group Defibrillator Training.

Heart of Midlothian

Hillary Scott
hilary.scott@nationalworld.com
Reporter

A Midlothian business is breathing life into its company by investing in potentially life-saving equipment.

Mayfield-based recycling business, The NWH Group, is installing defibrillators for each of its eight depots across Scotland and Northern England, the first of which has just been installed at the Mayfield head office.

Sudden Cardiac Arrest (SCA) is a leading cause of death globally. Automated External Defibrillators (AED) give workers a a drastically better chance of survival.

The widespread installation across all sites is a top priority to the company, at a time when there are reportedly 30,000 sudden cardiac arrests in the UK outside hospital every year.

Ricky Ray, Compliance Director at The NWH Group, said: "We're fiercely committed to the health and wellbeing of our employees and have, on average during the last year, launched one new employee health and wellbeing initiative per month.

"These initiatives include the introduction of mental health first aiders, mental health training courses for all management teams, and free flu vaccinations for all employees.

"With the overwhelming statistics around cardiac arrest in the UK, we have chosen to prioritise the installation of defibrillators as our next initiative."

The first device has already been installed in the Mayfield depot, where the highest ratio of employees is based, and the Group is aiming to complete the roll out of the new equipment at all sites within 12 months.

The British Heart Foundation states that out-of-hospital cardiac arrest (OHCA) is a critical medical emergency, where the heart stops pumping blood around the body and unless treated immediately, it leads to death within minutes.

According to the charity, it is estimated that there is only access to defibrillators in less than 10 percent of OHCA that take place in public or in the workplace.

The overall survival rate in the UK is less than one in 10, and every one minute without CPR and defibrillation reduces the chance of survival by up to 10 percent.

The NWH Group is committed to bettering this statistic by ensuring employees, and any visitors to its sites, have access to the defibrillation equipment.

Elzara Batalova. Photo: ITV Border

Ukrainian refugee praises help from Borders College

By John Hislop
Reporter
john.hislop@newsquest.co.uk

A UKRAINIAN singer, actor and TV presenter says that studying at Borders College has been a life-changing experience.

Elzara Batalova fled Crimea following the Russian occupation in 2014 and left Ukraine entirely after the invasion in 2022.

Moving as a refugee to Cardrona seemed a world away from the life she was used to.

But after getting a job as a waitress at the Peebles Hydro Hotel, she connected with a group of musicians in Edinburgh.

And she has now been invited to perform at a special concert at the capital's Usher Hall on Sunday (February 26) to mark the one-year anniversary of the Russian invasion.

Elzara will join other Scottish and Ukrainian musicians, writers and poets who will come together in an act of remembrance and solidarity, paying respect to Ukraine's sacrifices and celebrating the extraordinary courage and defiance of Ukraine and its people.

Scotland's colleges have been instrumental in helping Ukrainian refugees build their home away from home, and learning the English language is a vital first step to them integrating within the community.

Elzara is currently studying National 2 English on the ESOL course, run by Borders College.

And studying English gave her the confidence to appear on national TV and radio to talk about how the invasion of her home country had a negative impact on her showbiz career.

Coming to Scotland was a daunting prospect at first, but she soon settled in and has positive relationships within the community.

Talking about her experience at Borders College, Elzara said: "I want to thank Borders College for the amazing educational English courses for Ukrainians.

"Thanks to these courses and our teacher Tosca Oldfield, we can integrate into society, understand others, and feel safe.

"My English has become much better, thanks to Tosca and Borders College."

Borders College, in partnership with Scottish Borders Community and Development, offers English classes for adults living in the region for whom English is not the first language.

Ski tow used to rescue injured walker

AN INJURED walker has been saved after members of the Tweed Valley Mountain Rescue Team used a ski tow to get up a hill.

Volunteers were called out to help Police Scotland in the Pentland Hills shortly before 6pm on Saturday (February 18).

The walker, who had an ankle injury, was close to the Hillend ski slope.

But "foul weather" meant that a helicopter could not access the site.

A spokesperson from the Tweed Valley rescue team said: "Luckily the casualty was close to the Hillend ski slope and thanks to the ski centre staff our team members were able to use the ski tow to get up the hill.

"Once the casualty was on our stretcher the dry ski slope came into its own when we were able to use it to sledge the casualty down to the waiting ambulance at 8.30pm."

Members of the rescue team on the ski slope. Photo: Tweed Valley Mountain Rescue Team/Facebook

Appendix 3: Update letter to Key Stakeholders with exhibition details – February 2023

Renewable Energy Systems Limited
Third Floor, STV, Pacific Quay
Glasgow G51 1PQ, United Kingdom
+44 (0)1414 045 500 | info@res-group.com

Joanna McGrath
Chair to Moorfoot Community Council
Sent by email to: _____ _____

20 February 2023

Dear Ms. McGrath,

RE: Torfichen Wind Farm proposal – public exhibitions

Further to my previous letter dated 16 January, I am writing to confirm details of two public exhibition events that RES will be holding in March for our Torfichen Wind Farm proposal.

Public exhibitions

The public exhibition events form part of our pre-application consultation on the Torfichen Wind Farm proposal and will enable people to learn more about the project, discuss any questions that they may have with the project team, and provide feedback on the initial design. They have been carefully organised around hall availability, with the second event being held later into the evening to make the events accessible to as many people as practicable.

Monday 6 March 2023

Middleton Village Community Hall
54 Borthwick Castle Terrace
North Middleton EH23 4QU

1pm to 6pm

Tuesday 7 March 2023

Macfie Hall
Heriot EH38 5YE

3pm to 8pm

The exhibitions are being advertised in the Midlothian Advertiser and Peebleshire News later this week. A digital poster version of the exhibition advert accompanies this letter in case you wish to post it on any of your community social media sites or websites. We can also arrange to send laminated versions of this to you should this be helpful – please let us know if this is the case.

A project newsletter will also be mailed out this week to over 1,100 properties in the local area (and to anyone who has got in touch with us and asked to be kept up to date with the proposal) to help raise awareness of the project and upcoming exhibitions. A digital copy of the newsletter accompanies this letter in case this is helpful.

A range of information will be available at the exhibitions, including visualisations which will help to give an impression of what the current site design and layout will look like from different viewpoints in the area.

In addition to seeking people's comments on the proposal itself, we would also like to understand how the wind farm could support local priorities through the delivery of a tailored community benefits package. RES has developed a unique Local Electricity Discount Scheme (LEDS) which has benefited other communities around our wind farms in the past and we're keen to learn if this is also of interest at Torfichen or whether the community has other ideas to help secure long-term economic, social and environmental benefits.

Providing feedback on the proposal

The exhibition events will initiate a four-week consultation period for people to provide written feedback to RES on the proposal. Feedback can be submitted in writing by filling out a 'comments form' at the exhibition events or online at www.torfichen-windfarm.co.uk from Monday 6 March when copies of the exhibition information will be available on the project website for people to view. **The closing date for comments is Tuesday 4 April 2023.**

Please note that comments to RES at this time are not representations to the determining authority (The Scottish Government's Energy Consents Unit). There will be an opportunity to submit representations to the determining authority should an application be submitted.

Next steps

The written feedback received from the exhibition events and consultation period, together with key consultee feedback and the findings of the environmental assessment work being undertaken, will be considered as part of the design development over the coming months.

We will also hold a second set of public exhibition events closer to submission of the planning application (currently scheduled for submission around late summer 2023) to update people on the proposal and present the final design. These events will also refer to the written feedback received from the March 2023 exhibitions and consultation period and explain any changes made to the design in response to this.

We hope that you have found this update helpful. If you have any questions, or would like further information, please don't hesitate to get in touch.

Yours sincerely

Danny McLean
Development Project Manager
E danny.mclean@res-group.com
M +447769 388725

Appendix 4: Newsletter 1 – February 2023

TORFICHEN WIND FARM PROPOSAL

NEWSLETTER – FEBRUARY 2023

About the Project

Overview and site location

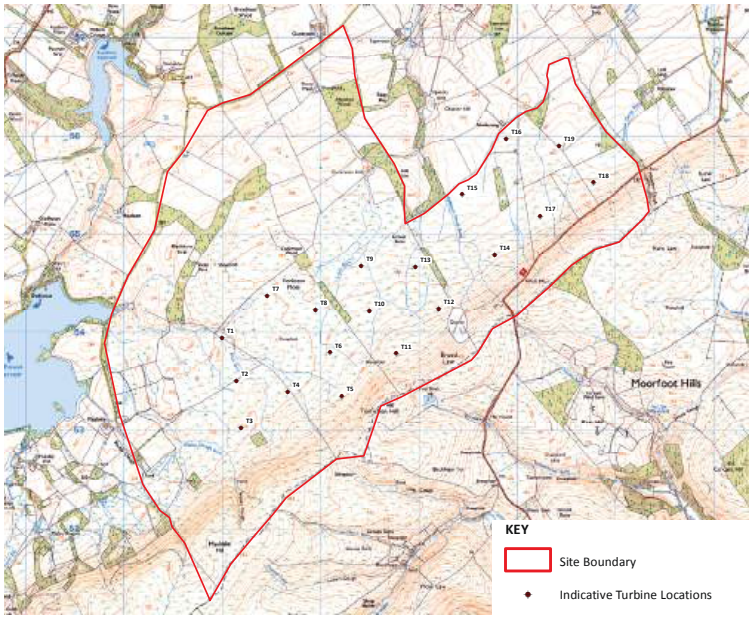
RES is in the early stages of exploring a potential wind farm and energy storage proposal near Torfichen Hill, approximately 6km south of Gorebridge in Midlothian.

Following initial feasibility work on site we submitted a Scoping Report in January 2023 to the Scottish Government, seeking feedback on the scope of proposed environmental survey work.

The Scoping Report included an early design layout for the proposed scheme comprising 19 turbines at a tip height of around 180m, resulting in an overall installed site generating capacity (based on the scoping layout) of around 114MW, and a proposed energy storage facility which will help maximise generation capacity and efficiency of the site.

Approximate location of wind farm site (for illustrative purposes only)

Indicative turbine layout



Copyright and database right 2020; Historic Environment Scotland and Ordnance Survey data ©

Turbine technology has continued to advance considerably and new onshore wind projects like the proposed Torfichen Wind Farm are amongst the lowest cost forms of generating electricity.

These modern, taller turbines generate significantly more electricity which will help to address the climate emergency, cost of living crisis and security of energy supply issues that we currently face.

If consented, Torfichen Wind Farm would be capable of generating clean, low-cost renewable electricity for around 85,000[1] homes - helping to play an important role in meeting Scotland's legally-binding 2045 net zero target.

Visit our website at www.torfichen-windfarm.co.uk

Public Exhibitions

Engaging early with the community

We are holding public exhibitions in the local area to enable people to learn more about the project, discuss any questions with the RES project team, and provide feedback on the initial design.

The exhibitions initiate a consultation period being run by RES to gather written comments on the proposal. Anyone wishing to provide feedback to RES on the project can do so in writing by filling out a 'comments form' at the exhibition events or online at www.torfichen-windfarm.co.uk from Monday 6 March 2023 when copies of the exhibition information will be available on the project website for people to view.

The closing date for comments is Tuesday 4 April 2023. Please note that comments to RES at this time are not representations to the determining authority (The Scottish Government's Energy Consents Unit). There will be an opportunity to submit representations to the determining authority should an application be submitted.

Exhibition dates

Monday 6 March 2023
1pm to 6pm

Middleton Village
Community Hall
54 Borthwick Castle Terrace,
North Middleton EH23 4QU

Tuesday 7 March 2023
3pm to 8pm

Macfie Hall
Heriot EH38 5YE

The project is also predicted to deliver approximately £5.3 million[2] of inward investment to the area as well as a tailored community benefits package in line with local needs and priorities. As such, in addition to gathering people's feedback on the design and layout of the proposal itself we're keen to understand the local priorities, needs and community projects which people would like to see the wind farm support, should it go ahead.

We're also looking to build our knowledge of local skills and capabilities and explore ways of maximising inward investment to the local area from the project, so if you're a local business interested in getting involved in onshore wind projects please come along to the exhibitions and talk to our team.

About RES

RES, a British company with a proud history in Scotland, is the world's largest independent renewable energy company with operations across Europe, the Americas and Asia-Pacific. At the forefront of the industry for over 40 years, RES has delivered more than 23GW of renewable energy projects worldwide.

Employing over 100 staff in Scotland, RES has the expertise to develop, construct and operate projects of outstanding quality such as Penmanshiel Wind Farm in the Scottish Borders, and works closely with the local supply chain wherever possible.

Contact us

Danny McLean
Development Project Manager
danny.mclean@res-group.com
07769 388725

RES, Third Floor
STV, Pacific Quay, Glasgow, G51 1PQ

Visit our website at www.torfichen-windfarm.co.uk

This newsletter has been designed to keep you up to date with the Torfichen Wind Farm proposal. If you no longer wish to receive this newsletter, please write to RES at the address above to let us know.

If you require information in Braille, large text or audio, please get in touch with us.

[1] The 85,000 homes equivalent figure has been calculated by taking the predicted annual electricity generation of the site (using the Department of Business, Energy and industrial Strategy's [BEIS] average load factor for [onshore and offshore] wind of 31.84% and RES' predicted site generation capacity of 114MW) and dividing this by the BEIS annual average electricity figure showing that the annual UK average domestic household consumption is 3,748 kWh (December 2021). Final wind farm capacity will vary depending on the outcome of planning permission and the turbine type selected.

[2] The £5.3 million inward investment figure is based on typical spend that RES has seen spent on its projects with local stakeholders, suppliers and service providers in the region of £279,000 per wind turbine during the development, construction and first year of operation.

res
power for good

Appendix 5: Exhibition information boards (x16) – March 2023

TORFICHEN WIND FARM
PROPOSAL

Welcome

About this exhibition

Thank you for taking the time to attend this exhibition. The event focuses on the wind farm and energy storage proposal that we are exploring, near Torfichen Hill, approximately 6km south of Gorebridge in Midlothian.

A range of information is provided as part of this exhibition - including details about the site location, design layout, proposed infrastructure, site constraints, likely turbine delivery route, and environmental considerations.

In addition, we have provided visualisations comprising wirelines and photomontages to help give an impression of what the current site design and layout may look like from different viewpoints in the area.

The exhibition forms part of our pre-application consultation and is designed to give you the opportunity to:

- learn more about the proposal;
- discuss any questions or views with our project team; and
- provide written feedback to RES on the proposal.

Please take time to read the exhibition information provided and talk to our project team about any questions that you may have. Any written consultation feedback submitted to RES will be considered by the project team as the design is developed and refined over the coming months.

Early engagement

RES believes in meaningful and effective consultation, and we aim to engage early with the local community and key stakeholders in order to facilitate constructive consultation. This helps to identify issues and concerns, as well as benefits and opportunities, which we can then consider when developing and refining the design and delivery of the proposal.

We consider pre-application consultation a crucial part of the wind farm development process. This early-stage exhibition is designed to help maximise the potential for consultation feedback to help shape the design.

Commenting on the proposal

The exhibition initiates a consultation period being run by RES to gather comments and feedback on the proposal. We are keen to discuss the project with you and answer any questions that you may have, but please note that **formal feedback to RES at this stage needs to be submitted in writing**.

If you would like to provide feedback to RES on the project you can do so by filling out a 'comments form' at the exhibition events or online from the project website at **www.torfichen-windfarm.co.uk** where copies of the exhibition information are also available for people to view. If you have any questions about this, please speak to our project team.

In addition to gathering feedback on the proposal itself and current design, we would also like to understand how the wind farm could support local priorities through the delivery of a tailored community benefits package.

The closing date for feedback to RES is **Tuesday 4 April 2023**.

Please note that comments to RES at this time are not representations to the determining authority (The Scottish Government's Energy Consents Unit). There will be an opportunity to submit representations to the determining authority should an application be submitted.

Your feedback matters

Feedback at this early stage has the potential to change and influence the design and improve the overall quality of the planning application from a community perspective.

In addition to confirming any current support, opposition, or neutrality to the proposal at this stage please consider submitting any constructive feedback that you may have regarding the design and delivery of the project as this information has the potential to change and influence the design in a way that is beneficial to the community, should it go ahead.

Next steps and keeping you updated

Any written consultation feedback submitted to RES will be considered by the project team over the coming months as the design is developed and refined, in addition to feedback from key consultees and the findings from the technical and environmental studies that we are undertaking.

We will hold a second set of public exhibition events closer to submission of the planning application (which is currently scheduled around late summer 2023) to update people on the proposal and present the final design.

People will have the opportunity to speak to the project team again about the project and provide written feedback to RES. These events will also refer to the written feedback received from the March 2023 exhibitions and consultation period and explain any changes made to the design in response to the feedback.

If you would like to be kept up to date with the proposal and informed about the next set of exhibitions, please fill in a comments form with your details or speak to one of our project team at the exhibition. A copy of the key information presented at this exhibition, including an electronic copy of the comments form (which can be filled in online or downloaded), can be found on the Torfichen project website at **www.torfichen-windfarm.co.uk** together with contact details for our project team.

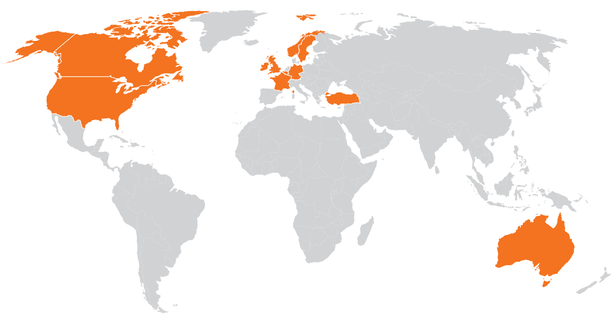
TORFICHEN WIND FARM
PROPOSAL

About RES

The world's largest independent renewable energy company

RES has been at the forefront of wind energy development for over 40 years and delivered more than 23GW of renewable energy projects worldwide. We employ more than 2,500 passionate people across the globe and are active in 11 countries, working across onshore and offshore wind, solar, energy storage, green hydrogen, transmission and distribution.

Sustainability lies at the core of our business activity and values, and we have been leading efforts to create a future where everyone has access to affordable zero carbon energy. The 23GW of green energy that we have developed and/or constructed offsets more than 21 million tonnes of carbon every year.



23GW PROJECT PORTFOLIO

10GW OPERATIONAL ASSETS SUPPORTED

40 YEARS OF EXPERIENCE

2500+ EMPLOYEES

ACTIVITIES

DEVELOP · CONSTRUCT · OPERATE

TECHNOLOGIES

WIND · SOLAR · STORAGE · TRANSMISSION & DISTRIBUTION · GREEN HYDROGEN (H_2)

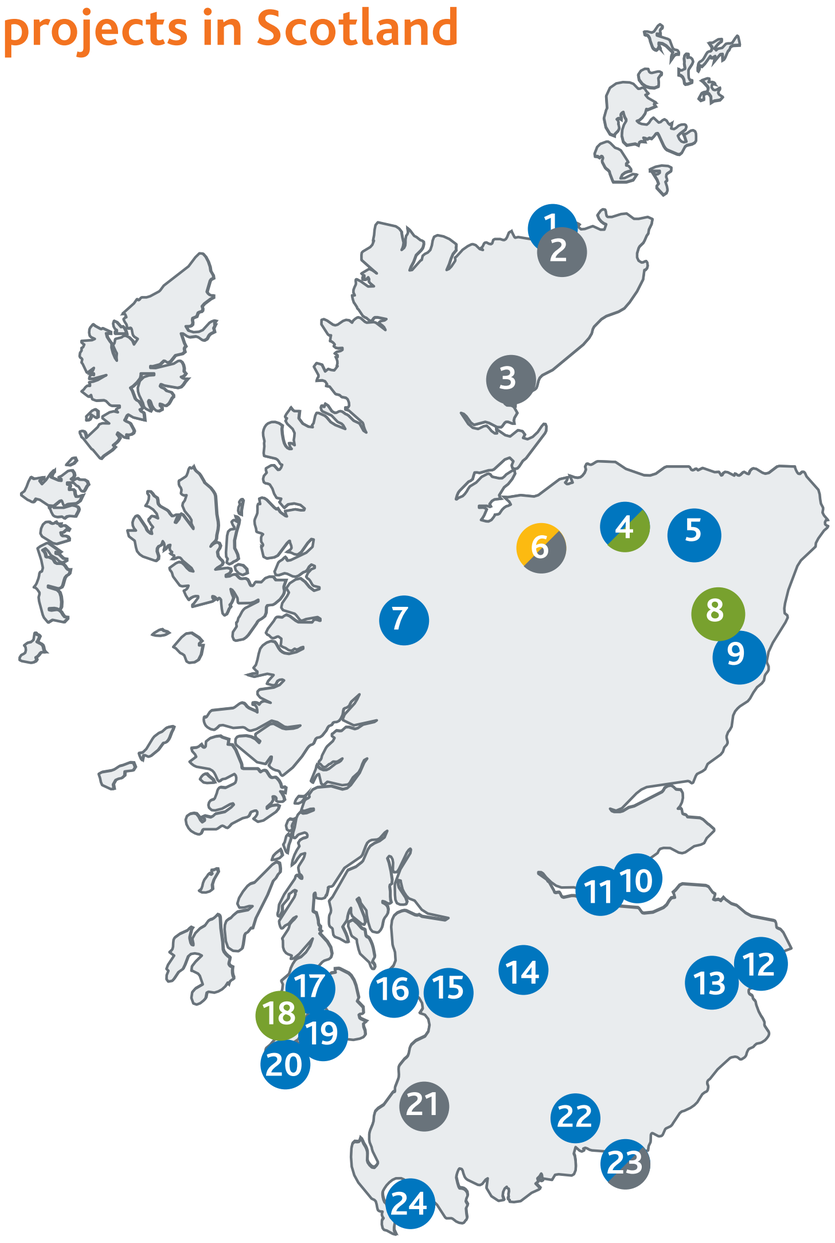
RES in Scotland

RES is a privately-owned company with a proud history in Scotland. We grew out of Sir Robert McAlpine, a British family-owned firm with over 140 years of experience in construction and engineering including the Glenfinnan Viaduct in the Highlands and the Emirates Arena and Sir Chris Hoy Velodrome in Glasgow. From our Glasgow office we have been developing, constructing and operating wind farms in Scotland since 1993.

We have developed and/or built 21 wind farms in Scotland, with a total generation capacity of 597MW, and have recently finished constructing Blary Hill Wind Farm in Argyll and Bute. We were also involved in the 14-turbine Penmanshiel Wind Farm near Granthouse, in the Scottish Borders, which we now operate. The project was commissioned in 2016 and delivers a community benefits package which includes RES' Local Electricity Discount Scheme.
For further information about RES, visit www.res-group.com.

Onshore wind projects in Scotland

- Development
- In planning
- Consented
- Under construction
- Operational



RES has developed and/or built and/or operates a range of projects across Scotland including:

1	Forss I and II	16	Kelburn
2	Cairnmore Hill	17	Freasdail
3	Kintradwell	18	Killean
4	Hill of Towie I and II	19	Cour
5	Glens of Foudland	20	Blary Hill
6	Cairn Duhie (and redesign)	21	Sclenteuch
7	Beinneun	22	Minnygap
8	Hill of Fare	23	Solwaybank and Bloch
9	Meikle Carewe	24	Glenchamber
10	Earlseat		
11	Little Raith		
12	Penmanshiel		
13	Black Hill		
14	Tormywheel		
15	Neilston		

Map updated February 2023

TORFICHEN WIND FARM
PROPOSAL

The need for onshore wind

Low-cost electricity

Onshore wind, together with large scale solar, is the cheapest form of electricity generation[1] . It can be deployed quickly and delivered at lower costs than offshore wind, hydro, marine technologies, and nuclear.

If consented, the Torfichen Wind Farm scheme would be capable of generating enough clean, low-cost renewable electricity for approximately 85,000 homes[2] based on the current design presented at this exhibition. With the rising cost of living and climate change emergency, it is imperative that we deliver electricity efficiently and at lowest cost to the consumer.

Energy security

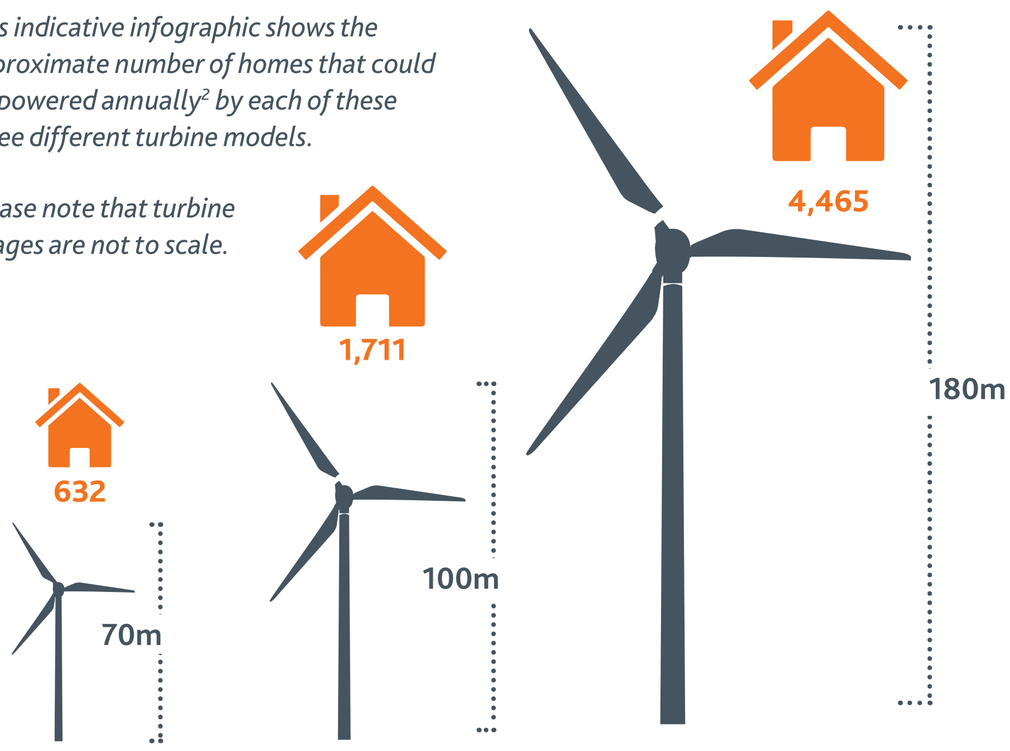
Wind energy is a free and inexhaustible resource which has an important role to play as part of a balanced energy mix. It increases energy security by reducing our reliance on imports and is not subject to sudden price fluctuations or the uncertainty of global markets. Advancements in energy storage solutions will also help capture excess energy generation. The current 114MW (megawatt) Torfichen Wind Farm proposal also includes a 100MW output battery storage facility to help maximise the efficiency of the site and further contribute to energy security.

Improved performance and output

Turbine technology has advanced considerably in recent years, meaning that turbines are now taller and more efficient which enables them to generate a significantly greater amount of renewable electricity per turbine. Modern taller turbines provide more electricity, which helps address the climate emergency, cost of living crisis, and security of energy supply. The 180m turbines proposed at Torfichen would allow for far greater benefits in terms of renewable electricity generation per turbine than smaller turbines would.

This indicative infographic shows the approximate number of homes that could be powered annually[2] by each of these three different turbine models.

Please note that turbine images are not to scale.



850kW turbine **2.3MW turbine** **Torfichen (proposed) 6MW turbine**

[1] Electricity Generation Costs - Department for Business, Energy & Industrial Strategy, August 2020.

[2] The indicative homes equivalent figures for the site (a conservative estimate of 85,000 homes) and for the three different turbine models shown above (632 homes, 1,711 homes, and 4,465 homes) have each been calculated by taking the predicted annual electricity generation (based on the site's installed capacity of 114MW, or each turbine's capacity i.e. 850kW/ 2.3MW/ 6MW) together with the Department of Business, Energy and industrial Strategy's (BEIS) average load factor for (onshore and offshore) wind of 31.84% and dividing this by the BEIS annual average electricity figure (showing that the annual UK average domestic household consumption is 3,748 kWh [December 2021]). The final wind farm capacity and the turbine models used for Torfichen will vary depending on the outcome of any planning permission and the turbine procurement process.

[3] NASA (https://climate.nasa.gov/evidence/).

[4] Onshore Wind – policy statement refresh 2021, Scottish Government, October 2021


Hill of Towie Wind Farm, Moray (turbines 100m to blade tip)

Tackling climate change

Whilst temperature and weather patterns have naturally fluctuated throughout history, scientists now agree that there is

"unequivocal evidence that Earth is warming at an unprecedented rate" not seen in the past 10,000 years and that "human activity is the principal cause."[3]

Rapidly melting ice sheets, accelerated rises in sea levels and ocean warming, longer droughts, more frequent floods, wildfires and tropical storms are just some of the devastating effects of climate change seen across the globe which are affecting humans and other species.

In December 2015, at the Paris COP convention on climate Change, the landmark Paris Agreement was reached. The Agreement aimed to *"strengthen the global response to the threat of climate change"* and set a goal of *"holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels, recognising that this would significantly reduce the risks and impacts of climate change."*

Net zero carbon targets

A 'climate emergency' was declared by the UK Government and the Scottish Government in 2019. The UK Government has set a legally binding target for reducing greenhouse gas emissions to 'net zero' by 2050 and the Scottish Government has a net zero target of 2045. Renewables, and specifically onshore wind, will play an important role in helping achieve these targets.

Scotland currently has 8.4GW of installed onshore wind capacity. The Scottish Government is currently seeking to secure an additional 8-12GW of installed onshore wind capacity by 2033[4] in order to help meet their legally-binding net zero target. This is a substantial increase and will require a significant deployment of new onshore wind projects in order to meet this demand for green, low-carbon electricity.

TORFICHEN WIND FARM
PROPOSAL

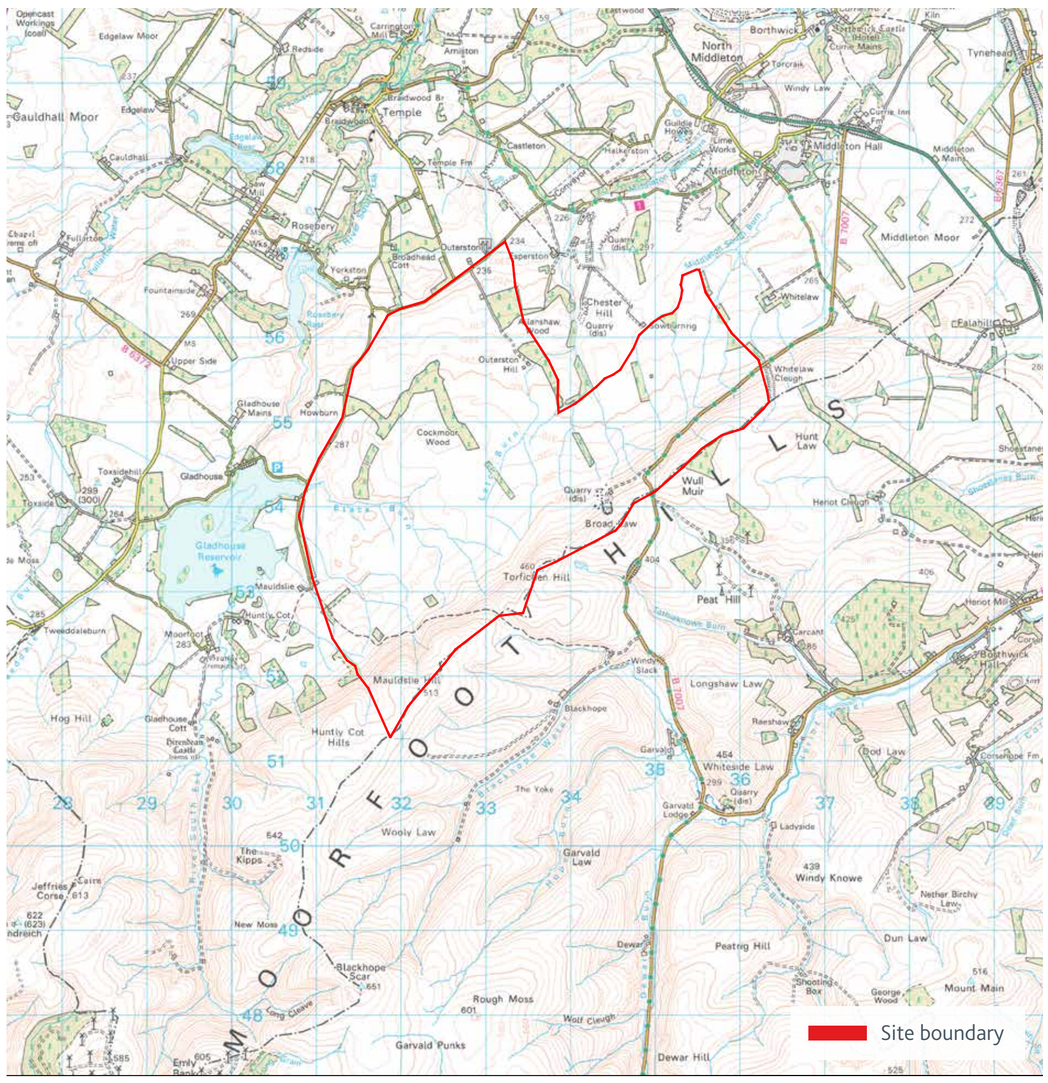
Project overview

The site

The Torfichen Wind Farm proposal is located approximately 6km south of Gorebridge, in Midlothian. The site is set within a mixed landscape of undulating farmland, fragmented moorland and forestry / small woodlands which is populated sparsely with settlements.

The site is primarily agricultural, predominantly used for livestock farming. The site has good wind resource and lies outwith any nationally designated landscape areas.

Site location map



Scoping stage

In January 2023, following initial feasibility work on site, we submitted a Scoping Report to the Scottish Government. The Report sought feedback from the Scottish Government and other consultees (including local Community Councils) on the scope of the proposed environmental survey work.

The Report included an early design layout for the proposed scheme comprising 19 turbines at a turbine tip height of around 180m, resulting in an overall installed site generating capacity (based on the scoping layout) of around 114MW.

A battery storage facility is also proposed with a power output of around 100MW and a storage capacity of around 200MWh to help increase the flexibility and generation opportunities of the site.

Turbine technology has advanced considerably in recent years, meaning that turbines are now taller and more efficient which enables them to generate a significantly greater amount of renewable electricity per turbine. If consented, Torfichen would be capable of generating clean, low-cost renewable electricity for around 85,000[1] homes each year.

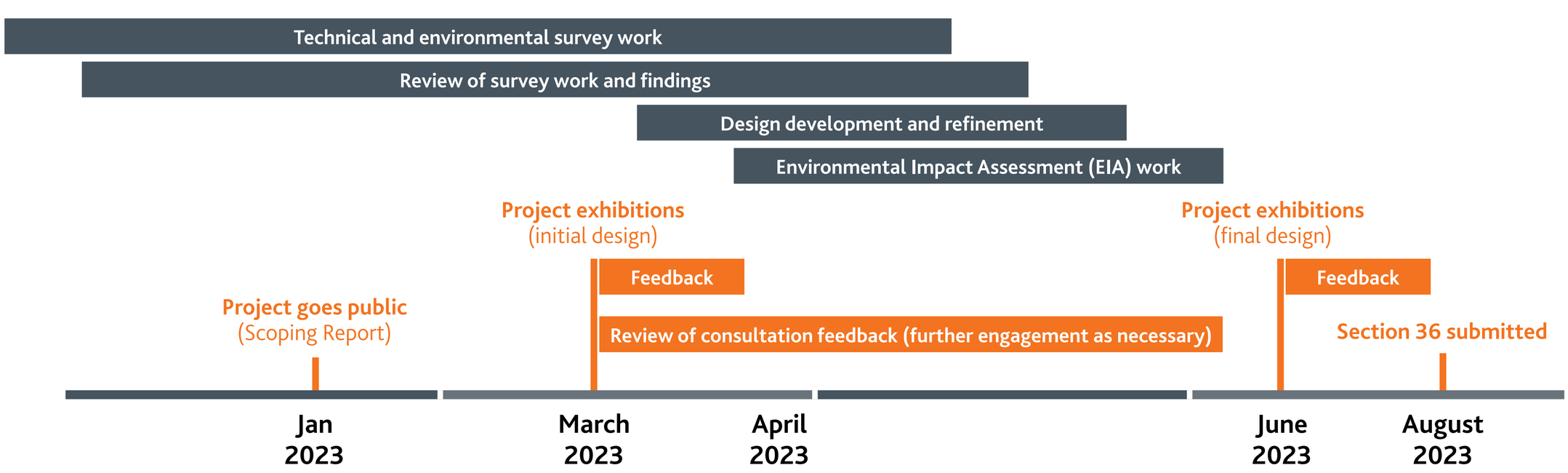
Consultee feedback to the Scoping Report is currently being reviewed and any necessary changes made to the proposed scope of environmental work. Technical and environmental surveys will continue to be undertaken over the coming months. Once all of the survey work is complete an environmental impact assessment will be undertaken to help inform and refine the design.

Planning submission timescales

The Torfichen Wind Farm proposal will have an installed generating capacity greater than 50MW (megawatts). As such, the application for planning consent will be submitted by RES to the Scottish Government's Energy Consents Unit under Section 36 of the Electricity Act 1989 (the Electricity Act) and determined by Scottish Ministers. We currently expect to submit the Section 36 application around late summer 2023.

In the meantime, we will continue to undertake detailed Environmental Impact Assessment (EIA) studies and surveys. The findings from this EIA work, together with consultation feedback from both this exhibition and key consultees, will be considered as part of the design development.

Indicative timeline



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TORFICHEN WIND FARM
PROPOSAL

Design infrastructure and constraints

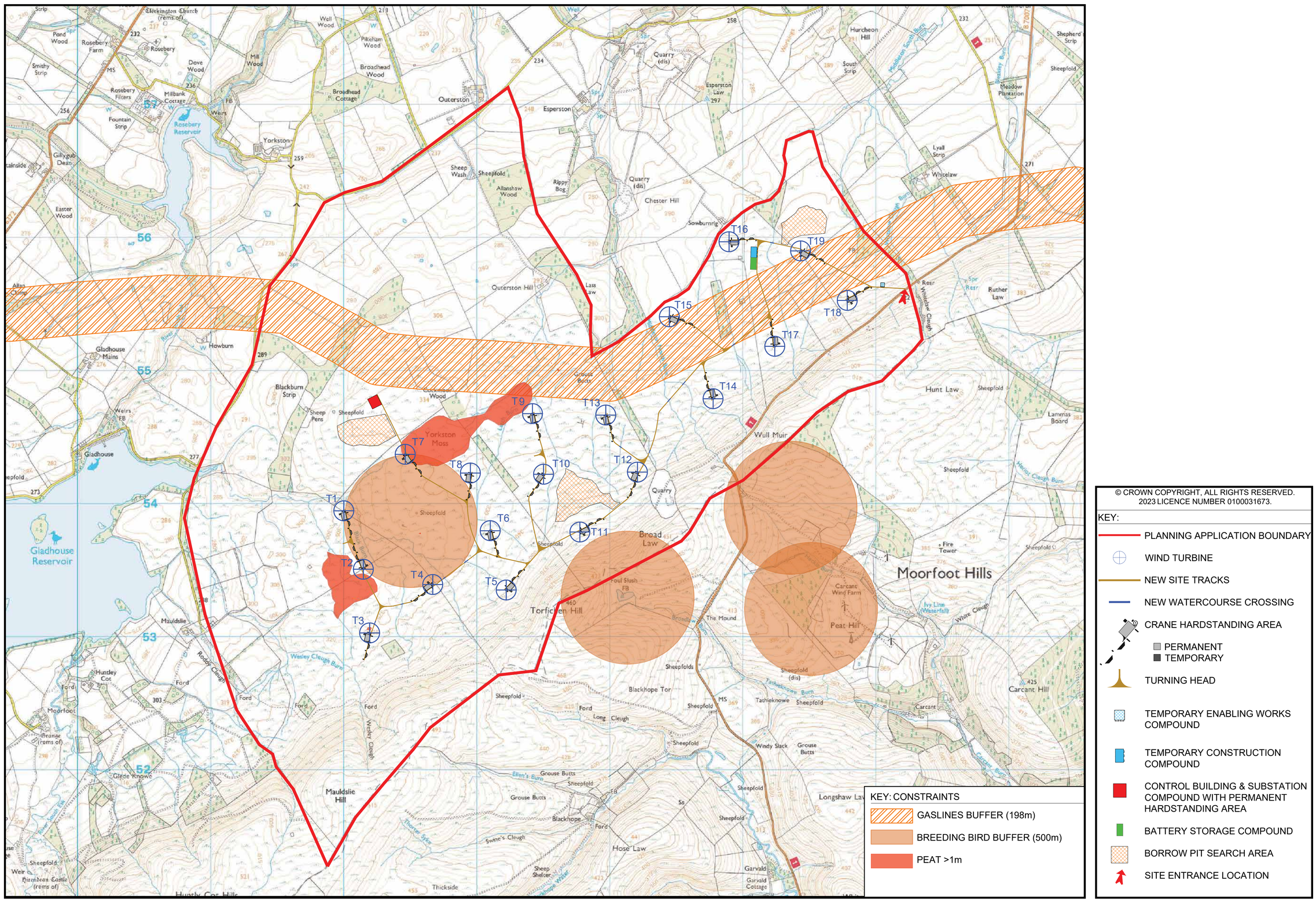
Early design

The drawing below shows the proposed infrastructure layout at this early stage of the project. This design is indicative only at this stage, and is based on the current known constraints which are also shown on the drawing.

There is a lot of work still to do over the coming months, and the design will be developed and refined during this time in response to both the findings from the technical and environmental survey work as well as consideration of written feedback from key consultees and the local community.

As the design is still at an early stage, any comments that you may have on the infrastructure or layout have the potential to change and influence the design and improve the overall quality of the planning application from a community perspective. Please talk to our project team if you have questions about the design or ideas for ways in which it could be improved in your opinion.

Indicative infrastructure layout



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TORFICHEN WIND FARM
PROPOSAL

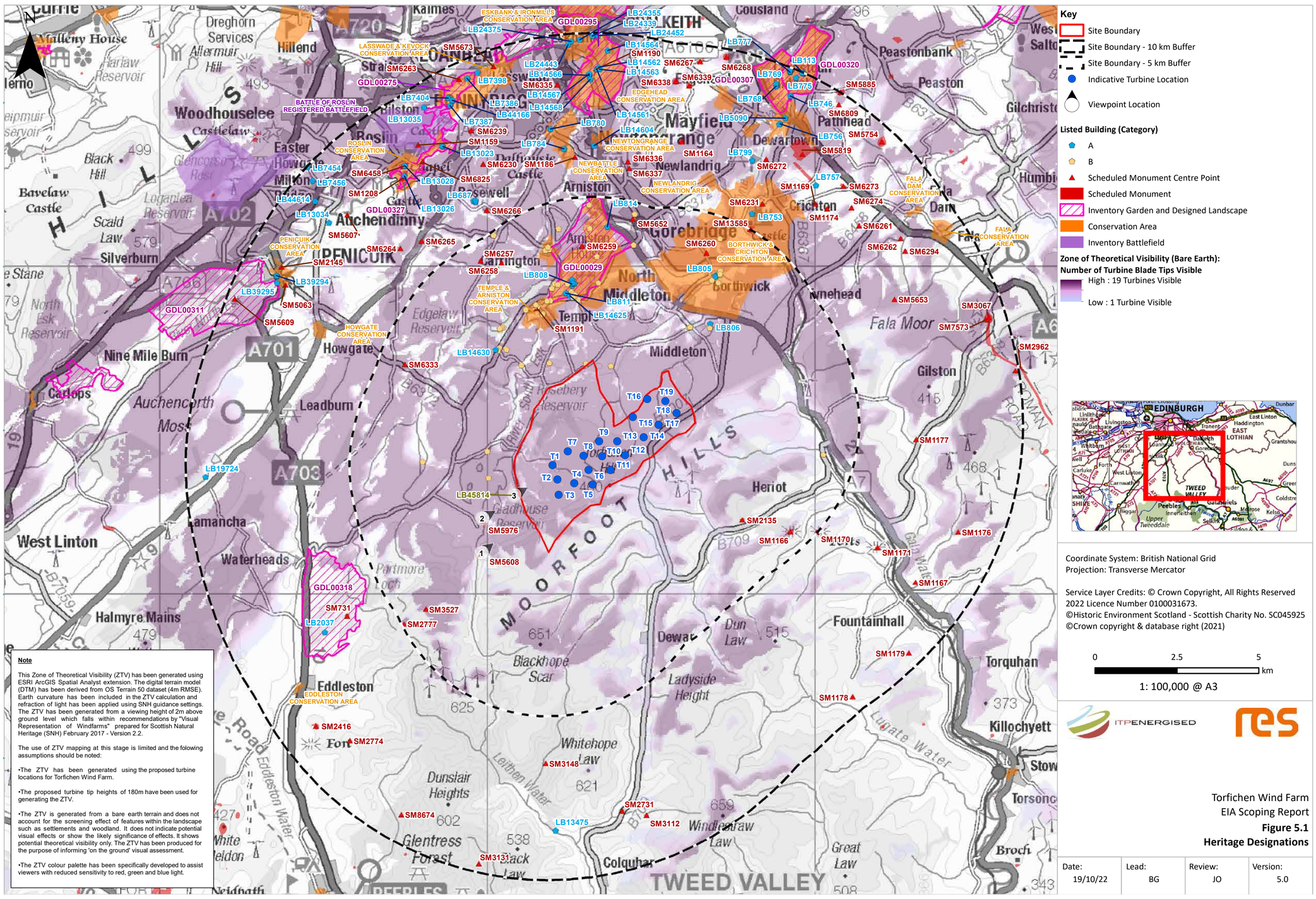
EIA considerations

Cultural heritage

The 'cultural heritage' of an area comprises archaeological sites, historic buildings, inventoried gardens and designed landscapes, inventoried battlefields and other historic environment features. The 'setting' of an asset within the wider landscape may contribute to its cultural heritage significance. There are no designated heritage assets within the site boundary area but there are 19 non-designated heritage assets which have local importance.

The Cultural Heritage Impact Assessment will identify cultural heritage assets that may be subject to significant impacts, both on the site and within 5km of the proposed turbines.

A high-level appraisal has been carried out in relation to Scheduled Monuments; Listed Buildings, Inventoried Gardens and Designated Landscapes; and Inventoried Battlefields which have been identified within the vicinity of the site. These include remains of Hirendean Castle and Moorfoot Monastic Grange to the south-west. Potential impacts will be assessed and a programme of mitigation proposed where appropriate.



Note

This Zone of Theoretical Visibility (ZTV) has been generated using ESRI ArcGIS Spatial Analyst extension. The digital terrain model (DTM) has been derived from OS Terrain 50 dataset (4m RMSE). Earth curvature has been included in the ZTV calculation and refraction of light has been applied using SNH guidance settings. The ZTV has been generated from a viewing height of 2m above ground level which falls within recommendations by "Visual Representation of Windfarms" prepared for Scottish Natural Heritage (SNH) February 2017 - Version 2.2.

The use of ZTV mapping at this stage is limited and the folowing assumptions should be noted:

•The ZTV has been generated using the proposed turbine locations for Torfichen Wind Farm.

•The proposed turbine tip heights of 180m have been used for generating the ZTV.

•The ZTV is generated from a bare earth terrain and does not account for the screening effect of features within the landscape such as settlements and woodland. It does not indicate potential visual effects or show the likely significance of effects. It shows potential theoretical visibility only. The ZTV has been produced for the purpose of informing 'on the ground' visual assessment.

•The ZTV colour palette has been specifically developed to assist viewers with reduced sensitivity to red, green and blue light.

Ecology

We take the protection of the site and surrounding area's ecology seriously. The non-avian Ecology Impact Assessment will involve a range of studies including habitats, protected species, notable species (e.g. national and European Protected Species) and locally protected species. To date we have undertaken botanical survey work to identify habitats that are of conservation importance or have groundwater dependence, and protected species survey work to investigate for protected mammals (such as badger, otter, water vole, red squirrel, and pine marten). Further habitat and species assessment work will be undertaken over the coming months as the design develops and infrastructure siting is refined.

Ornithology

Avoiding impacts on bird species, wherever possible, is an important factor in the design of the site. Already, we have commissioned over 100 hours of baseline ornithological survey work over the last two years during breeding and non-breeding seasons to build our understanding of the species on site. Surveys have included flight path activity, breeding behaviour, winter walkover surveys, as well as specific black grouse and wader surveys. Some of the key species that we are monitoring in the area are golden plover, pink-footed goose, hen harrier, red kite, and goshawk.

TORFICHEN WIND FARM
PROPOSAL

EIA considerations

Shadow flicker

Shadow flicker is a phenomenon where, under certain circumstances of geographical position and time of day, the sun may pass behind the rotors of a wind turbine and cast a shadow over neighbouring properties. When the blades rotate, the shadow flicks on and off. It only occurs inside buildings where the flicker appears through a narrow window opening. The Torfichen Wind Farm proposal is being designed in a way that will minimise any potential for shadow flicker. Shadow flicker can be easily modelled and mitigated in a number of ways (e.g. shadow detection technology on relevant turbines to create a shutdown timetable if necessary).

Hydrology and hydrogeology

The proposal has the potential to cause changes to the baseline hydrological and hydrogeological conditions on the site, and the receiving water environment, and as such the Environmental Impact Assessment (EIA) will seek to identify sensitive water environment features, assessing potential impacts and proposing mitigation where required.

A number of initial studies and assessments have been carried out to map the Groundwater Dependent Terrestrial Ecosystems (GWDTE), groundwater, water supplies and surface water features, and other potential water environment receptors.

The mapping of private water supplies forms a key part of the hydro and hydrogeological work and further consultation will be undertaken to identify all water supply infrastructure in the vicinity of the proposed development. A Private Water Supply Risk Assessment will also be developed to accompany the planning application. Any construction work close to water supplies is strictly regulated. Please talk to our team if you have any questions regarding your private water supply.

Should any significant impacts be identified as part of the EIA process, appropriate mitigation will be proposed. Mitigation seeks, first, to avoid adverse impacts and, where impacts are unavoidable, to reduce the significance of residual effect to an acceptable level. It also seeks enhancement and compensation, where possible, to provide the best practicable option.

Noise

Noise is an important consideration and the wind farm will be designed to comply with strict noise limits set by Midlothian Council should the project be granted consent.

Initial design work has taken account of residential properties in the surrounding area with buffers applied which has resulted in the scoping layout presented. Survey work is required to understand the background noise and assess noise in greater detail to inform the iterative design process and EIA.

We will shortly be commissioning a range of background noise studies at selected properties in the local area which will be agreed with Midlothian Council's Environmental Health Officer. The surveys will measure the noise at different times of the day and night in order to establish a baseline. These studies will inform the EIA which will assess the impact of operational (and construction) noise in accordance with relevant guidance including ETSU-R-97 and ensure that the proposal is within required noise limits.

Aviation lighting

The turbines proposed for Torfichen are above 150m in height and will therefore require aviation lighting so that the turbines are visible to aircraft. We will be consulting with the Civil Aviation Authority (CAA), Edinburgh Airport, the Ministry of Defence (MOD) and any other relevant consultees over the coming months to agree a lighting strategy with them.

It is worth noting that not all turbines are likely to be required to be lit (for example, lighting may just be required on outermost turbines). Furthermore, the (red) aviation lighting is designed to focus the light across and upwards for the attention of aircraft rather than downward to those at ground level.

There are also variations in the intensity of the lighting with lower levels required in good visibility and higher levels required in cloudy or foggy weather. In some instances, infra-red lighting may be possible (which is invisible to the naked eye).

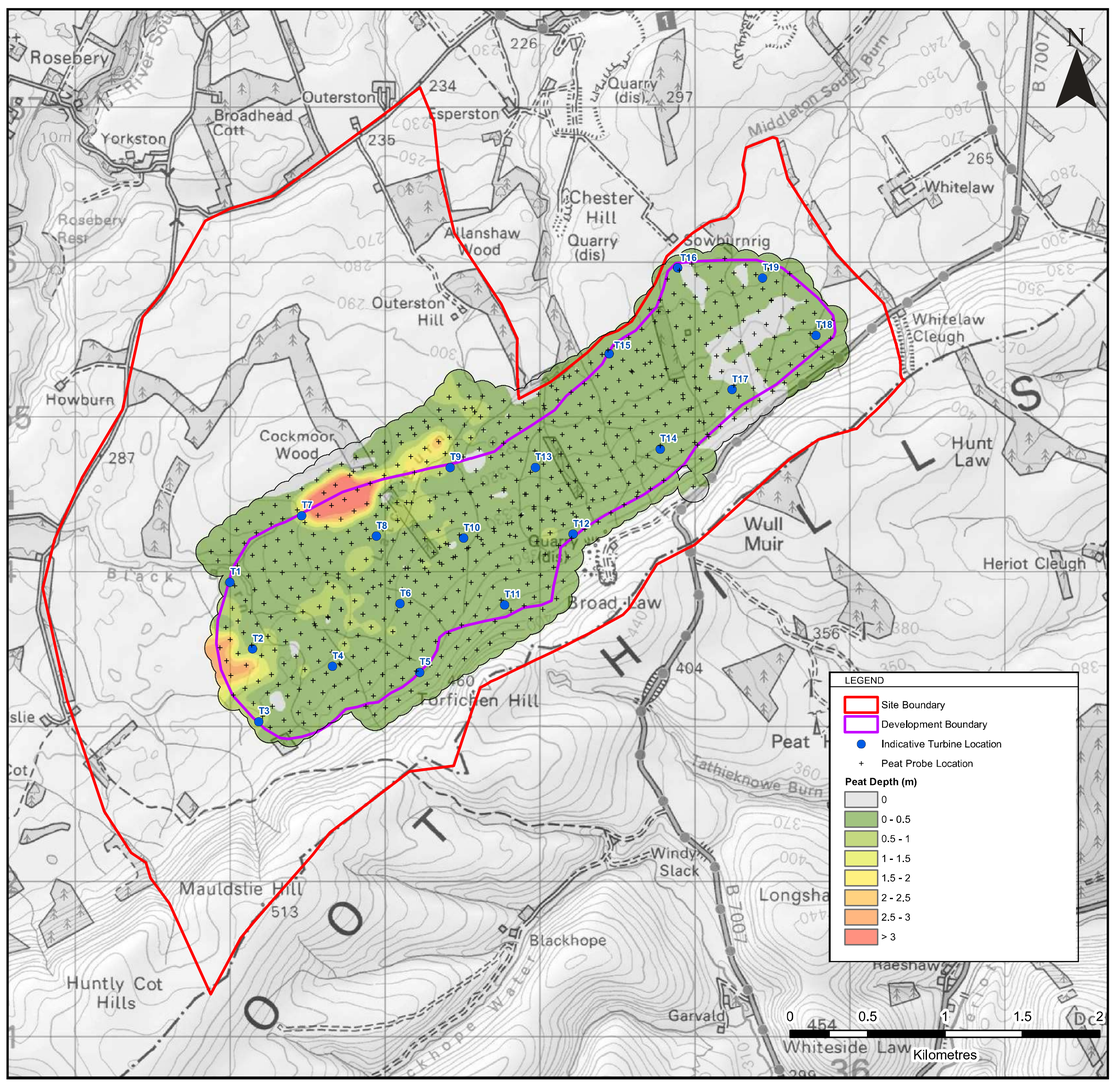
The proposed lighting strategy will be presented in the planning application.

Peat

Initial peat depth surveys and assessments have been undertaken across the site to inform the early site layout. This work has been carried out in accordance with current Scottish Government and NatureScot good practice guidance on wind farm construction.

A further phase of more detailed peat surveys is proposed following further refinement of the infrastructure layout and a Peat Management Plan will be developed over the coming months.

The approach to peat will aim to avoid impacts and, where this is not possible, will seek appropriate re-use options to minimise any impacts and facilitate habitat restoration or enhancement where possible.



TORFICHEN WIND FARM
PROPOSAL

EIA considerations

Aviation and radar

Radar systems can be susceptible to interference from wind turbines as the blade movement can cause intermittent detection by radars within their operating range. This is particularly relevant where there is a line of sight between the radar and the wind turbine development.

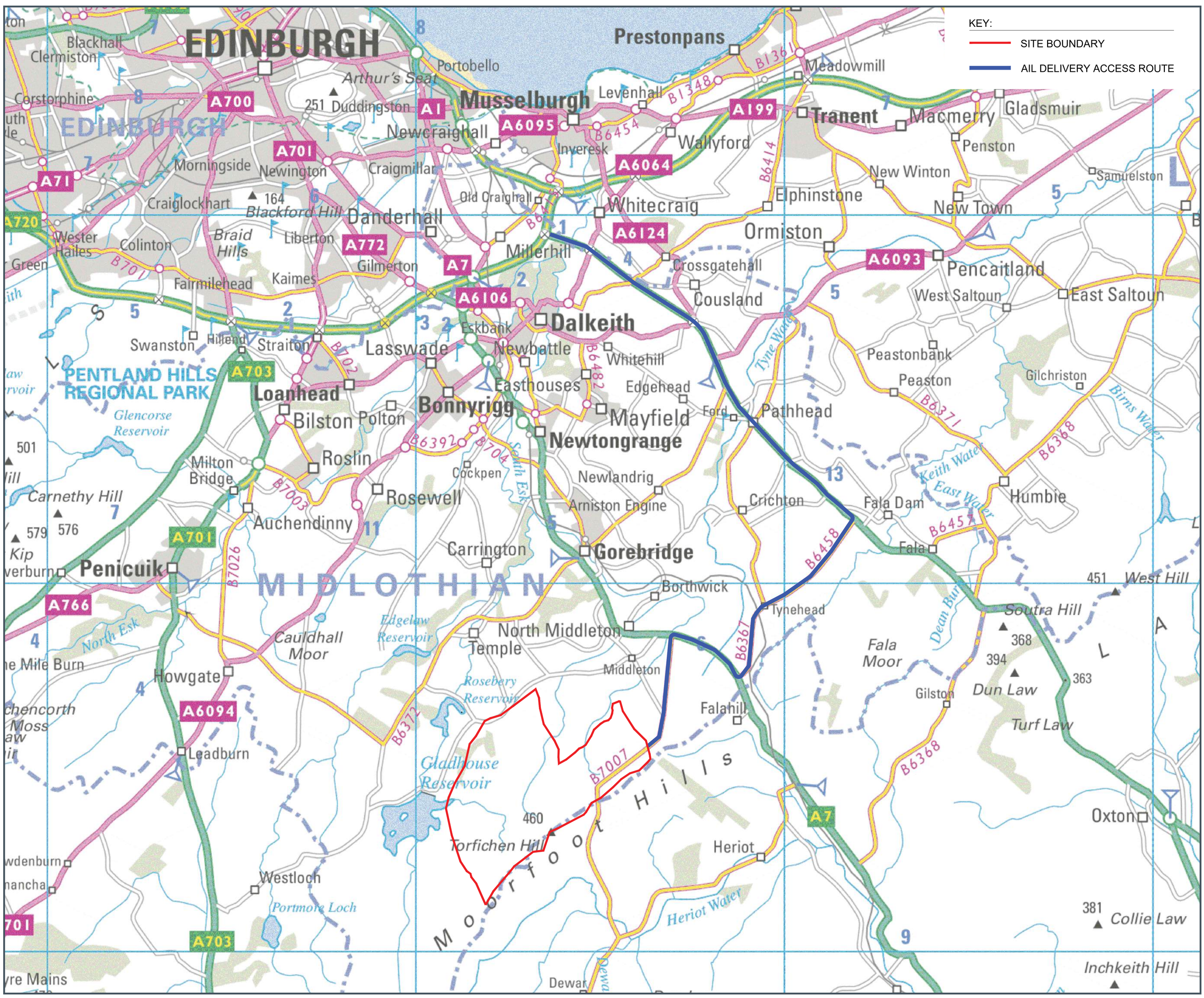
RES has undertaken an initial Aviation Assessment to identify any radar infrastructure which may be impacted by the proposed turbines. The closest infrastructure to the site is located at Edinburgh Airport and Lowther Hill, however there is no line of sight to the proposed turbines from either. Further assessment is being carried out to establish any potential impacts of the proposed turbines on the instrument flight procedures of Edinburgh Airport.

Full consultation will be undertaken with all relevant consultees including the MoD, Civil Aviation Authority and Edinburgh Airport.

Traffic and transport

An initial Access Study and Swept Paths Analysis (SPA) have been carried out by RES to assess route options and help minimise potential impacts during the delivery of wind turbine components. The Access Study established a preferred route for deliveries which is shown on the map below. The route involves entry at the King George V dock in Glasgow before transportation to the site via M8, A720, A67, B6458 and A7 and approaching the site entrance through the B7007.

We will also be assessing traffic volumes in the local area over the coming months. This work will help us to understand the impact of other project-related traffic (HGVs, site plant, 4x4s), required during the construction phase, and identify ways to minimise disruption on road users. The site access point will also need to be carefully designed with appropriate visibility splays to meet strict safety requirements.



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TORFICHEN WIND FARM
PROPOSAL

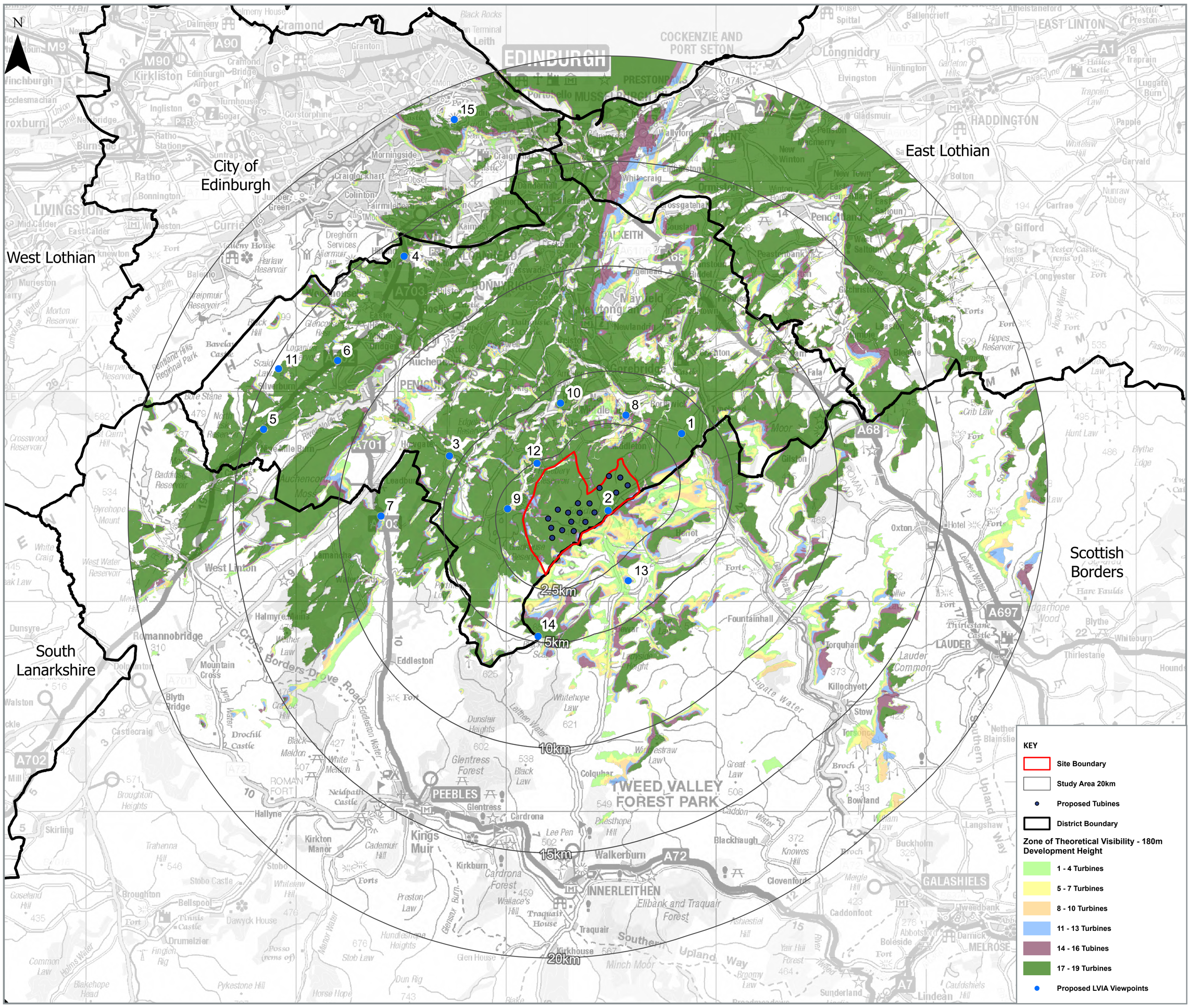
Tip height ZTV (20km) – unscreened

Bare landform visibility

The Zone of Theoretical Visibility (ZTV) map below illustrates the theoretical extent of where turbines will be visible from within the wider area, assuming 100% visibility and bare landform (without any trees, buildings or obstacles in the view) as per NatureScot guidance. This map serves as a tool to inform the Landscape and Visual Impact Assessment (LVIA). Landscape and visual considerations, including effects on residential visual amenity from the closest properties, will be carefully assessed and play a key role in the progression of the design.

Landscape and visual considerations

As upright structures, turbines cause indisputable changes to the landscape within which they sit and assessing whether this impact is 'acceptable' can be challenging. Public opinion on turbine visibility differs, with some people not liking the sight of wind farms in their community and others welcoming them. The visibility indicated on the bare landform ZTV below is likely to be much less extensive in reality. Ultimately, the final decision regarding whether a wind farm's visibility is acceptable or not rests with the determining authority who will assess applications against planning policy.

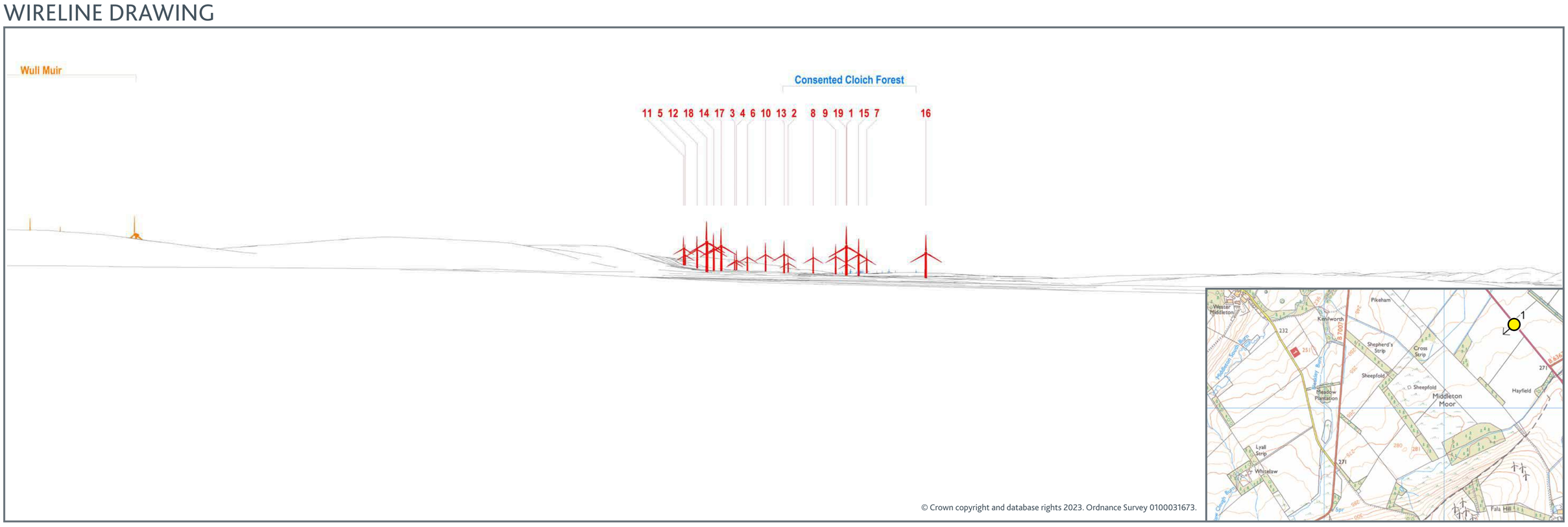


TORFICHEN WIND FARM
PROPOSAL

Viewpoint 1 – Middleton Mains

EXISTING VIEW

WIRELINE DRAWING



VIEWPOINT LOCATION

PHOTOMONTAGE OF PROPOSAL

VIEWPOINT INFORMATION

Location	338584, 657695	**Altitude**	264m AOD	**Nearest turbine**	3,539m to T18
Bearing to centre of image	236.75	**Angle of view**	90 Degrees		

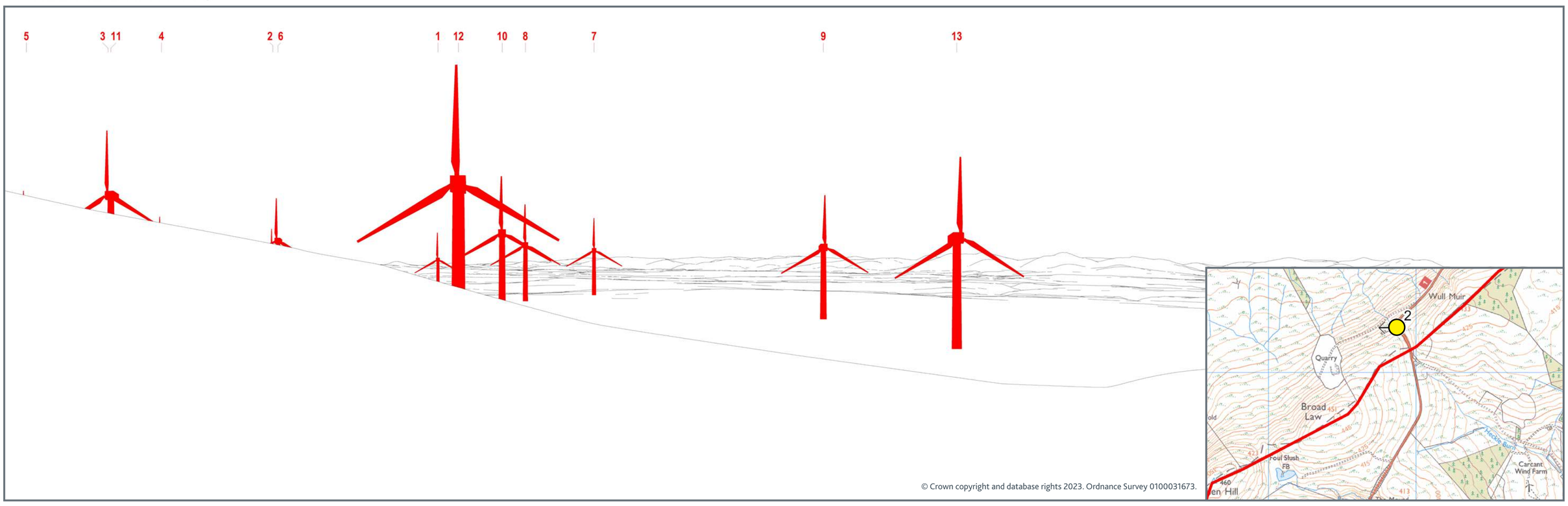
The cumulative wireline does not illustrate any micro-turbines. This is because the assessment of cumulative effects will focus on those schemes which have greater potential to result in significant cumulative effects.

TORFICHEN WIND FARM
PROPOSAL

Viewpoint 2 (LEFT) – Broad Law Corner

EXISTING VIEW

WIRELINE DRAWING



VIEWPOINT LOCATION

PHOTOMONTAGE OF PROPOSAL

VIEWPOINT INFORMATION

Location	334870, 654307	**Altitude**	397m AOD	**Nearest turbine**	491m to T14
Bearing to centre of image	282.1	**Angle of view**	90 Degrees		

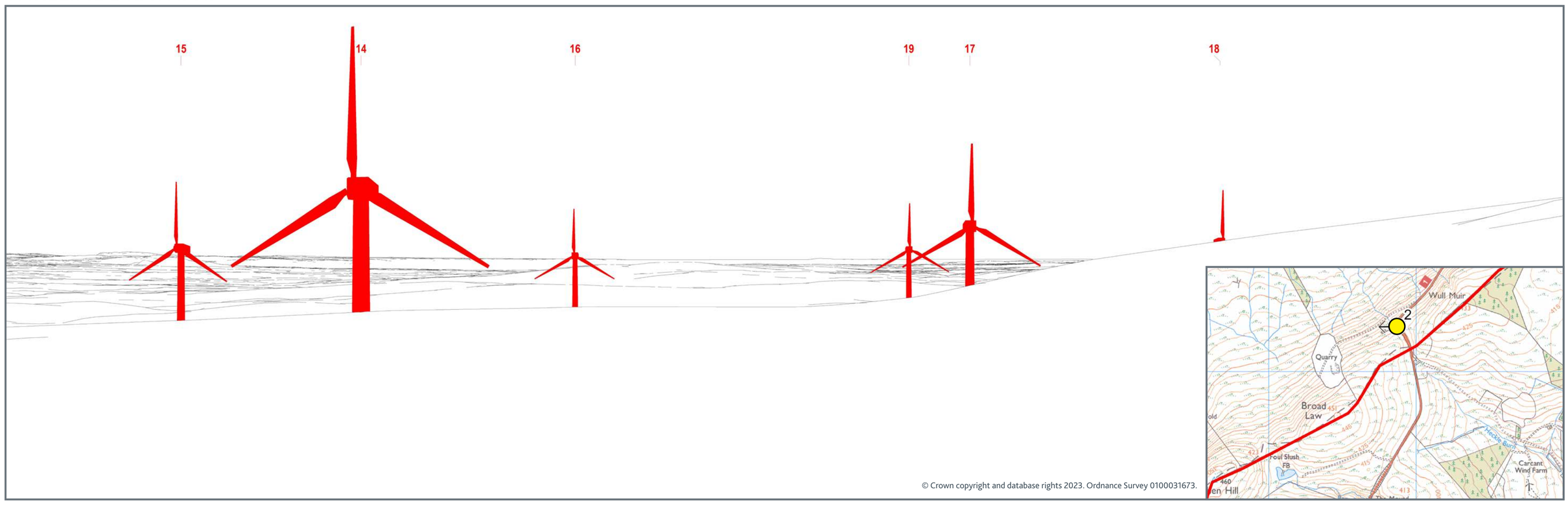
Please note that Viewpoint 2 is represented by two 90 degree angles of view (left and right) to include the entirety of the proposed development in context with the wider landscape.

TORFICHEN WIND FARM
PROPOSAL

Viewpoint 2 (RIGHT) – Broad Law Corner

EXISTING VIEW

WIRELINE DRAWING



VIEWPOINT LOCATION

PHOTOMONTAGE OF PROPOSAL

VIEWPOINT INFORMATION

Location	334870, 654307	**Altitude**	397m AOD	**Nearest turbine**	491m to T14
Bearing to centre of image	12.575	**Angle of view**	90 Degrees		

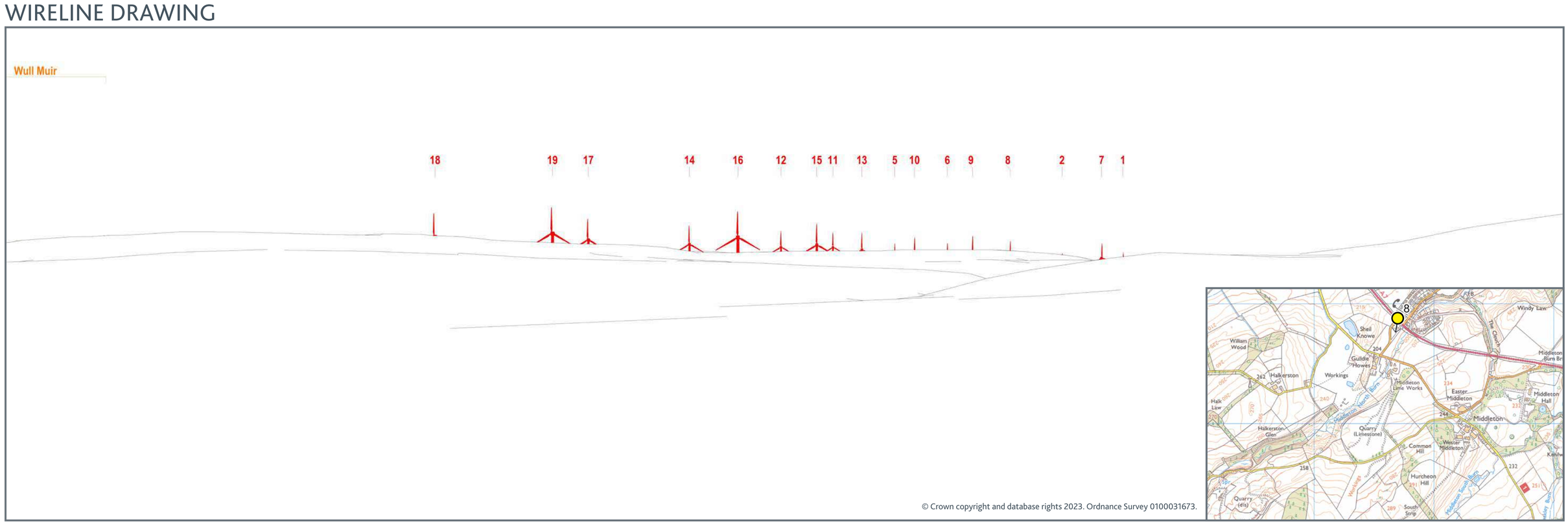
Please note that Viewpoint 2 is represented by two 90 degree angles of view (left and right) to include the entirety of the proposed development in context with the wider landscape.

TORFICHEN WIND FARM
PROPOSAL

Viewpoint 8 – North Middleton

EXISTING VIEW

WIRELINE DRAWING



VIEWPOINT LOCATION

PHOTOMONTAGE OF PROPOSAL

VIEWPOINT INFORMATION

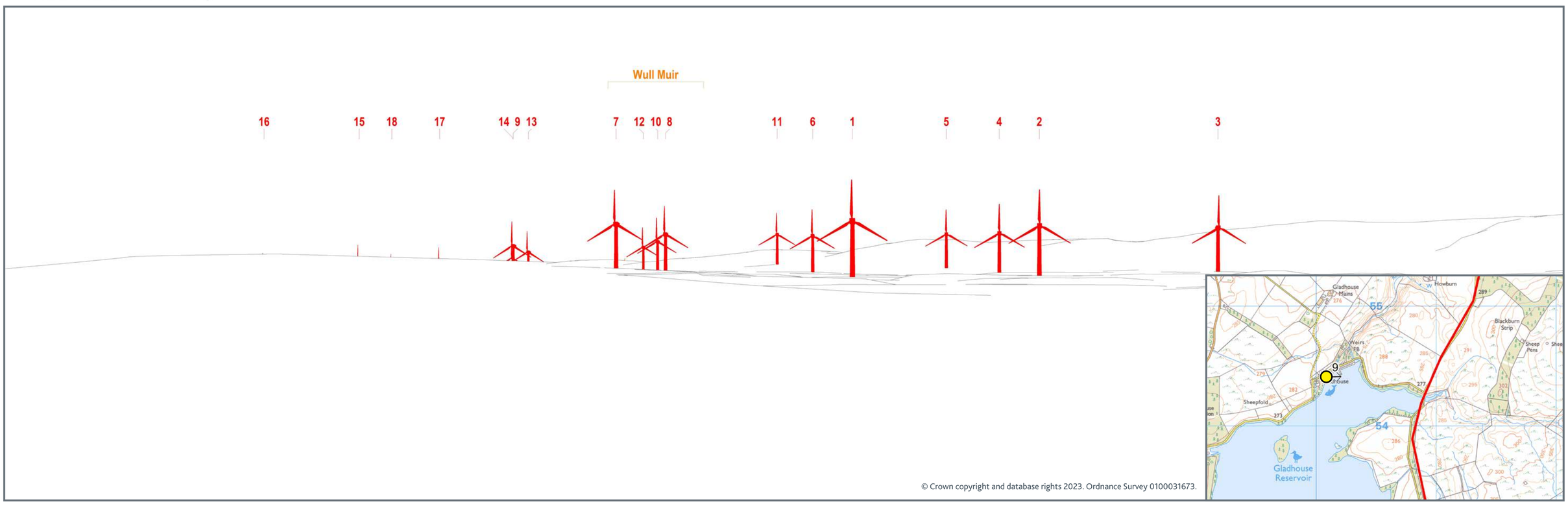
Location	335698, 658882	**Altitude**	203m AOD	**Nearest turbine**	2,993m to T19
Bearing to centre of image	198	**Angle of view**	90 Degrees		

TORFICHEN WIND FARM
PROPOSAL

Viewpoint 9 – Gladhouse Reservoir

EXISTING VIEW

WIRELINE DRAWING



VIEWPOINT LOCATION

PHOTOMONTAGE OF PROPOSAL

VIEWPOINT INFORMATION

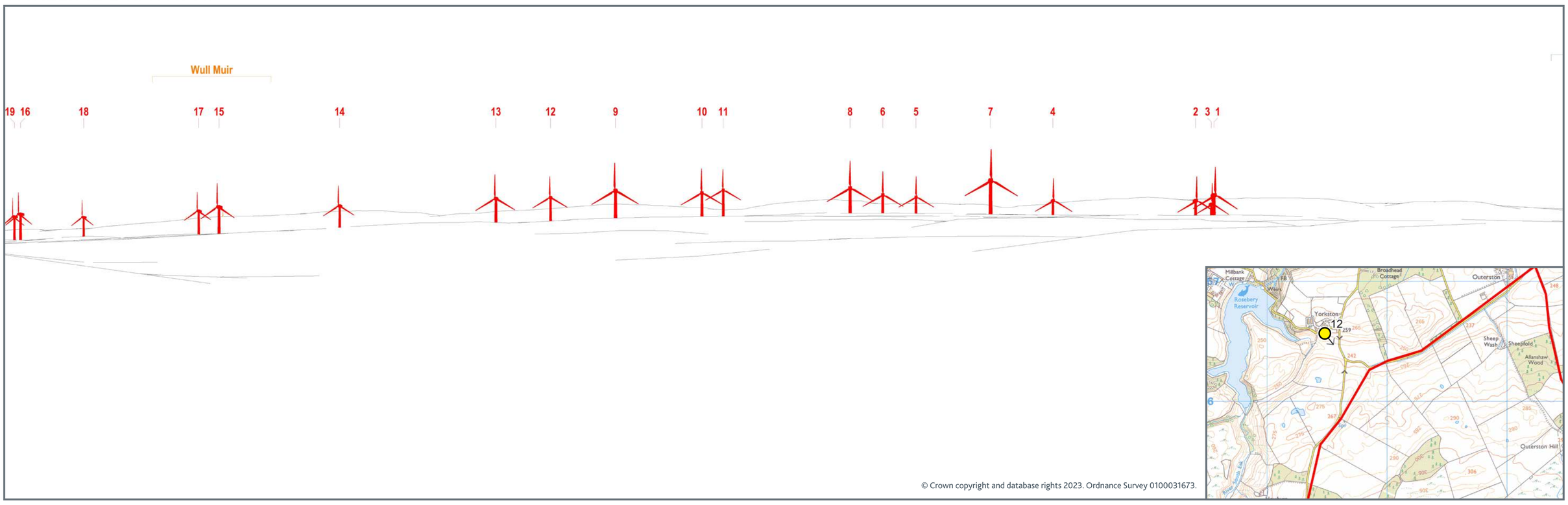
Location	330084, 654410	**Altitude**	272m AOD	**Nearest turbine**	1,970m to T1
Bearing to centre of image	99.95	**Angle of view**	90 Degrees		

TORFICHEN WIND FARM
PROPOSAL

Viewpoint 12 – Minor Road, near Yorkston Farm

EXISTING VIEW

WIRELINE DRAWING



VIEWPOINT LOCATION

PHOTOMONTAGE OF PROPOSAL

VIEWPOINT INFORMATION

Location	331479, 656567	**Altitude**	251m AOD	**Nearest turbine**	2,407m to T7
Bearing to centre of image	43.9	**Angle of view**	90 Degrees		

TORFICHEN WIND FARM
PROPOSAL

Maximising the local benefit

A power for good

RES seeks to be a power for good in communities that neighbour our projects by working openly and constructively to ensure tangible local benefits. We believe that onshore wind should provide direct, lasting benefits to local communities and there are a number of ways that this can be achieved. We take a tailored approach and work directly with the community to understand how the wind farm could support the local area and help to secure long-term economic, social and environmental benefits. This approach will help to deliver a tailored community benefits package that is aligned with the priorities of the local community and could, for instance, provide funding for projects that sit outside the parameters of a traditional application-based fund.

Working with the community

As part of this exhibition and consultation period we are seeking feedback on your ideas for local benefits and priority projects that you would like to see supported or delivered in your community from the Torfichen Wind Farm project, should it receive consent. Some examples from other communities that we've worked with include:

- Skills development opportunities
- Improvements to local footpaths and/or signage
- Funding for local groups and organisations
- Improved parking facilities at site entrance
- Apprenticeship schemes with local businesses
- Business start-up initiatives
- Improvements to village halls
- Community defibrillators
- Electric-car charging points
- Discounted electricity bills for residents and businesses within a set distance from the wind farm (find out more below).

Any feedback which may tie into the design is particularly important for us to capture at this early stage so that it can be considered in relation to the development and refinement of the scheme over the coming months.

It is important to note that voluntary community benefits are not a material planning consideration.

Local Electricity Discount Scheme (LEDS)

Our unique Local Electricity Discount Scheme (LEDS) seeks to deliver direct and tangible benefits to people living and working closest to RES' operational wind farms.

Developed in response to research and feedback from local communities around RES' operational wind farms, LEDS offers an annual discount to the electricity bills of those properties closest to a participating RES wind farm. If this is something that you are interested in as a potential part of a tailored community benefits package at Torfichen, please note this in your formal written feedback to RES and let our project team know if you would like more information.

Local Electricity Discount Scheme

Working with the local supply chain

Some of the most direct and meaningful benefits that can be delivered from a project like this are jobs and employment for local businesses and contractors, in addition to the use of local services and amenities, all of which can generate a significant amount of inward investment within the area.

RES has a strong track record for working with the local supply chain around its projects and in order to maximise the opportunities from the Torfichen Wind Farm proposal we are looking to build our knowledge of the local skills and capabilities within the area.

Kintradwell Wind Farm proposal – case study

RES signed an agreement with Brora-based firm, Edward Mackay Contractor, giving them right of first offer on the civil construction work for our proposed Kintradwell Wind Farm. Should the project receive consent, this commitment will help secure valuable local jobs and employment opportunities for the firm, which currently employs around 100 local staff.

RES partnership with Edward Mackay Contractor, Brora

Liam Mackay, Director at Edward Mackay Contractor, said *"All credit to RES for engaging with local businesses and for giving us the opportunity to get stuck into a project on our doorstep, should it proceed. The work that we are looking at is significant and could be a real boost for not only our business but the whole area".*

RES is also funding a local apprentice at Edward Mackay Contractor for up to four years. The apprenticeship is providing a young person from the local area with the opportunity to build valuable knowledge and skills on the job whilst also working towards an HNC qualification in civil engineering.

Inward investment

Expenditure in the local economy during the development, construction and operation of wind farms varies from project to project due to various factors including project size, project duration, and the availability of local suppliers. In recent years, RES has seen typical spend with local stakeholders, suppliers and service providers in the region of £279,000 per wind turbine during the development, construction and first year of project operation. In some cases, it has been possible to significantly improve on this number.

The Torfichen Wind Farm proposal is predicted to deliver approximately £5.3 million of inward investment to the area in the form of jobs, employment, and use of local services during the development, construction and first year of operation. In addition, approximately £1.1million in business rates[1] will be payable each year to Midlothian Council during operation (based on the 114MW scoping layout).

Some of the services and materials likely to be required are:

- Civil engineering
- Electrical works and cabling
- Plant hire and crane hire
- Environmental surveyors
- Concrete and aggregates
- Groundworks
- Steel fixing
- Labourers
- Fencers
- Accommodation

If you're a local business (or know a local business) interested in getting involved in onshore wind please speak to our project team.

[1] The business rates figure of £1.1million each year has been calculated from the most recent Scottish business rates (2017 valuation) and predicted performance of the wind farm.

Appendix 6: Comments form for consultation feedback – March 2023

Torfichen Wind Farm proposal

Comments Form

Your feedback counts

RES believes in meaningful and productive consultation, and we aim to engage early with the local community and key stakeholders in order to facilitate constructive consultation. This helps to identify issues and concerns, as well as benefits and opportunities, which we can then consider when developing and refining the design and delivery of the proposal.

We welcome feedback from the local community on our Torfichen Wind Farm proposal. Please provide any feedback that you may have in writing by filling out this comments form. **The closing date for comments to RES at this stage of the design is Tuesday 4 April 2023.** Comments will still be accepted after this date but may not be considered in relation to the design development.

Please note that any comments submitted to RES are not representations to the determining authority (the Scottish Government's Energy Consents Unit) and that there will be an opportunity to submit representations to the determining authority should a planning application for the proposal be submitted.

1. Public exhibition

1.1 How did you find out about this public exhibition?

- ☐ Newsletter through the door
- ☐ Advert in local newspaper
- ☐ Project website (www.torfichen-windfarm.co.uk)
- ☐ Word of mouth
- Other (please specify): ☐

1.2 Which exhibition event did you attend?

- ☐ Middleton Village Community Hall
- ☐ Macfie Hall
- ☐ None – viewed exhibition information on project website only

1.3 What part of the public exhibition did you find most useful?

- ☐ Exhibition information boards
- ☐ Visualisations (photomontages)
- ☐ Ability to ask RES questions
- Other (please specify): ☐

1.4 Before visiting the exhibition how would you describe your knowledge of the Torfichen Wind Farm proposal?

- ☐ Knew a lot
- ☐ Knew quite a lot
- ☐ Knew a little
- ☐ Knew very little
- ☐ Knew nothing at all

1.5 Having visited the exhibition, to what extent do you feel you have increased your knowledge of the Torfichen Wind Farm proposal?

- ☐ A lot
- ☐ Quite a lot
- ☐ A little
- ☐ Very little
- ☐ None at all

1.6 Do you have any suggestions for ways in which we could have improved our exhibition?

2. Climate change, energy security and renewables

In response to the climate change emergency, the Scottish Government has set a legally-binding target for Scotland to reach net zero carbon emissions by 2045.

2.1 Do you agree that generating electricity from renewable sources, and reducing our reliance on fossil fuels, can help towards tackling the issue of climate change?

- ☐ I strongly agree
- ☐ I agree
- ☐ I don't know
- ☐ I disagree
- ☐ I strongly disagree

2.2 Do you agree that we need to develop onshore wind farms to support greater energy independence and security of supply for the UK?

- ☐ I strongly agree
- ☐ I agree
- ☐ I don't know
- ☐ I disagree
- ☐ I strongly disagree

2.3 Do you agree that we need to develop onshore wind farms to help reduce energy bills?

- ☐ I strongly agree
- ☐ I agree
- ☐ I don't know
- ☐ I disagree
- ☐ I strongly disagree

2.4 Do you have any further comments regarding the above?

3. Torfichen Wind Farm proposal - design and layout

Feedback at this early stage has the potential to change and influence the design and improve the overall quality of the planning application from a community perspective.

In addition to confirming any current support, opposition, or neutrality to the proposal at this stage please consider submitting any constructive feedback that you may have regarding the design and delivery of the project as this information has the potential to change and influence the design in a way that is beneficial to the community, should it go ahead.

3.1 What's your attitude to the proposal for a wind farm at Torfichen?

- ☐ I am supportive
- ☐ I am neutral
- ☐ I am opposed
- ☐ I don't like onshore wind farms in general

3.2 If the wind farm went ahead, as currently designed, what do you think about the turbine and infrastructure layout?

- ☐ I am happy with the proposed layout
- ☐ I am neutral towards the proposed layout
- ☐ I have concerns about the proposed layout (if so, please note these overleaf)
- ☐ I don't like onshore wind farms in general

3.3 **Do you have any specific comments regarding the proposed design or delivery of the project that you would like us to take into consideration** (for example - infrastructure locations including substation, continued use of construction compound(s) for battery storage, proposed tracks, turbine delivery route)**?**

4. Local benefit

In addition to the £5.3 million of inward investment that the scheme is predicted to deliver to the area in the form of jobs, employment, and use of local services, we are proposing to deliver additional benefit through a tailored community benefits package that is aligned with the priorities of the local community.

As such, we are asking for your feedback on the ideas, local priorities, and community projects that you would like to see supported (should Torfichen Wind Farm be consented) so that we can deliver a tailored community benefits package that will help to secure long-term economic, social and environmental benefits for the local area.

We are also interested in your views on RES' unique Local Electricity Discount Scheme (LEDS) which forms part of our tailored community benefits package for some of our other projects and offers an annual discount to the electricity bills of those properties closest to a participating RES wind farm.

4.1 **Within which Community Council area do you reside?**

4.2 **Community benefit tends to focus on those Community Council areas closest to the proposal which host the site and/or infrastructure. What are your views on this approach for Torfichen?**

4.3 **What ideas, local priorities, or community projects would you like to see benefitting from Torfichen Wind Farm, should it go ahead** (some examples from other communities we've worked with are provided on the 'Maximising the local benefit' exhibition board)**?**

4.4 **RES has developed its unique Local Electricity Discount Scheme (LEDS) which offers an annual discount to the electricity bills of those properties closest to a participating RES wind farm. Is this something you think should form part of the tailored community benefits package for Torfichen Wind Farm?**

- ☐ Yes
- ☐ No
- ☐ Maybe

5. Your details

Please provide your name and contact details below in order to authenticate this comments form. Providing this information gives context to your feedback, facilitates a better understanding of community views and priorities, and enables us to respond to any questions raised. However, if you are not comfortable providing us with your full contact details **please include your postcode as a minimum.**

Your contact details will be treated by RES with the strictest of confidence, in line with the General Data Protection Regulations (GDPR) 2018. We may at times share your contact details, in confidence, with third parties who we employ to help process your comments or update you on the project and by providing your details below you consent to this. You may write to RES at any time to ask that your contact details be removed from our records and from any third parties we work with.

Name	
Address	
Postcode	
Email	

Any written consultation feedback submitted to RES will be considered by the project team over the coming months as the design is developed and refined, in addition to feedback from key consultees and the findings from the technical and environmental studies that we are undertaking.

We will hold a second set of public exhibition events closer to submission of the planning application (which is currently scheduled around late summer 2023) to update people on the proposal and present the final design. People will have the opportunity to speak to the project team again about the project and provide written feedback to RES. These events will also refer to the written feedback received from the March 2023 exhibitions and consultation period and explain any changes that have been made to the design in response to the feedback.

If you would like to be kept up to date with the project, please tick this box: ☐

Hard copy comments forms can be handed in at the exhibitions or posted back to RES at **Torfichen Wind Farm - Project Team**, Renewable Energy Systems Limited, 3rd Floor, STV, Pacific Quay, Glasgow G51 1PQ, or scanned and emailed to sam.mayes@res-group.com.

PLEASE NOTE – there is more room overleaf if you require more space for feedback.

Please use this page if you need space for any further feedback:

Please use this page if you need space for any further feedback:

Appendix 7: Newspaper adverts- August 2023

Midlothian Advertiser
URN: SEM6040431 Date: 2023-08-24 Section: ROP
Advertiser: Res Ltd Page: 7/32

NEWS

The network of Top Up Taps is helping to reduce waste and save people money. (Scottish Water)

Top up to stay healthy

Mark Dowie
mark.dowie@nationalworld.com

A network of hi-tech public water taps has helped Scotland to save the equivalent of five million plastic bottles.

The Top Up Taps have been installed in locations across the country, including the Midlothian area by Scottish Water, which recently installed 100th tap in the shadow of the Kelpies in Falkirk.

Since the start of the project in 2018, the aim was to put the distinctive blue taps in key locations all over the country – and they now stretch from Arran to Arbroath and from Shetland to Stranraer.

The Top Up Taps have been placed in convenient locations including parks, promenades, busy shopping streets, railway stations, tourist spots – and even outside the Scottish Parliament.

And the initiative has inspired a 19% increase in people carrying a refillable bottle, helping them to stay well-hydrated, which is essential to health and well-being.

Kes Juskowiak, Scottish Water's general manager of customer water services, said: "It's brilliant that so many locals and visitors alike are using our Top Up Taps in such numbers. But nothing would make us happier than seeing them used even more.

"There couldn't be many better reasons for carrying a refillable water bottle and topping up regularly – it's good for your health, good for your pocket and good for the planet."

The scientific and medical evidence is clear that drinking plenty of water is good for minds and bodies, and Scottish Water wants everyone to have easy access to it whenever and wherever they need it.

Good hydration also helps with physical performance – whether taking gentle exercise or training like an elite athlete, the body needs water to help regulate temperature and keep blood flowing to muscles.

The top up taps area also helping to save the costs of buying bottled water and prevent single-use plastic from ending up in landfill, littering streets or in oceans.

Scottish Water has also created a dedicated website featuring an interactive map where customers can find the Top Up Taps closest to them, or where to fill up their water bottles during day trips across the country.

This can be found at www.YourWaterYourLife.co.uk/TapMap.

7000 abused since 2021

Scotland's shopworker protection law has been used 7056 times in less than two years to report retail-specific cases of abuse or assault of staff and retailers.

The Protection of Workers (Retail and Age-restricted Goods and Services) (Scotland) Act, creates an offence of assaulting, threatening or abusing retail workers.

It also provides for a statutory aggravation of that offence where the retail worker is enforcing a statutory age restriction.

It came into force in August 2021.

The latest figures up to July 2023, provided by Police Scotland, included totals for serious assaults (37), common assaults (3066) and threats and abuse on retail workers (3953).

The Scottish Grocers' Federation has now asked Police Scotland, the Scottish Government and the Crown Office and Procurator Fiscal Service to ensure that the figures are reported frequently and to also provide data on the referrals and convictions in relation to the legislation.

Southern Reporter
URN: IBC6028007 Date: 2023-08-31 Section: ROP
Advertiser: Renewable Energy Systems Ltd (N.I) Page: 5/48

NEWS

Victoria Park funfair. (Image: Jim Barton)

No fun at the fair

by Paul Kelly
Reporter
paul.kelly1@nationalworld.com

Security is set to be beefed up at a funfair in Peebles after a man was assaulted and robbed by a group of youths last year.

The man was taken to hospital after teenagers attacked him close to a funfair at Victoria Park in June, 2022.

As a result the operators are being encouraged to take on additional security staff and police are to take "extra interest" when the funfair is again staged between Thursday, September 14 and Saturday, September 16.

Members of Peebles Common Good Fund Sub-Committee gave their blessing for the popular event to go ahead next month, but with another proviso that earlier closing times are adopted.

Meeting chair Councillor Robin Tatler said: "You will remember that last year there were some unfortunate incidents but subsequent to that I know that they have had some extra security staff on and the police have taken a much greater interest and in addition the operators have looked at early closing of nine o'clock."

Councillor Julie Pirone said: "They did have an incident last year and they maybe have to look at the numbers they have got on their security being increased slightly.

"I know last year they had an issue about being able to get the security because of other events and things that were happening.

"The police will certainly be made aware by the council and they will take an interest in it because they know the views of the local community about the funfair and they should look at the early closing again, so it doesn't conflict with pubs closing so that it's a bit earlier and people can move away from the funfair and police can turn their attention to something else in the town.

"If those things are guaranteed by the operator then I don't see any problem because it does give people an extra activity and they all enjoy it."

Councillor Marshall Douglas also supported the funfair coming with extra security in place and pointed out that the problem last year was due to "factors exter-

Charity ride this weekend

This year's Royal Burgh Ex Standard Bearers Charity Ride will take place on Saturday, September 2, raising money for the Harris Trust and My Name'5 Doddie Foundation.

The ride will start from Station Road, Selkirk, at 10am, majestically going over the hills on the South Common of Selkirk at Lindean Mast, stopping at Lilliesleaf for an hour before heading down the side of the A7 and Hartwoodburn and back to Selkirk for 3pm. Approximately 15 miles.

If you would like to take part please pick up an application and sponsorship form from 48 High Street Selkirk or register through Sotttomlinson@aol.com. Minimum sponsorship of £25 as previous years , with a Day out for Two to Kelso Races largest sponsorship raised courtesy of Coltherd Racing .

Anyone wanting a digital file of the application form to print themselves please email Scott Tomlinson at Sotttomlinson@aol.com. Please note this will not be a ride for novices, also no leading reins.

Appendix 8: Update letter to Key Stakeholders with exhibition details - August 2023

Renewable Energy Systems Limited
Third Floor, STV, Pacific Quay
Glasgow G51 1PQ, United Kingdom
+44 (0)1414 045 500 | info@res-group.com

Joanna McGrath
Chair to Moorfoot Community Council
Sent by email to: _____ _____

24 August 2023

Dear Ms. McGrath,

RE: Torfichen Wind Farm proposal – public exhibitions

Further to my previous letter dated 20 February, I am writing to confirm details of two public exhibition events that RES will be holding in September for the Torfichen Wind Farm proposal.

Public exhibitions

We are holding a final suite of public exhibitions in early September 2023 in order to present the updated design. These events will provide people with an opportunity to review the updated design, speak with the project team and ask questions.

Wednesday 6 September 2023

Middleton Village Community Hall
54 Borthwick Castle Terrace
North Middleton EH23 4QU

3pm to 8pm

Thursday 7 September 2023

Macfie Hall
Heriot EH38 5YE

3pm to 8pm

A range of information will be available, including photomontages and visualisation software to help give an impression of what the site could look like from different viewpoints in the area, and RES staff will be on hand to discuss the proposal and answer any questions that people may have. These exhibition events will also refer to the written feedback received from the March 2023 exhibitions and consultation period and explain any changes made to the design in response to this feedback.

Raising awareness

We have placed adverts in the Midlothian Advertiser and Southern Reporter in order to help raise awareness of the events. A digital poster version of the exhibition advert accompanies this letter in case you wish to post it on any of your community social media sites or websites. We can also arrange to send laminated versions of this advert to you for use as posters on local noticeboards should this be helpful; please let us know.

In addition, a project newsletter has been mailed out this week to over 1,100 properties in the local area (and to anyone who has got in touch with us and asked to be kept up to date with the proposal). A digital copy of the newsletter accompanies this letter in case helpful.

Providing feedback on the proposal

Anyone wishing to provide feedback and ideas for local benefits to RES can do so in writing by filling out a 'comments form' at the exhibition events or online at www.torfichen-windfarm.co.uk from Wednesday 6 September when copies of the exhibition information will be available on the project website for people to view. **The closing date for comments is Thursday 21 September 2023.**

Comments submitted to RES during these exhibitions or subsequent consultation period are not representations to the determining authority (The Scottish Government's Energy Consents Unit). There will be an opportunity to submit representations to the determining authority once a planning application has been submitted.

Next steps

Based on our current programme we are looking to submit our planning application later in autumn 2023. Upon submission, the planning application will be formally advertised. We will also write out to key stakeholders and issue another edition of our project newsletter to local households and anyone else who has asked us to keep them up to date.

Yours sincerely

Danny McLean
Development Project Manager
E danny.mclean@res-group.com
M +447769 388725

Appendix 9: Newsletter 2 – August 2023

TORFICHEN WIND FARM PROPOSAL

NEWSLETTER – AUGUST 2023

Project update

RES is holding a final suite of public exhibitions to present the updated design for its 18-turbine Torfichen Wind Farm proposal and energy storage facility located near Torfichen Hill, approximately 6km south of Gorebridge.

Public exhibitions

Since the March 2023 public exhibitions and consultation RES has been reviewing the comments received, together with key consultee feedback and further site survey work, and progressing the design.

The updated 18-turbine scheme will be presented at our final suite of public exhibitions in September 2023. These events will provide people with an opportunity to review the updated design, discuss the proposal, and ask the project team any questions.

A range of information will be available at the public exhibitions, including photomontages and visualisation software to help give an impression of what the site could look like from different viewpoints in the area.

These events will also refer to the written feedback received from the March 2023 exhibitions and consultation period and explain any changes made to the design in response to this feedback.

Wednesday 6 September 2023
3pm to 8pm

Middleton Village Community Hall
54 Borthwick Castle Terrace
North Middleton EH23 4QU

Thursday 7 September 2023
3pm to 8pm

Macfie Hall
Heriot EH38 5YE

Anyone wishing to provide feedback and ideas for local benefits to RES can do this by filling out a 'comments form' at the exhibition events or online at www.torfichen-windfarm.co.uk from Wednesday 6 September when copies of the exhibition information will be available on the project website for people to view.

The closing date for comments on the updated design is Thursday 21 September 2023.

Comments submitted to RES during these exhibitions or subsequent consultation period are not representations to the determining authority (The Scottish Government's Energy Consents Unit). There will be an opportunity to submit representations to the determining authority once the planning application has been submitted.

Based on our current programme we are looking to submit our planning application later in Autumn 2023.

Benefits from the wind farm

Community benefit package

RES is proposing a tailored package of benefits for the community from the Torfichen Wind Farm that would be worth £5,000 per megawatt (or equivalent) of installed capacity per annum.

This package could include RES' unique Local Electricity Discount Scheme (LEDS), something that has received significant interest from the community. LEDS seeks to deliver direct and tangible benefits to people living and working closest to a participating wind farm through an annual discount to their electricity bills.

We continue to welcome ideas from the community on how the community benefits package could be delivered. The area of benefit will be determined in consultation with locally elected representatives should the project receive consent.

Other benefits

We are in a climate emergency, cost of living crisis, and face issues with security of energy supply. Onshore wind can address all of these.

Onshore wind alongside other renewable technologies can generate the cheapest form of electricity generation, and isn't subject to sudden fossil fuel price fluctuations or the uncertainties of global markets. It is quick to build (12-24 months) and the carbon payback time is usually within 1-3 years.

Torfichen Wind Farm would be capable of generating enough clean, low-cost electricity for around 117,000 homes[1] and reducing carbon emissions by approximately 110,136 tonnes[2] each year.

The project would also make an important contribution to Scotland's new target of installing 20GW of onshore wind across Scotland by 2030 to help towards meeting our Net Zero carbon emissions by 2045.

Inward investment

The project is predicted to deliver approximately £5 million[3] of inward investment into the local area in the form of jobs, employment, and use of local services during construction and the first year of operation. Torfichen Wind Farm would also deliver more than £1.1 million in business rates[4] annually to Midlothian Council.

About RES

RES, a privately-owned company with a proud history in Scotland, is the world's largest independent renewable energy company - with operations across Europe, the Americas and Asia-Pacific.

From our Glasgow office we have been developing, constructing and operating wind farms in Scotland since 1993. We have developed and/or built 21 wind farms in Scotland, with a total generating capacity of 597MW.

At the forefront of the industry for over 40 years, RES has delivered more than 23GW of renewable energy projects worldwide. For further information visit www.res-group.com.

Contact us

Danny McLean
Development Project Manager

danny.mclean@res-group.com
07769 388725

RES, Third Floor
STV, Pacific Quay, Glasgow, G51 1PQ

For more information visit www.torfichen-windfarm.co.uk. This newsletter has been designed to keep you up to date with the Torfichen Wind Farm proposal. If you no longer wish to receive this newsletter, please contact us to let us know. If you require information in Braille, large text or audio, please get in touch with us.

[1] The 117,000 homes equivalent figure has been calculated by taking the predicted annual electricity generation of the site (based on RES assessments Torfichen Wind Farm has a predicted capacity factor of 43.5% - based on a 6MW [megawatt] candidate turbine) and dividing this by the annual average electricity figures from the Department of Business, Energy and Industrial Strategy (BEIS) showing that the annual UK average domestic household consumption is 3,509 kWh (December 2022). Final wind farm capacity will vary depending on the outcome of planning permission and the turbine type selected.

[2] The carbon emissions reduction figure of 110,136 was calculated using the Scottish Government's Renewable Electricity Output Calculator (https://www.gov.scot/publications/renewable-and-conversion-calculators/)

[3] £5 million inward investment figure is based on typical spend that RES has seen spent on its projects with local stakeholders, suppliers and service providers in the region of £279,000 per wind turbine during the development, construction and first year of operation.

[4] The business rates figure of £1.1million each year has been calculated from the most recent non-domestic rates revaluation in Scotland (2023 Revaluation) and predicted performance of the wind farm.

Appendix 10: Exhibition information boards (x19) - September 2023

TORFICHEN WIND FARM
PROPOSAL - UPDATED DESIGN

Welcome

Overview

Thank you for taking the time to attend this exhibition. The event presents the updated layout design for our wind farm and energy storage proposal, Torfichen Wind Farm, located approximately 6km south of Gorebridge, in Midlothian.

Since the project first became public in January 2023, we have undertaken an extensive amount of technical and environmental site survey work. We have also considered feedback from a wide range of key consultees on the proposal including local Community Councils and Midlothian Council.

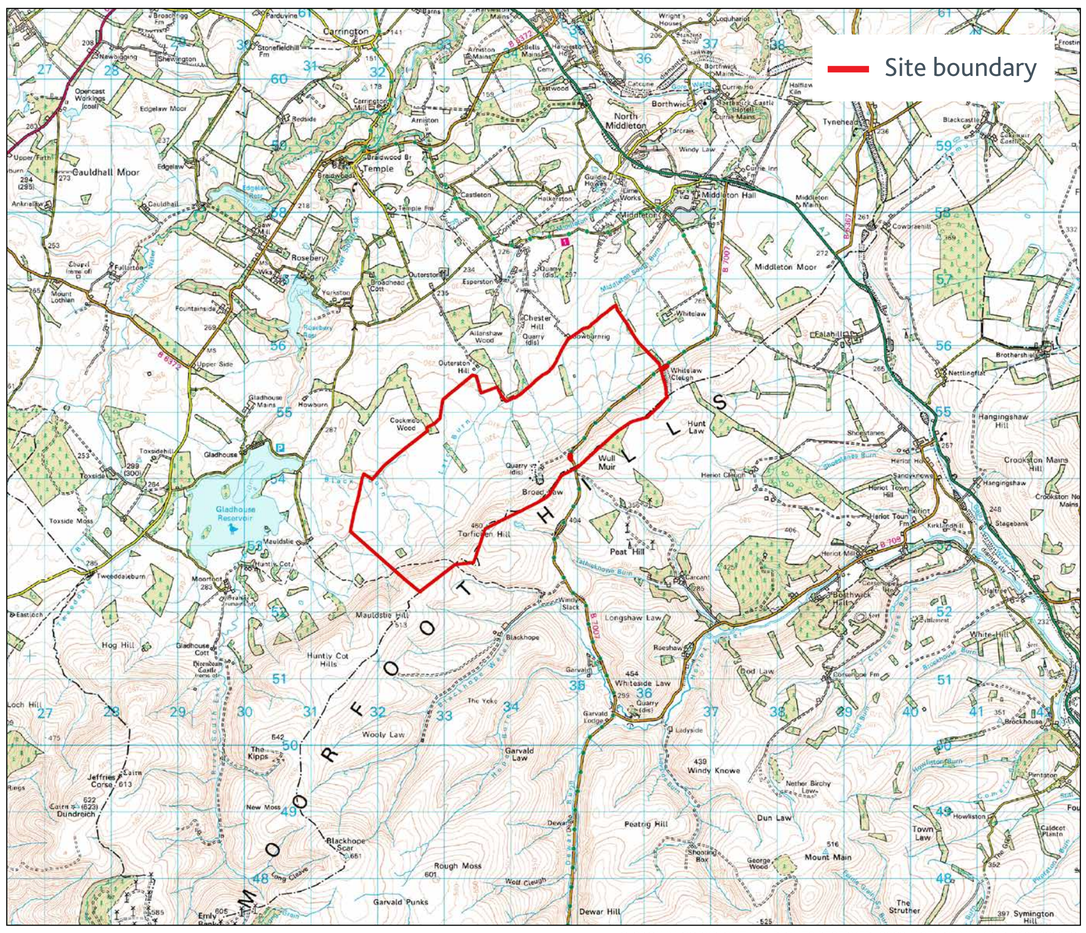
Public exhibition events were held in the local area in March 2023 to engage with people on the proposal and seek feedback on our early scoping design. Those events, held in North Middleton and Heriot, together with the subsequent consultation period, generated written feedback from the public for the project team to consider including comments on the following themes:

- Landscape and visual (turbine height, site location)
- Energy (onshore wind, other technologies)
- Exhibition (format, staff, communications)
- Acoustics (predicted sound levels)
- Construction (route to site, impact on private water supplies)
- Community benefit

We are grateful to everyone who provided feedback.

We are now at a stage where most of the site survey work is complete, the updated 18 wind turbine layout design is being refined and finalised, and the Environmental Impact Assessment (an extensive document which will accompany the planning application) is underway.

Site location map



© CROWN COPYRIGHT, ALL RIGHTS RESERVED. 2023 LICENCE NUMBER 0100031673.

About this exhibition

The purpose of this final suite of public exhibitions is to provide you with an opportunity to review the updated 18 wind turbine layout design, speak with the project team and ask any questions that you may have.

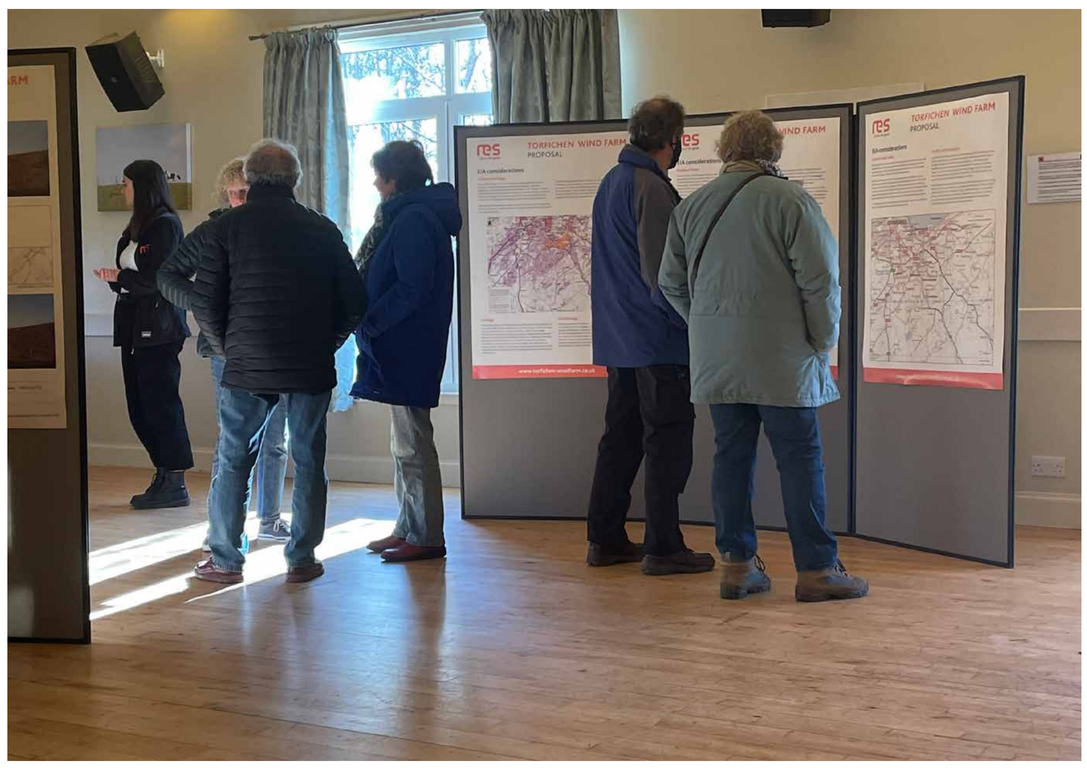
A wide range of project information is available at this exhibition including:

- **Infrastructure design updates** (turbines, tracks, battery storage, on-site substation, grid connection)
- **Environmental Impact Assessment considerations** (such as acoustics, cultural heritage, ecology and ornithology, private water supplies, peat, shadow flicker)
- **Visualisations** (photomontages and wirelines as well as visualisation software) to help give an impression of what the site could look like from different viewpoints within the area

This exhibition forms part of our pre-application consultation and, whilst the layout design is almost finalised, this event provides you with an opportunity to submit written feedback again to RES, if you wish, on the updated layout design.

Once the proposal is submitted into planning there will be an opportunity to submit formal comments on the proposal to the determining authority. More information about how to do this is provided on the 'Next steps' board.

As part of these exhibitions, we have produced a 'Report on feedback' which summarises the feedback received from the March 2023 exhibitions and subsequent consultation period and highlights any changes that have been made to the layout design in response to this feedback. Copies of this Report are available as part of the materials presented at this exhibition.



www.torfichen-windfarm.co.uk

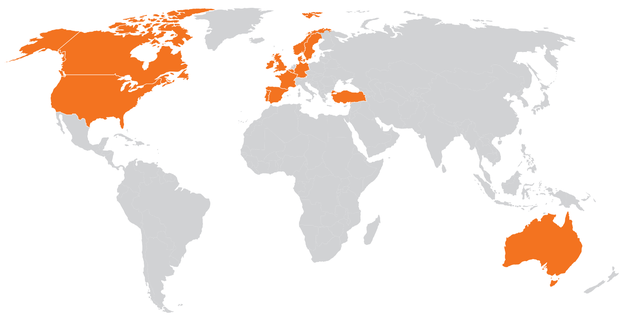
TORFICHEN WIND FARM
PROPOSAL - UPDATED DESIGN

About RES

The world's largest independent renewable energy company

RES has been at the forefront of wind energy development for over 40 years and delivered more than 23GW of renewable energy projects worldwide. We employ more than 2,500 passionate people across the globe and are active in 14 countries, working across onshore and offshore wind, solar, energy storage, green hydrogen, transmission and distribution.

Sustainability lies at the core of our business activity and values, and we have been leading efforts to create a future where everyone has access to affordable zero carbon energy. The 23GW of green energy that we have developed and/or constructed offsets more than 21 million tonnes of carbon every year.



23GW PROJECT PORTFOLIO

12GW OPERATIONAL ASSETS SUPPORTED

40+ YEARS OF EXPERIENCE

2500+ EMPLOYEES

ACTIVITIES

DEVELOP · CONSTRUCT · OPERATE

TECHNOLOGIES

WIND · SOLAR · STORAGE · TRANSMISSION & DISTRIBUTION · GREEN HYDROGEN

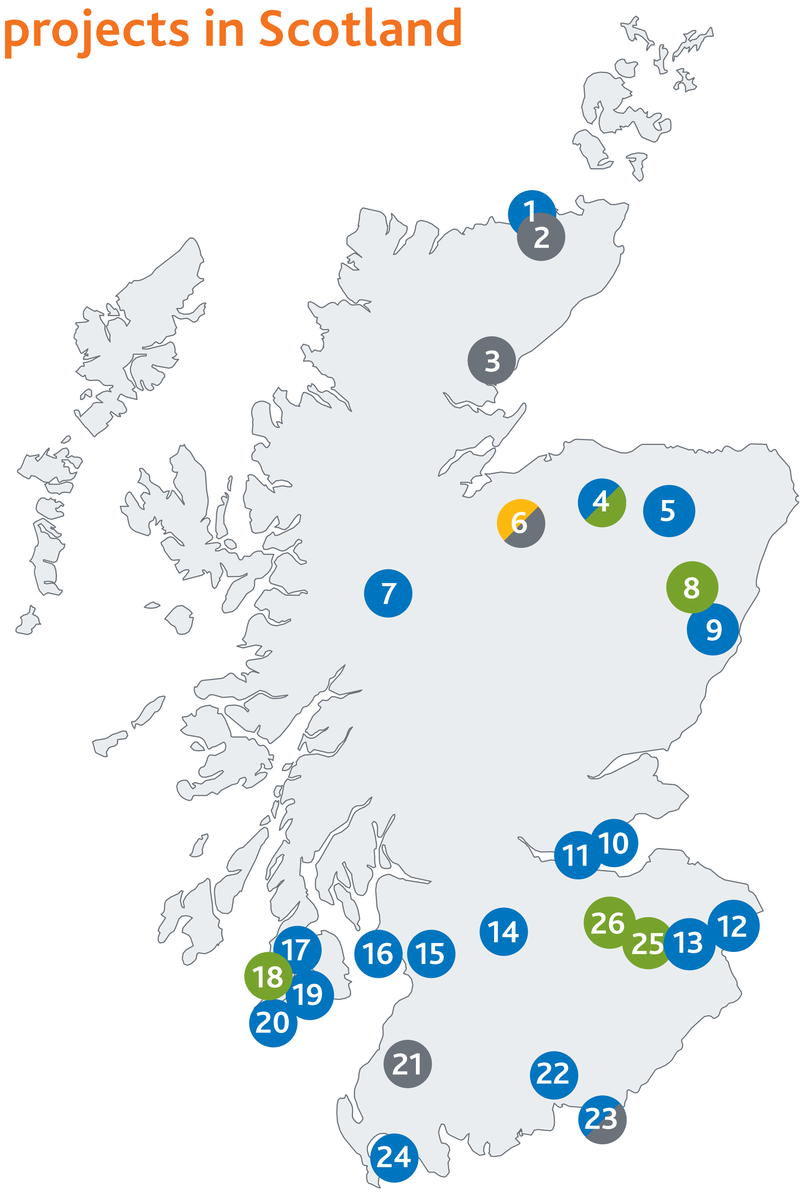
RES in Scotland

RES is a privately-owned company with a proud history in Scotland. We grew out of Sir Robert McAlpine, a British family-owned firm with over 140 years of experience in construction and engineering including the Glenfinnan Viaduct in the Highlands and the Emirates Arena and Sir Chris Hoy Velodrome in Glasgow. From our Glasgow office we have been developing, constructing and operating wind farms in Scotland since 1993.

We have developed and/or built 21 wind farms in Scotland, with a total generation capacity of 597MW, and have recently finished constructing Blary Hill Wind Farm in Argyll and Bute. We were also involved in the 14-turbine Penmanshiel Wind Farm near Granthouse, in the Scottish Borders, which we now operate. The project was commissionedin 2016 and delivers a community benefits package which includes RES' Local Electricity Discount Scheme. For further information visit www.res-group.com.

Onshore wind projects in Scotland

- Development
- In planning
- Consented
- Under construction
- Operational



Map updated May 2023

RES has developed and/or built and/or operates a range of projects across Scotland including:

1	Forss I and II	15	Neilston
2	Cairnmore Hill	16	Kelburn
3	Kintradwell	17	Freasdail
4	Hill of Towie I and II	18	Killean
5	Glens of Foudland	19	Cour
6	Cairn Duhie (and redesign)	20	Blary Hill
7	Beinneun	21	Sclenteuch
8	Hill of Fare	22	Minnygap
9	Meikle Carewe	23	Solwaybank and Bloch
10	Earlseat	24	Glenchamber
11	Little Raith	25	Longcroft
12	Penmanshiel	26	Torfichen
13	Black Hill		
14	Tormywheel		

www.torfichen-windfarm.co.uk

TORFICHEN WIND FARM
PROPOSAL - UPDATED DESIGN

The need for onshore wind

National Development

We are in a climate emergency, cost of living crisis and also seeking to enhance the security of our energy supply. Onshore wind can address all of these. This is recognised by the Scottish Government's National Planning Framework 4 (NPF4)[1] which was published in February 2023.

NPF4 is Scotland's long term spatial planning strategy and categorises onshore wind projects with a generating capacity in excess of 50MW as National Development. In principle it supports all forms of renewable energy generation including onshore wind.

Net zero carbon targets

A 'climate emergency' was declared by the UK Government and the Scottish Government in 2019. The UK Government has set a legally binding target for reducing greenhouse gas emissions to 'net zero' by 2050 and the Scottish Government has a net zero target of 2045[1]. Renewables, and specifically onshore wind, will play an important role in helping achieve these targets.

Scotland currently has almost 9GW of operational onshore wind capacity. The Scottish Government has a target of achieving 20GW of installed onshore wind capacity across Scotland by 2030[2] in order to help meet the legally-binding 2045 net zero carbon emissions target. This is a substantial increase and will require a significant deployment of new onshore wind projects in order to meet this demand for green, low-carbon electricity.

Improved performance and output

Wind turbine technology has advanced considerably in recent years, meaning that wind turbines are now taller and more efficient which enables them to generate a significantly greater amount of electricity per wind turbine.

Modern taller wind turbines provide more electricity, which helps address the climate emergency, cost of living crisis, and security of energy supply. The 180m tall wind turbines proposed at Torfichen Wind Farm would allow for far greater benefits in terms of renewable electricity generation per wind turbine than smaller turbines would.

This indicative infographic shows the approximate number of homes that could be powered annually[3] by each of the three different turbine models.

Please note that images are not to scale.

Low-cost electricity

Onshore wind, alongside other renewable energy technologies, can generate the cheapest form of new electricity generation. If consented, the Torfichen Wind Farm scheme would be capable of generating enough clean, low-cost renewable electricity for approximately 117,000 homes[3] based on the current design presented at this exhibition. With the rising cost of living and climate change emergency, it is imperative that we deliver electricity efficiently and at lowest cost to the consumer.

Energy security

Wind energy is a free and inexhaustible resource which has an important role to play as part of a balanced energy mix. It increases energy security by reducing our reliance on imports and is not subject to sudden price fluctuations or the uncertainty of global markets. It is also quick to build (12-24 months), and the carbon payback time is usually within 1-3 years. Advancements in energy storage solutions will also help capture excess electricity generation. The current 108MW Torfichen Wind Farm proposal also includes a 100MW battery energy storage system to help maximise the efficiency of the proposal and further contribute to energy security.

Tackling climate change

Whilst temperature and weather patterns have naturally fluctuated throughout history, scientists now agree that there is *"unequivocal evidence that Earth is warming at an unprecedented rate"* not seen in the past 10,000 years and that *"human activity is the principal cause."* [4]

Rapidly melting ice sheets, accelerated rises in sea levels and ocean warming, longer droughts, more frequent floods, wildfires and tropical storms are just some of the devastating effects of climate change seen across the globe which are affecting humans and other species. With the ever-growing threat of climate change and the catastrophic impacts that it could have, it is critical that we transition to a zero-carbon future. If consented, Torfichen Wind Farm would be capable of reducing carbon emissions by approximately 110,136 tonnes[5] each year – displacing fossil fuels.

[1] https://www.gov.scot/publications/national-planning-framework-4/

[2] Onshore Wind – policy statement refresh 2021, Scottish Government, October 2021

[3] The indicative homes equivalent figures for the site (a conservative estimate of 117,000 homes) and for the three different wind turbine models shown above (923 homes, 2,498 homes, and 6,516 homes) have each been calculated by taking the predicted annual electricity generation (based on the site's installed capacity of 108MW, or each wind turbine's capacity i.e. 850kW/ 2.3MW/ 6MW) together with RES' predicted capacity factor of 43.5% (based on a 6MW [megawatt] candidate turbine) and dividing this by the BEIS annual average electricity figure (showing that the annual UK average domestic household consumption is 3,509 kWh [December 2022]). The final wind farm capacity and the wind turbine models used for Torfichen Wind Farm will vary depending on the outcome of any planning permission and the wind turbine procurement process.

[4] NASA (https://climate.nasa.gov/evidence/)

[5] The carbon emissions reduction figure of 110,136 was calculated using the Scottish Government's Renewable Electricity Output Calculator (https://www.gov.scot/publications/renewable-and-conversion-calculators/)

TORFICHEN WIND FARM
PROPOSAL - UPDATED DESIGN

Project overview

Project background

In January 2023 RES submitted a Scoping Report to the Scottish Government and other consultees seeking feedback on the scope of proposed environmental survey work for a wind farm and energy storage proposal near Torfichen Hill. The site lies approximately 6km south of Gorebridge in Midlothian.

The Scoping Report included an early design comprising 19 wind turbines at a tip height of up to 180m and an energy storage facility which would help maximise generation capacity and efficiency of the proposal.

In March 2023, we held public exhibitions in the local area to enable people to learn more about the project, discuss any questions with the RES project team, and provide feedback on this initial scoping design.

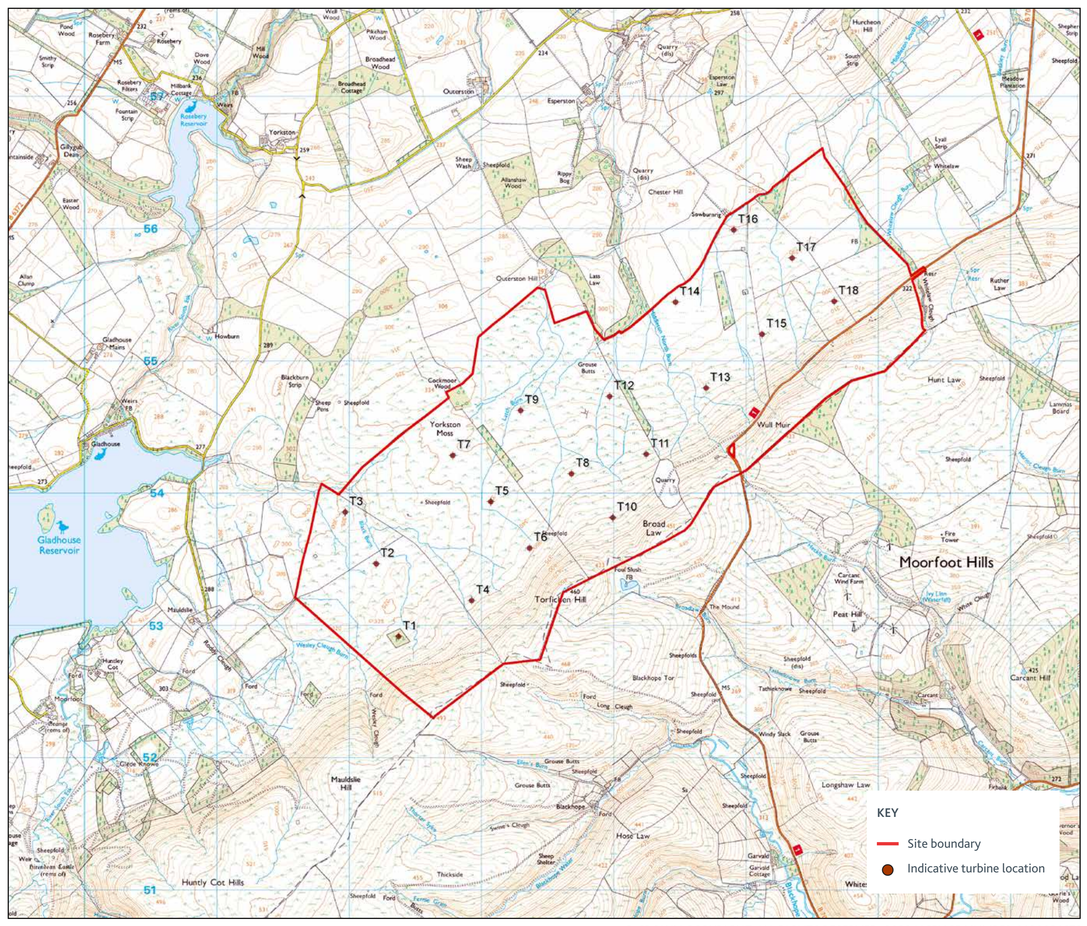
Since these events we have undertaken further detailed environmental and technical studies to build our understanding of the site. The findings from this work, together with the comments received from the public consultation as well as technical key consultee feedback, have been carefully considered in relation to the development of the layout design.

The maps to the right show the updated 18 wind turbine proposal, and the initial 19 wind turbine scoping design.

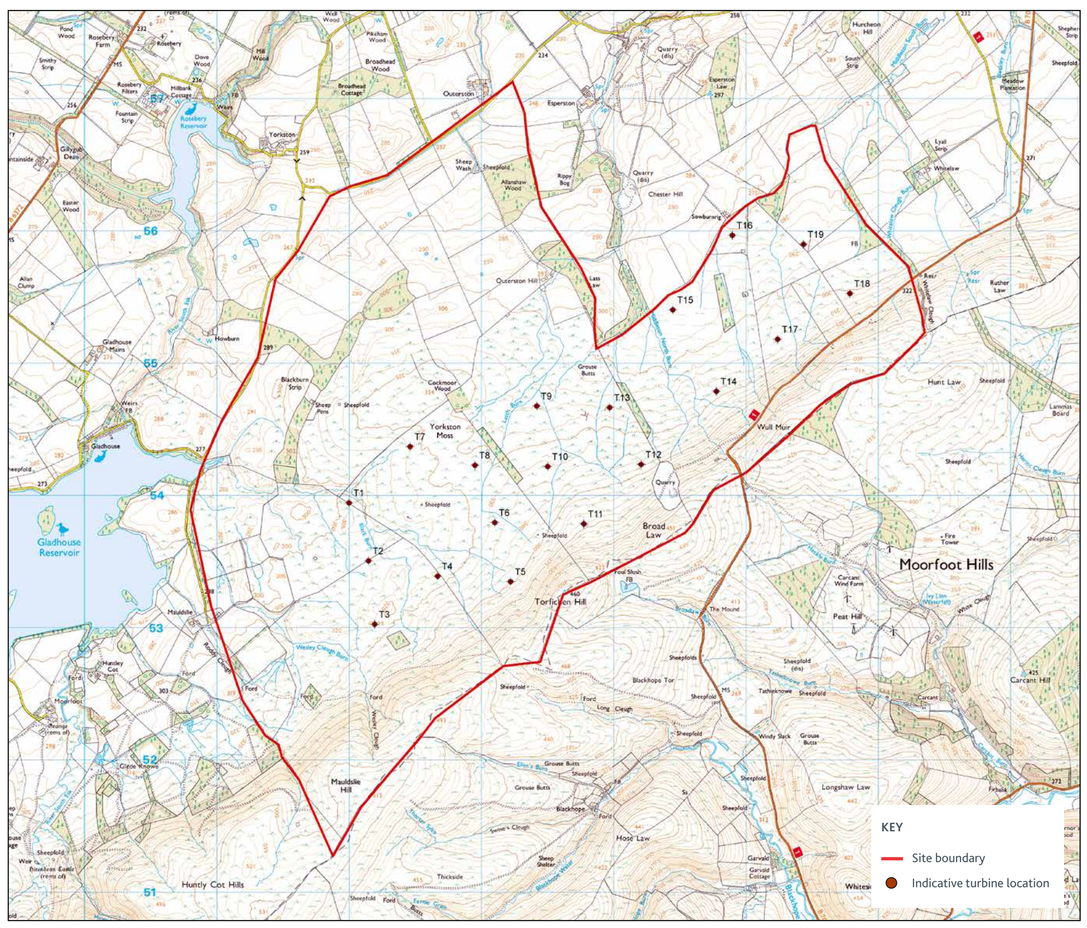
Design evolution – turbine layout & site boundary

The two maps below show the comparative changes in wind turbine numbers and locations and the red lined site boundary.

Updated layout



Scoping layout



TORFICHEN WIND FARM
PROPOSAL - UPDATED DESIGN

Infrastructure – updated design

Wind turbines

Since the scoping design, which was presented at the March 2023 public exhibitions, the number of wind turbines has been reduced from 19 to 18. The proposed wind turbine tip height of up to 180m remains the same.

Furthermore, each wind turbine location has moved to varying degrees to refine the design and minimise impacts wherever possible.

The total installed generating capacity has also reduced slightly since the previous propsal from around 114MW to 108MW due to the reduction in wind turbine numbers.

Tracks

Tracks have been aligned to avoid, as much as possible, crossing of watercourses, services and areas of deeper peat.

Grid connection

RES has been advised by the Transmission Owner (TO) that the proposed wind farm will connect to the National Grid via a 132kV connection into Gala North, a new substation near Galashiels.

The grid network operators are currently upgrading the grid infrastructure in the country and RES will be required to pay transmission connection charges to National Grid during operation of the wind farm for the grid connection. We have accepted a grid offer from the TO, in this case Scottish Power Transmission (SPT).


Example of 132kV overhead wood pole line

SPT, as the TO, is responsible for maintaining and investing in the grid in the south of Scotland. This includes designing connections for transmission grid applications, such as that for the Torfichen Wind Farm, and submitting the planning applications for these connections. As such, the grid route is subject to a separate planning application from the wind farm – and will be submitted as a separate Section 37 planning application under the Electricity Act by the TO once they have finalised their design.

Once the planning application for the grid route is submitted, there will be a consultation period undertaken by the TO during which details of the grid route and method will be available for the public to provide comment to the TO as part of the planning process.

Indicative details of the anticipated route of the grid connection for the proposal will also be included by RES within the Proposed Development Description chapter of the Environmental Impact Assessment Report (EIAR) which will accompany the planning application for Torfichen Wind Farm.

Battery Energy Storage System (BESS)

The battery energy storage system (BESS) is anticipated to have a storage capacity akin to the wind farm i.e., a power output capacity of 100MW and a storage energy capacity of around 200MWh (megawatt hours).

The maximum size of the BESS compound would be up to 100m by 150m. Full details of the scale and dimensions, minimum and maximum export capacity of megawatts and megawatt hours of electricity, and a full assessment of the impacts and effects and all proposed mitigation will be included in the Environmental Impact Assessment Report (EIAR) which will accompany the planning application.

The BESS location can be seen on the Infrastructure map on the ‘Infrastructure and constraints maps’ exhibition board.

The risk of fire at a BESS is low but will be considered and mitigated in the design of the storage general arrangement and consideration of the monitoring and fire suppression system. The BESS is optimised with appropriate container spacing to minimise the risk of propagation across the facility in the unlikely event of a fire. Additionally, fire breaks or spacing from forestry is designed again to minimise fire propagation.

A battery management system is also implemented for continuous monitoring of the BESS through its lifetime. The containers housing the batteries typically include dry aerosol fire suppression solutions, favoured over water suppression, as they are successful at reaching all areas within containers and don’t require a dedicated water supply.


Example of a BESS

On-site substation

The proposal will also include an on-site substation. The electricity generated from each turbine is low voltage and needs to be converted into a higher voltage to be exported onto the National Grid.

Underground cables organised into arrays transport the electricity generated to the on-site substation whereupon it is converted into a higher voltage (132kV in the case of Torfichen Wind Farm). This electricity is then transported via a ‘grid connection’ (a 132kV overhead wood pole line is expected for Torfichen Wind Farm) onto the National Grid.

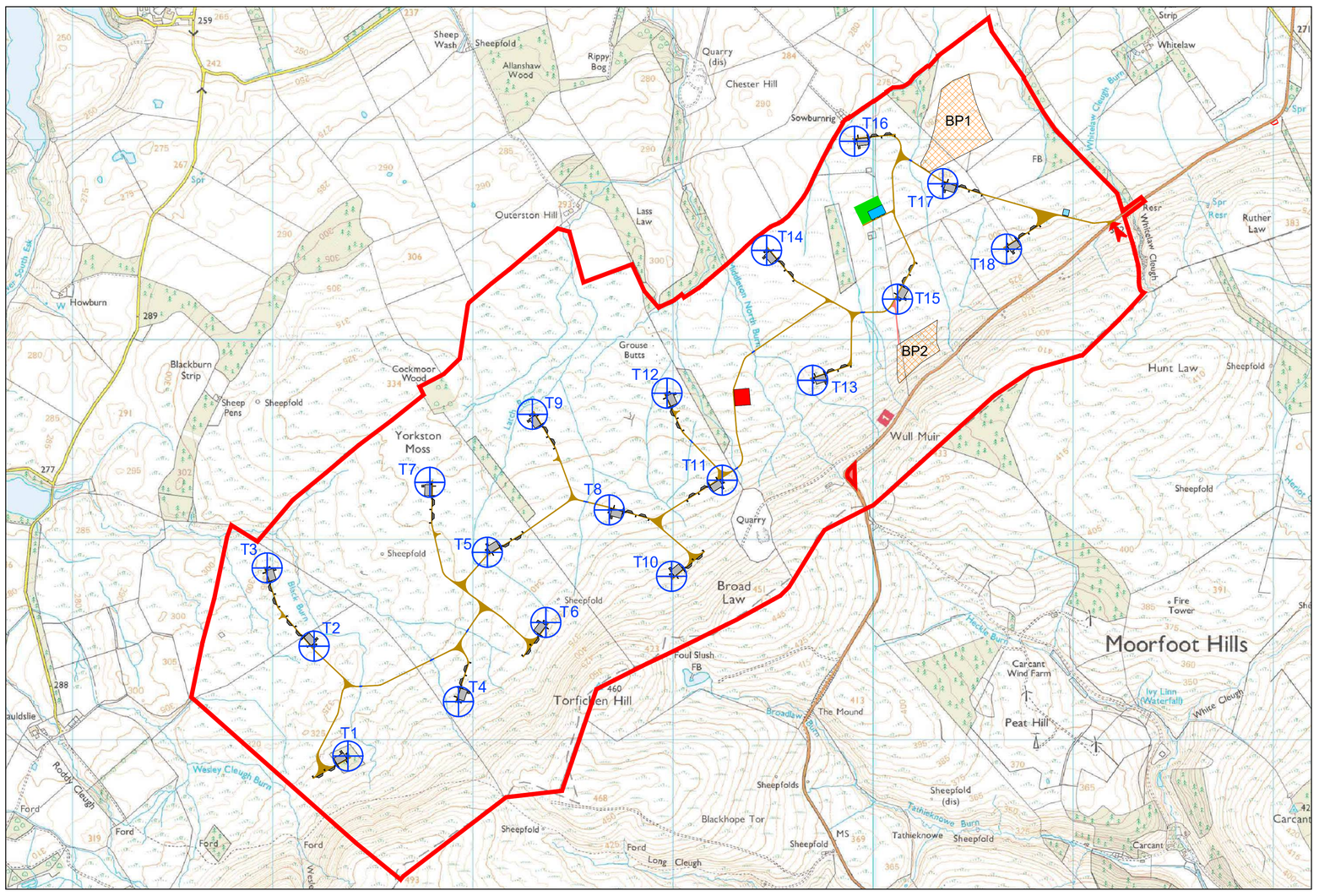
The on-site substation location can be seen on the Infrastructure map on the ‘Infrastructure and constraints maps’ exhibition board.

TORFICHEN WIND FARM

PROPOSAL - UPDATED DESIGN

Infrastructure and constraints maps

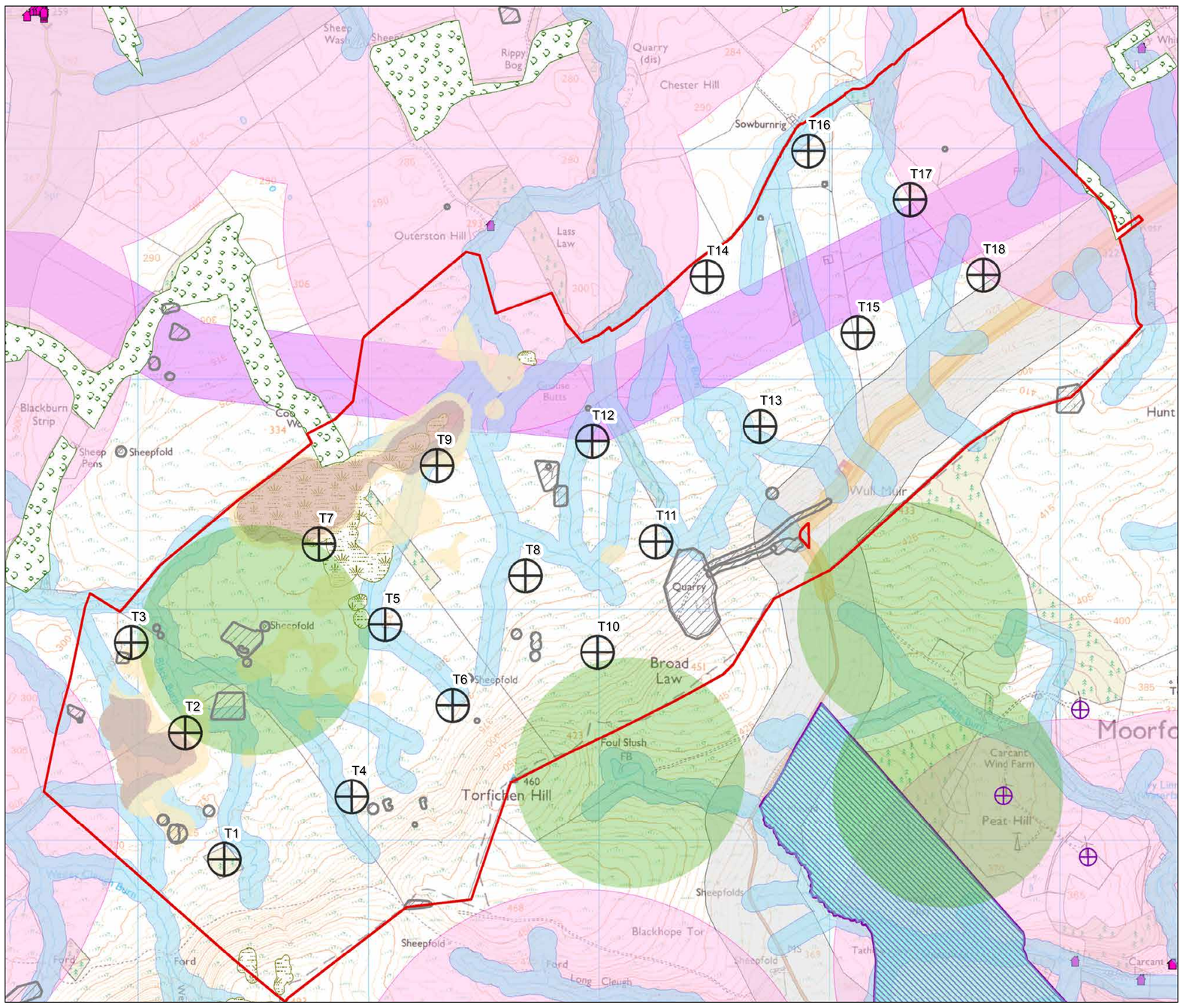
Infrastructure map (updated design)



KEY:

- PLANNING APPLICATION BOUNDARY
- WIND TURBINE
- NEW SITE TRACKS
- TEMPORARY SITE TRACKS
- NEW WATERCOURSE CROSSING
- CRANE HARDSTANDING AREA
  - PERMANENT
  - TEMPORARY
- TURNING HEAD
- TEMPORARY ENABLING WORKS COMPOUND
- TEMPORARY CONSTRUCTION COMPOUND
- CONTROL BUILDING & SUBSTATION COMPOUND WITH PERMANENT HARDSTANDING AREA
- BATTERY STORAGE COMPOUND
- BORROW PIT SEARCH AREA
- SITE ENTRANCE LOCATION

Constraints map (updated design)



KEY:

- Turbine Locations
- Carcant Turbines
- Site Boundary
- Breeding Bird Buffer
- Ancient Woodland

Peat Depth

- < 0.5m
- 0.5 - 1m
- >1m
- Blanket Bog Buffer
- Important Bird Areas
- Site of Special Scientific Interest SNH
- Habitations
- Habitations Buffer
- Hydrology Buffer
- Gas Mains Buffer
- Underground Line Buffer
- Roads Buffer
- Cultural Heritage Buffer

TORFICHEN WIND FARM

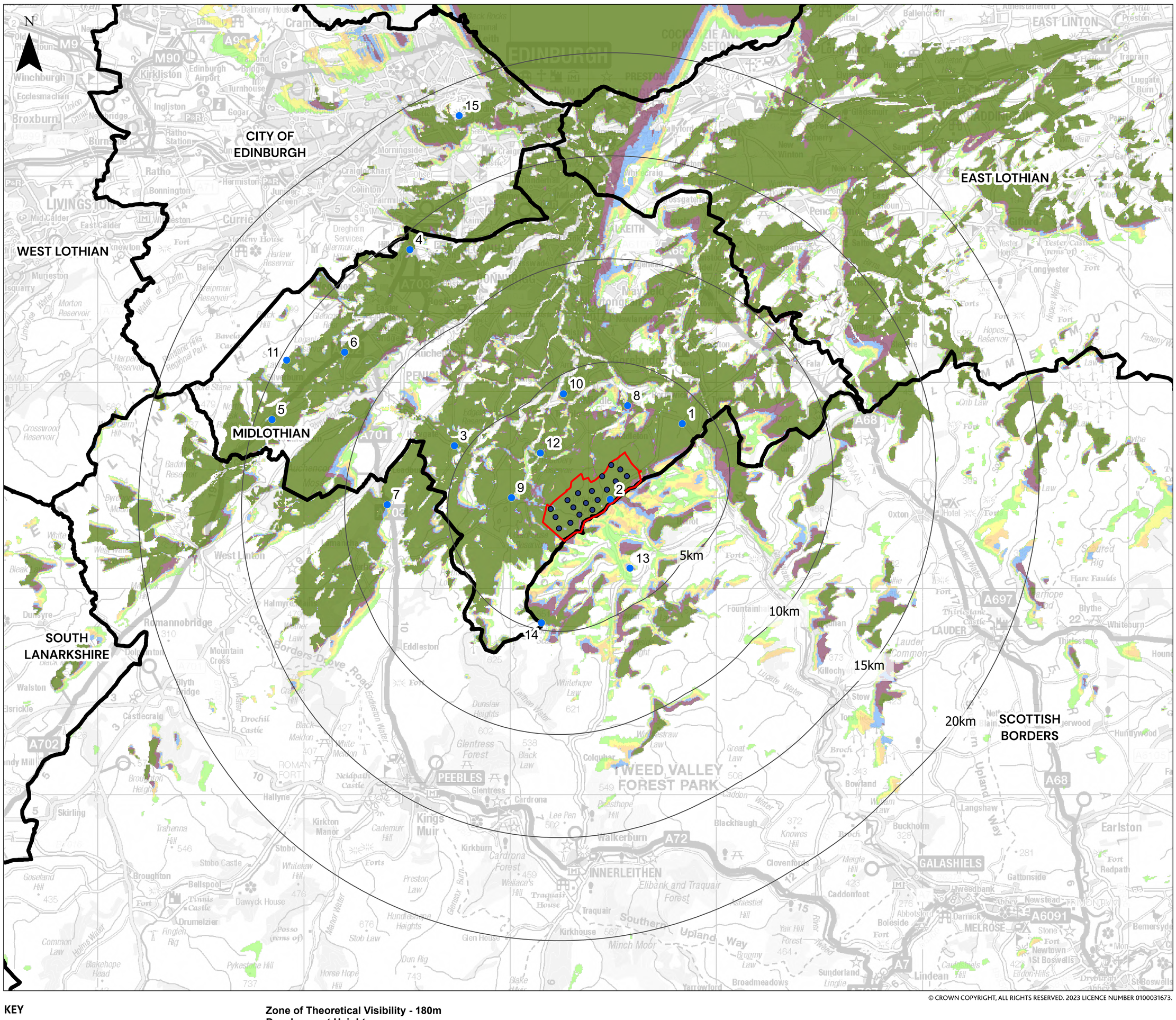
PROPOSAL - UPDATED DESIGN

Tip height Zone of Theoretical Visibility (ZTV) - 20km unscreened

Bare landform visibility

The Zone of Theoretical Visibility (ZTV) map below illustrates the theoretical extent of where wind turbines will be visible from within a 20km area, assuming 100% visibility and bare landform (without any trees, buildings or obstacles in the view) as per NatureScot guidance.

This map serves as a tool to inform the Landscape and Visual Impact Assessment (LVIA). The visibility indicated on the bare landform ZTV below is likely to be much less extensive in reality.



KEY

- Site Boundary
- Study Area 20km
- Proposed Tubines
- District, Metropolitan district, Unitary authority - OS Boundary-Line
- Proposed LVIA Viewpoints

Zone of Theoretical Visibility - 180m Development Height

- 1-4 Turbines
- 5-7 Turbines
- 8-10 Turbines
- 11-13 Turbines
- 14-16 Turbines
- 17-18 Turbines

Coordinate System: British National Grid
Projection: Transverse Mercator

Service Layer Credits: ; Historic Environment Scotland and Ordnance Survey data ©

0 2 4 8 km

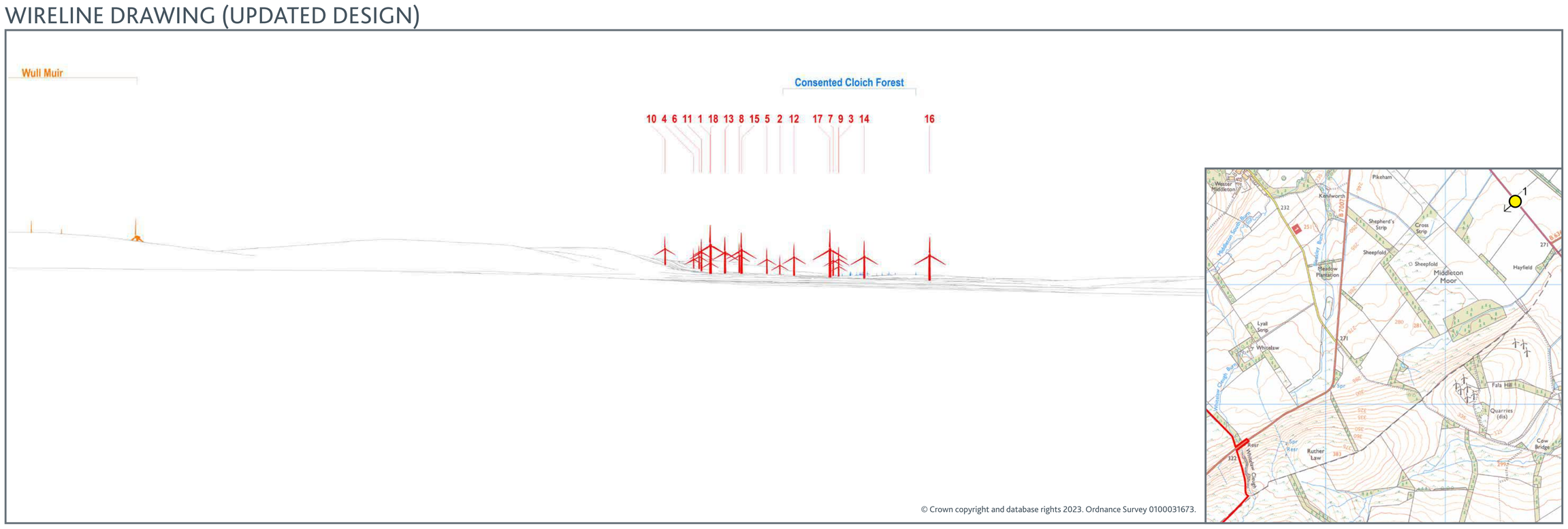
1:175,000 @ A3

TORFICHEN WIND FARM
PROPOSAL - UPDATED DESIGN

Viewpoint 1 – Middleton Mains

EXISTING VIEW

WIRELINE DRAWING (UPDATED DESIGN)



VIEWPOINT LOCATION

PHOTOMONTAGE OF PROPOSAL (UPDATED DESIGN)

VIEWPOINT INFORMATION

Location	338584, 657695	**Altitude**	264m AOD	**Nearest turbine**	3,679m to T18
Bearing to centre of image	236.75	**Angle of view**	90 Degrees		

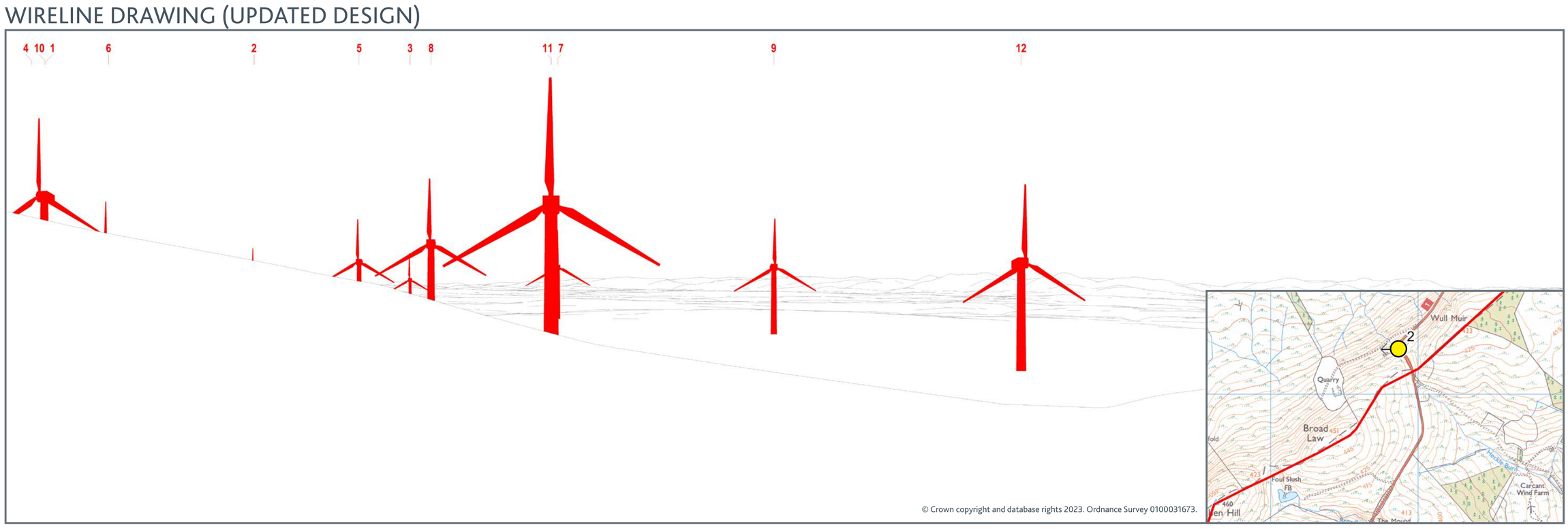
The cumulative wireline does not illustrate any micro-turbines. This is because the assessment of cumulative effects will focus on those schemes which have greater potential to result in significant cumulative effects.

TORFICHEN WIND FARM
PROPOSAL - UPDATED DESIGN

Viewpoint 2 (LEFT) – Broad Law Corner

EXISTING VIEW

WIRELINE DRAWING (UPDATED DESIGN)



VIEWPOINT LOCATION

PHOTOMONTAGE OF PROPOSAL (UPDATED DESIGN)

VIEWPOINT INFORMATION

Location	334870, 654307	**Altitude**	397m AOD	**Nearest turbine**	519m to T13
Bearing to centre of image	282.1	**Angle of view**	90 Degrees		

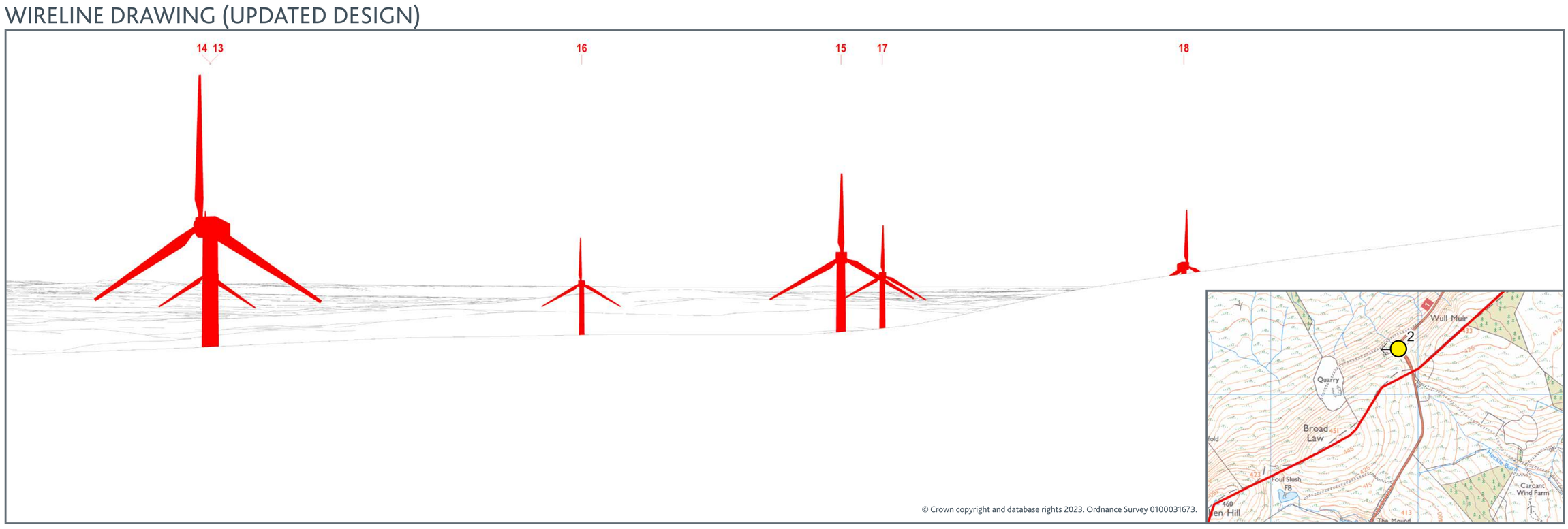
Please note that Viewpoint 2 is represented by two 90 degree angles of view (left and right) to include the entirety of the proposed development in context with the wider landscape.

TORFICHEN WIND FARM
PROPOSAL - UPDATED DESIGN

Viewpoint 2 (RIGHT) – Broad Law Corner

EXISTING VIEW

WIRELINE DRAWING (UPDATED DESIGN)



VIEWPOINT LOCATION

PHOTOMONTAGE OF PROPOSAL (UPDATED DESIGN)

VIEWPOINT INFORMATION

Location	334870, 654307	**Altitude**	397m AOD	**Nearest turbine**	519m to T13
Bearing to centre of image	12.575	**Angle of view**	90 Degrees		

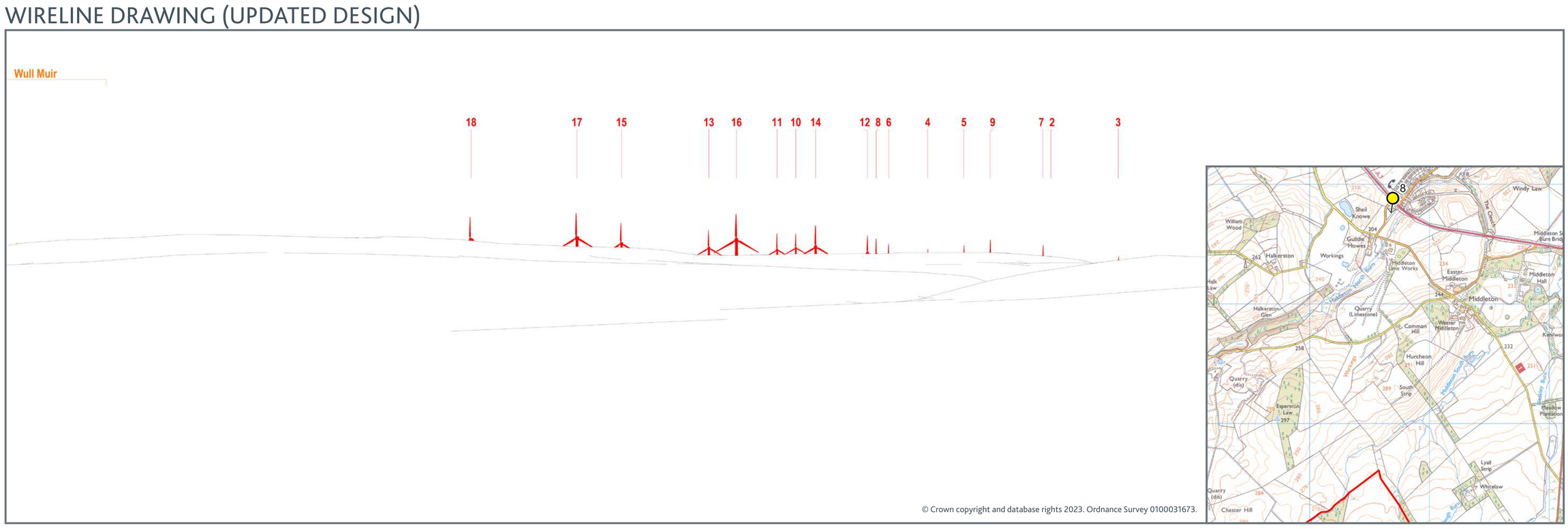
Please note that Viewpoint 2 is represented by two 90 degree angles of view (left and right) to include the entirety of the proposed development in context with the wider landscape.

TORFICHEN WIND FARM
PROPOSAL - UPDATED DESIGN

Viewpoint 8 – North Middleton

EXISTING VIEW

WIRELINE DRAWING (UPDATED DESIGN)



VIEWPOINT LOCATION

PHOTOMONTAGE OF PROPOSAL (UPDATED DESIGN)

VIEWPOINT INFORMATION

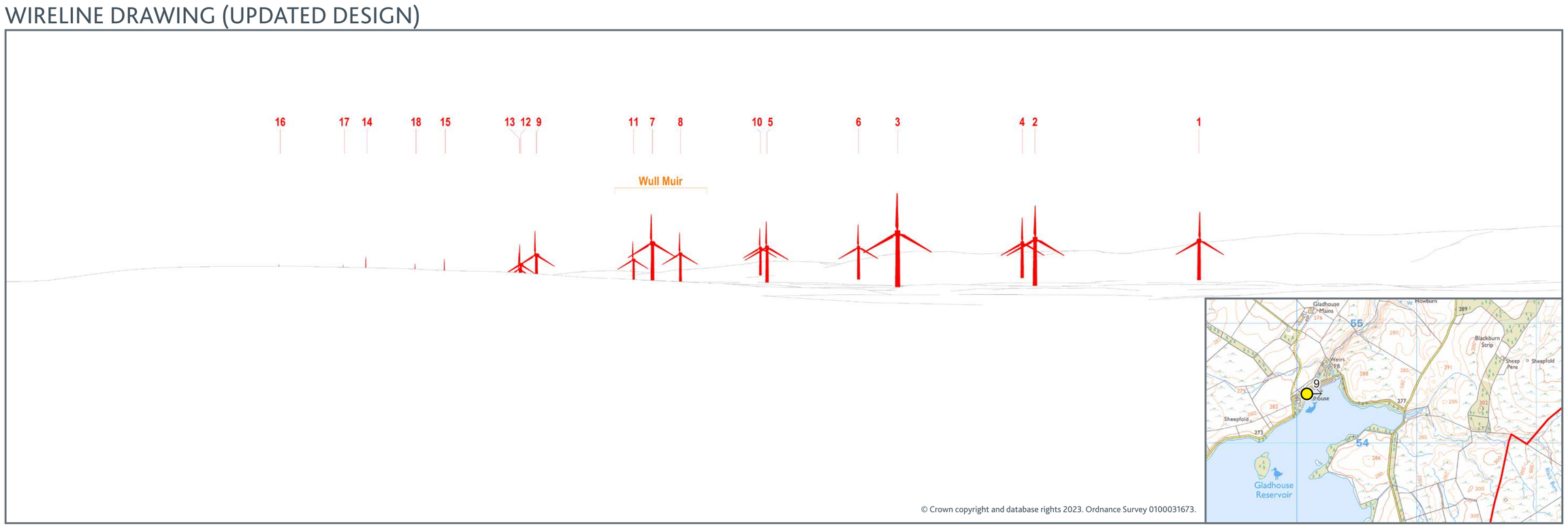
Location	335698, 658882	**Altitude**	203m AOD	**Nearest turbine**	2,996m to T16
Bearing to centre of image	198	**Angle of view**	90 Degrees		

TORFICHEN WIND FARM
PROPOSAL - UPDATED DESIGN

Viewpoint 9 – Gladhouse Reservoir

EXISTING VIEW

WIRELINE DRAWING (UPDATED DESIGN)



VIEWPOINT LOCATION

PHOTOMONTAGE OF PROPOSAL (UPDATED DESIGN)

VIEWPOINT INFORMATION

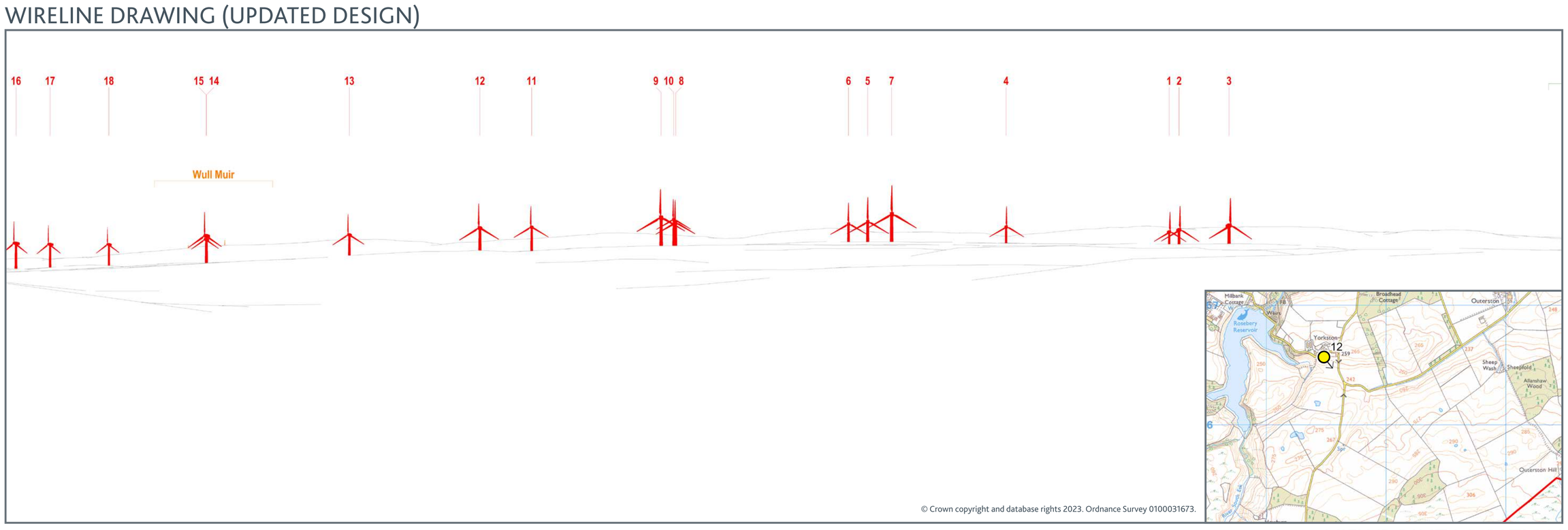
Location	330084, 654410	**Altitude**	272m AOD	**Nearest turbine**	1,964m to T3
Bearing to centre of image	99.95	**Angle of view**	90 Degrees		

TORFICHEN WIND FARM
PROPOSAL - UPDATED DESIGN

Viewpoint 12 – Minor Road, near Yorkston Farm

EXISTING VIEW

WIRELINE DRAWING (UPDATED DESIGN)



VIEWPOINT LOCATION

PHOTOMONTAGE OF PROPOSAL (UPDATED DESIGN)

VIEWPOINT INFORMATION

Location	331479, 656567	**Altitude**	251m AOD	**Nearest turbine**	2,629m to T7
Bearing to centre of image	43.9	**Angle of view**	90 Degrees		

TORFICHEN WIND FARM
PROPOSAL - UPDATED DESIGN

Environmental Impact Assessment (EIA) considerations

Site selection

The wind resource, site accessibility, topography, proximity to housing, local ecology and wildlife, waterbodies, peatland, cultural heritage assets and grid connectivity are some of the key considerations for the site selection and then layout design of a proposal like Torfichen Wind Farm.

Since the site selection, the Scottish Government published the National Planning Framework 4 (NPF4) in February 2023 which provides the national spatial strategy for Scotland. Policy 11 asserts support for onshore wind farms outside of National Parks and National Scenic Areas. Torfichen is outwith such national landscape designations.

Environmental Impact Assessment (EIA)

Environmental Impact Assessments (EIAs) are a compulsory part of the planning and consenting process for wind farms. The purpose of an EIA is to investigate and mitigate any potential effects of a development on the natural, physical and human environment.

Over the last couple of years, RES has undertaken a wide range of technical studies and environmental surveys on the site, including:

- Acoustics
- Archaeology and Cultural Heritage
- Hydrology, Hydrogeology and Geology
- Landscape and Visual
- Ornithology and Ecology
- Traffic and Transport

The findings from the site studies are written up in a comprehensive Environmental Impact Assessment Report (EIAR) which the Scottish Ministers will take into account when deciding whether or not to grant consent for the proposal.

Landscape and visual

Our landscape architects have undertaken extensive assessment work to inform the design development and turbine layout. Key changes (since the scoping design) include the reduction in turbine numbers from 19 to 18 and the movement of each wind turbine location to varying degrees to refine the design and minimise impacts wherever possible.

The photomontages and wireline visualisations presented at this exhibition have been prepared to NatureScot guidance and help to give an impression of what the proposal could look like from different viewpoints in the area.

We are looking to achieve a design that strikes an acceptable balance between the visibility of the proposal and its ability to generate significant amounts of renewable energy. Ultimately, the acceptability of this design will be assessed by the determining authority in relation to current energy policy and planning requirements having considered feedback from consultees as well as representations by members of the community and wider public.

Residential visual amenity

The Residential Visual Amenity Assessment (RVAA) is an important component of the wider Landscape and Visual Impact Assessment which is undertaken as part of the EIA. Following feedback through the Scoping process and public consultation we have been working carefully on the layout design to minimise potential impacts of the proposal on residential amenity by increasing the separation distance from wind turbines to settlements and residential properties.

Private water supplies

RES has collected Private Water Supply (PWS) data from Midlothian Council to establish the PWS source locations and source types in order to inform the PWS assessment that will be presented in the EIAR. The findings of the assessment will inform what further work would be required, if any, which may include baseline monitoring of relevant PWS, before, during and after construction. Any work associated with PWS post consent will be enforced through planning condition and subject to agreement with Midlothian Council.

Peat

Peat depth surveys and assessments have been undertaken. Peat is not uniform across the site and deeper peat is being avoided.

Typically, wind farms pay back the carbon within 1-3 years and operate carbon free thereafter. A carbon balance assessment will be provided in the EIAR. This will also be supported by a Peat Management Plan and an outline Habitat Management Plan.

Cultural heritage

Whilst there are no designated heritage assets within the site boundary area there are many non-designated and designated heritage assets in the surrounding 5km study area. The updated layout design lessens the potential effect upon the setting of such assets.

The Cultural Heritage chapter of the Environmental Impact Assessment Report (EIAR) will provide assessment of the impacts of the development on heritage assets identified and agreed in consultation with Historic Environment Scotland.

Ecology and Ornithology

Protecting and minimising any potential direct or indirect impacts on local wildlife and their habitats is of utmost importance and we take this responsibility seriously. A wide range of ecological and ornithological studies have been undertaken as part of the Environmental Impact Assessment work.

We are also in consultation with relevant consultees, including Midlothian Council, NatureScot, RSPB Scotland, and the Forth District Salmon Fishery Board with regard to designated sites, protected areas and protected species.

We are also developing an outline Habitat Management Plan for the site.

TORFICHEN WIND FARM

PROPOSAL - UPDATED DESIGN

Environmental Impact Assessment (EIA) considerations

Acoustics

Operation and construction acoustic assessments and prediction are undertaken in accordance with the relevant standards, current assessment methodologies and best practice as determined by the regulatory bodies, which include Midlothian Council, the Scottish Government and the UK Institute of Acoustics.

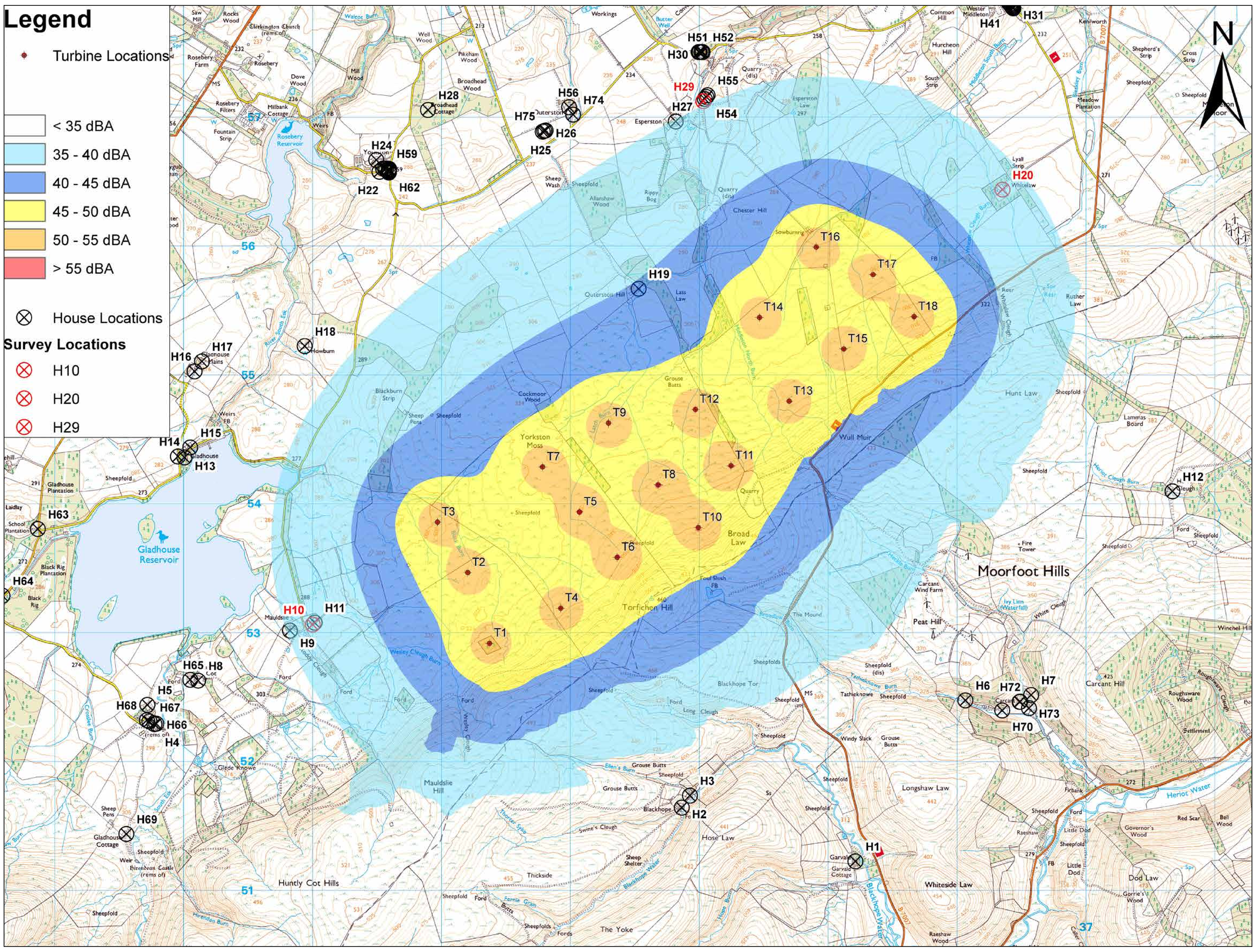
In consultation with Midlothian Council, we have undertaken a background sound survey at a number of locations around the site to measure the existing background sound levels. The results of the background sound survey are being analysed by our acoustics team and will inform the setting of the sound immission limits for the operation of the wind farm. These limits will be agreed with the local authority, and the proposal will be required to comply with these strict noise limits set within planning conditions.

The acoustic impact of the wind farm will be modelled and the output of this modelled work will be presented in the Acoustic Chapter of the extensive Environmental Impact Assessment Report (EIAR) which will accompany the planning application.

The Acoustic Chapter of the EIAR will demonstrate that RES has considered all appropriate measures in the design, construction, and operation phases to minimise the acoustic impact of the wind farm.


Acoustic monitoring equipment

Predicted preliminary acoustic footprint map



Shadow flicker

Shadow flicker is a phenomenon where, under certain circumstances of geographical position and time of day, the sun may pass behind the rotors of a wind turbine and cast a shadow over neighbouring properties. When the blades rotate, the shadow flicks on and off. It only occurs inside buildings where the flicker appears through a narrow window opening.

Shadow flicker can be predicted, modelled and mitigated using specialised software. The Torfichen Wind Farm proposal is being designed to minimise any potential for shadow flicker.

Shadow flicker monitoring software which can shut down certain wind turbines at particular times of the day, or in certain weather conditions, where a shadow flicker effect may result can also be utilised. This shadow flicker modelling work will be presented in the EIAR which will accompany the planning application.

TORFICHEN WIND FARM

PROPOSAL - UPDATED DESIGN

Environmental Impact Assessment (EIA) considerations

Traffic and transport

Various studies have been undertaken to assess route options and help minimise potential impacts during the delivery of wind turbine components.

We are assessing traffic volumes in the local area to understand the impact of other construction traffic (HGVs, site plant, 4x4s) and identify ways to minimise disruption on road users. The site entrance has been carefully designed with appropriate visibility splays to meet strict safety requirements.

We are also in consultation with Midlothian Council's roads department as well as the emergency services and other relevant consultees.

Should the proposal be consented, a detailed Traffic Management Plan would be developed to mitigate potential impacts on road users and ensure road safety.

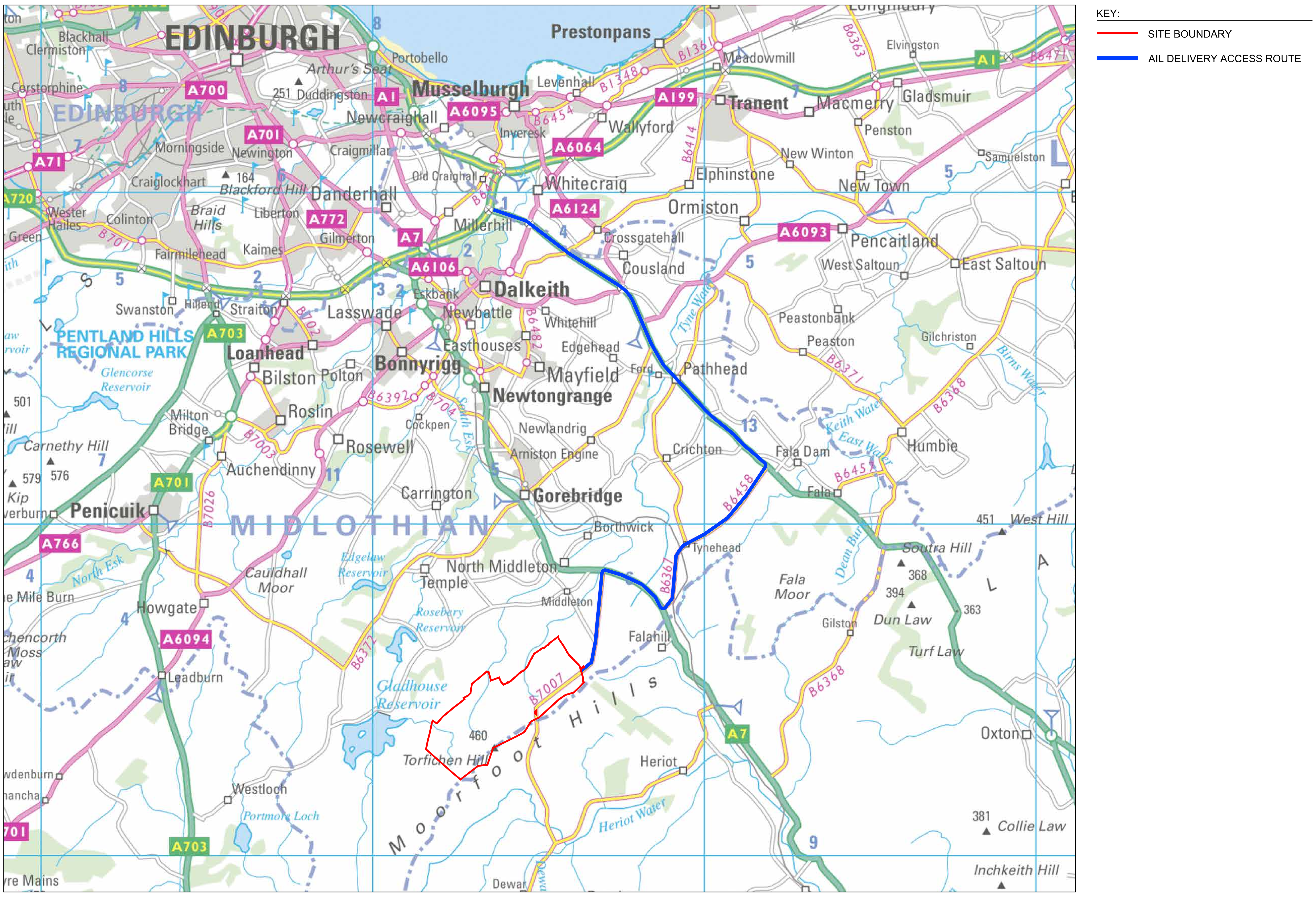
Aviation and radar

Radar systems can be susceptible to interference from wind turbines as the blade movement can cause intermittent detection by radars within their operating range. This is particularly relevant where there is a line of sight between the radar and the wind farm.

RES has undertaken an initial Aviation Assessment to identify any radar infrastructure which may be impacted by the proposed turbines. The closest infrastructure to the site is located at Edinburgh Airport and Lowther Hill, however there is no line of sight to the proposed turbines from either. Further assessment is being carried out to establish any potential impacts of the proposed turbines on the instrument flight procedures of Edinburgh Airport.

Full consultation will be undertaken with all relevant consultees including the MoD, Civil Aviation Authority and Edinburgh Airport.

Indicative turbine delivery route



Aviation lighting

In accordance with the Air Navigation Order 2016, en-route obstacles at or above 150m, such as the wind turbines proposed at Torfichen Wind Farm, require to be lit at night with medium intensity red aviation lights. The aviation lighting is designed to focus the light across and upwards for the attention of aircraft rather than downward to those at ground level and, in some circumstances, not all wind turbines require to be lit.

The light intensity varies in response to weather conditions and visibility (via an atmospheric conditions and visibility sensor on the wind turbine) - with lighting dimmed to 10% of their intensity in good visibility (typically greater than 5km) but maximised in cloudy or foggy weather (where visibility is typically less than 5km). We are consulting with the Civil Aviation Authority (CAA) to agree a lighting strategy with them. The proposed lighting strategy will be presented in the planning application which will also include a night-time visual impact assessment and visualisations.

TORFICHEN WIND FARM

PROPOSAL - UPDATED DESIGN

Maximising the local benefit

A power for good

RES seeks to be a power for good in communities that neighbour our projects by working openly and constructively to ensure tangible local benefits. We believe that onshore wind should provide direct, lasting benefits to local communities and there are a number of ways that this can be achieved.

Some of the most direct and meaningful benefits that can be delivered from a proposal like Torfichen Wind Farm are jobs and employment for local businesses and contractors, in addition to the use of local services and amenities, all of which can generate a significant amount of inward investment within the area.

Working with the local supply chain

RES is committed to ensuring that, wherever reasonably practicable, local contractors and employees are used in all aspects of wind farm development, construction and operation. The major opportunities arise during the construction phase when suitably qualified local firms are invited to bid for different aspects of construction, such as foundation laying and electrical works. Construction materials are normally sourced locally (i.e. within the county) and local transport and plant hire companies used wherever possible.

Expenditure in the local economy during the development, construction and operation of wind farms varies from project to project due to various factors including project size, project duration, and the availability of local suppliers. In recent years, RES has seen typical spend with local stakeholders, suppliers and service providers in the region of £279,000 per wind turbine during the development, construction and first year of operation. In some cases, it has been possible to significantly improve on this number.

Based on the updated layout design, the Torfichen Wind Farm proposal is predicted to deliver approximately £5 million of inward investment to the area in the form of jobs, employment, and use of local services during the development, construction and first year of operation. In addition, more than £1.1 million in business rates[1] will be payable each year to Midlothian Council during operation.

RES partnership with Edward Mackay Contractor, Brora

Kintradwell Wind Farm proposal – case study

RES signed an agreement with Brora-based firm, Edward Mackay Contractor, giving them right of first refusal on the civil construction work for our proposed Kintradwell Wind Farm. Should the project receive consent, this commitment will help secure valuable local jobs and employment opportunities for the firm, which currently employs around 100 local staff.

Liam Mackay, Director at Edward Mackay said *"All credit to RES for engaging with local businesses and for giving us the opportunity to get stuck into a project on our doorstep, should it proceed. The work that we are looking at is significant and could be a real boost for not only our business but the whole area".*

Glenchamber Wind Farm – case study

Glenchamber, an 11-turbine wind farm located in Dumfries and Galloway has an installed capacity of 27.5MW and began operating in 2016. In keeping with our commitment to maximise economic benefit to the local area, the civil engineering contractor chosen for Glenchamber was Luce Bay Group who are based just 8 miles from the wind farm. RES' work with Luce Bay saw more than £8 million invested into the local economy and provided employment for 45 local people.

Skills and services

Some of the most direct and meaningful benefits that can be delivered from a project like this are jobs and employment for local businesses and contractors, in addition to the use of local services and amenities, all of which can generate a significant amount of inward investment within the area.

RES has a strong track record for working with the local supply chain around its projects. In order to maximise the opportunities from the Torfichen Wind Farm proposal we are looking to connect with local businesses and build our knowledge of the local skills and capabilities within the area.

Some of the services and materials that are likely to be required in relation to the Torfichen Wind Farm proposal, should it be consented, are:

- Groundworks
- Steel fixing
- Labourers
- Fencers
- Plant operators
- Plant and crane hire
- Civil engineering
- Electrical works and cabling
- Environmental surveyors
- Concrete and aggregates
- Accommodation
- Cleaning and office support
- Garage services and vehicle maintenance

If you're a local business or contractor (or you know one) interested in getting involved in onshore wind, please speak to our project team.

[1]The business rates figure of £1.1 million each year has been calculated from the most recent non-domestic rates revaluation in Scotland (2023 Revaluation) and predicted performance of the wind farm.

TORFICHEN WIND FARM
PROPOSAL - UPDATED DESIGN

Community benefit package

Our approach

Should the project be consented, a community benefit package will be established to support the communities who host, and are closest to, the project.

We take a tailored approach and consult with the local community, both pre-planning and post-consent (should the proposal be granted planning permission), to gain an understanding of the local priorities and to seek suggestions for projects that will help to secure long-term economic, social and environmental benefits for the area.

This approach ensures the community benefits package that is delivered is aligned with the priorities of the local community. For instance, the package could include RES' Local Electricity Discount Scheme (LEDS) or provide funding for projects that sit outside the parameters of a traditional application-based fund.

Should the proposal receive consent, the area of benefit for Torfichen Wind Farm will be determined in consultation with locally elected representatives from the closest communities.

Value of the package

RES is proposing a tailored package of benefits for the community from Torfichen Wind Farm that would be worth £5,000 per megawatt (or equivalent) of installed capacity per annum. Based on the current layout design and installed capacity of 108MW this could equate to a tailored community benefit package for the local area worth £540,000 (or equivalent) each year.

This package could include RES' unique Local Electricity Discount Scheme (LEDS), something that has received significant interest from the community. LEDS seeks to deliver direct and tangible benefits to people living and working closest to RES' operational wind farms.

Local Electricity Discount Scheme (LEDS)

Our unique Local Electricity Discount Scheme (LEDS) was developed in response to research and feedback from local communities around RES' operational wind farms.

LEDS offers an annual discount to the electricity bills of those properties closest to a participating wind farm and there is no need to change energy provider. If this is something that you are interested in as a potential part of a tailored community benefits package at Torfichen, please note this in your formal written feedback to RES and let our project team know if you would like more information.

Local Electricity Discount Scheme

Who administers the fund?

Where traditional application-based funds are established for our projects, these are always administered by an independent organisation. For example, a Trust established for the specific purpose of managing community funds or an established grant-making organisation such as Foundation Scotland.

Should an application-based fund form part of the tailored community benefits package for Torfichen Wind Farm then we would consult with the community with regard to an administrator for the fund.

Your feedback on local priorities

We are seeking your feedback on ideas for local benefits and priority projects that you would like to see supported or delivered in your community from the proposed Torfichen Wind Farm, should it receive consent. Some of the most popular suggestions we've received from the community so far include:

- Biodiversity initiatives (planting of trees, encouraging wildlife)
- Discounted electricity
- Electric vehicle charging facilities within community
- Funding for local community groups
- Funding for village halls
- Improved transport
- Upgraded or new sports facilities

Voluntary community benefits are not a material planning consideration

Penmanshiel Wind Farm – case study

The Penmanshiel Wind Farm Community Benefit Fund contributed £35,000 to the Community Council's refurbishment of Reston play park which had been severely delayed due to the Covid-19 pandemic, with match funding used for the balance.

The initiative involved entering a contract with Scottish Borders Council to transfer ownership of the play park to the community council. The park was officially opened by the oldest gentleman in Reston, a fitting tribute from the elderly to the young.

Reston play park

Shared ownership
Is this of interest to the community?

RES is also interested to understand whether there is any appetite from the community in exploring the potential opportunity of shared ownership in the wind farm. If shared ownership is something that interests you, please put this on your comments form and speak to our project team. Local Energy Scotland is the independent body that manages the Scottish Government's Community and Renewable Energy Scheme (CARES).

To find out more visit: www.localenergy.scot/hub/shared-ownership

TORFICHEN WIND FARM
PROPOSAL - UPDATED DESIGN

Next steps

Commenting on the updated design

This exhibition forms part of our pre-application consultation and, whilst the design is almost finalised, this event provides you with an opportunity to submit written feedback to RES, if you wish, on the updated design.

Our team are here to discuss the project with you and do our best to answer any questions that you may have, but please note that formal feedback to RES on the updated design needs to be submitted in writing.

Anyone wishing to provide feedback to RES on the proposal and ideas for local benefits can do so in writing by filling out a 'comments form' at the exhibition events or online from the project website at www.torfichen-windfarm.co.uk from Wednesday 6 September when copies of the exhibition information will be available on the project website for people to view. If you have any questions about this please speak to our project team.

The closing date for comments is Thursday 21 September 2023.

Comments submitted to RES during these exhibitions or subsequent consultation period are not representations to the determining authority (The Scottish Government's Energy Consents Unit). There will be an opportunity to submit representations to the determining authority once a planning application has been submitted.

Pre-Application Consultation (PAC) Report

A Pre-Application Consultation (PAC) Report will accompany the planning application submission. The report will summarise the communications activity that has been undertaken on the project and consultation feedback received.

Indicative timeline

	2023	2024	2025	2026	2027	2028	2029
Submission (Section 36)							
Consent determination	18-24 months						
Discharge of planning conditions			12 months				
Procurement process				12 months			
Construction process					24 months		
Commissioning							4-6 months

Planning submission timescales

The Torfichen Wind Farm proposal has an installed generating capacity greater than 50MW (megawatts). As such, the application for planning consent will be submitted by RES to the Scottish Government's Energy Consents Unit under Section 36 of the Electricity Act 1989 (the Electricity Act) and determined by Scottish Ministers. Midlothian Council will be a statutory consultee in the process.

We currently expect to submit the Section 36 application later in Autumn 2023.

In the meantime, we will write up the detailed Environmental Impact Assessment Report (EIAR). This is an extensive and comprehensive document which reports on the survey findings and subsequent assessment of the proposal on key topic areas including:

- Acoustics
- Aviation and Infrastructure
- Cultural heritage
- Ecology
- Geology
- Hydrology and Hydrogeology
- Landscape and Visual
- Ornithology
- Socioeconomics
- Traffic and transport

The EIAR will accompany the planning application and be available for public viewing and comment as part of the formal consultation period run by the determining authority.

Once the Section 36 planning application has been submitted the determining authority will advertise the planning submission and hold a statutory consultation period whereupon members of the public, as well as statutory consultees, can submit their formal comments on the proposal.

These representations will then be assessed against the proposal and a planning decision made by the determining authority in due course.

Further information

Further information about the project can be found on the Torfichen Wind Farm project website at www.torfichen-windfarm.co.uk together with contact details for our project team. A copy of the key information presented at this exhibition, including an electronic copy of the comments form (which can be filled in online or downloaded), can also be found on the website.

If you would like to be kept up to date with the proposal, please fill in a comments form with your details and ask to be added to our project newsletter mailing list.

Appendix 11: Comments form for consultation feedback – September 2023

Torfichen Wind Farm proposal

September 2023 Public Exhibitions - Comments Form

Your feedback counts

Thank you for taking an interest in our Torfichen Wind Farm proposal. The purpose of these exhibitions is to update the public on the design, explain the changes that have been made since the March 2023 public exhibition events and consultation period, and answer any questions.

The updated layout is unlikely to change between now and submission. Nevertheless, we welcome any further feedback that you may have on the proposal, particularly with regards to ideas for local benefits which the project could deliver, should it be consented. Please provide any feedback in writing by filling out this comments form. **The closing date for comments to RES is Thursday 21 September 2023.**

Hard copy comments forms can be handed in at the exhibitions, posted back to RES at **Torfichen Wind Farm - Project Team**, Renewable Energy Systems Limited, 3rd Floor, STV, Pacific Quay, Glasgow G51 1PQ, or scanned and emailed to danny.mclean@res-group.com.

Please note that any comments submitted to RES during these exhibitions or subsequent consultation period are not representations to the determining authority (the Scottish Government's Energy Consents Unit). Once the planning application is submitted, a formal consultation will be advertised and held by the determining authority to provide the opportunity for people to submit formal representations on the proposal before a planning decision is made.

1. Public exhibitions

1.1 How did you find out about this public exhibition?

- ☐ Newsletter through the door
- ☐ Advert in local newspaper or digital online adverts
- ☐ Word of mouth
- ☐ Project website (www.torfichen-windfarm.co.uk)

Other (please specify): _____

1.2 Which exhibition event did you attend?

- ☐ Middleton Village Community Hall
- ☐ Macfie Hall
- ☐ None – viewed exhibition information on project website only

1.3 What part of the public exhibition did you find most useful?

- ☐ Exhibition information boards
- ☐ Ability to ask RES questions
- ☐ Visualisations (photomontages, wirelines, laptop wirelines)

Other (please specify): _____

2. Updated design and layout

2.1 What's your attitude to the updated proposal for Torfichen Wind Farm?

- ☐ I am supportive
- ☐ I am opposed
- ☐ I am neutral
- ☐ I don't like onshore wind farms in general

2.2 If the project went ahead what do you think about the updated turbine/infrastructure layout?

- ☐ I am happy with the proposed layout
- ☐ I have concerns about the proposed layout
- ☐ I am neutral to the proposed layout
- ☐ I don't like onshore wind farms in general

2.3 Do you have any further comments regarding the proposal or updated design?

3. Community benefits package

RES is proposing to deliver a tailored community benefits package aligned with the priorities of the local community. This package would be worth £5,000 per megawatt (or equivalent) of installed capacity per annum and could include RES' unique Local Electricity Discount Scheme (LEDS), something that has received significant interest from the community. LEDS offers an annual discount to the electricity bills of those properties closest to a participating wind farm. There will be further consultation with the local community, should the project receive consent, on the detail of the community benefits package. In the meantime, please provide any comments below.

3.1 Within which Community Council area do you reside? _____

3.2 Please rank each of the following most-popular ideas, from community feedback gathered so far, from:

1 - high importance; 2 - medium importance; or 3 - low importance:

	Please rank (1-3)
a. Biodiversity initiatives (planting of trees, encouraging wildlife)	
b. Local Electricity Discount Scheme (LEDS)	
c. Electric vehicle charge points within community	
d. Funding for schools, education initiatives, installing solar panels, etc.	
e. Funding for local community groups	
f. Funding for village halls	
g. Improved local transport	
h. Upgraded or new sports facilities	

3.3 **Do you have any other comments regarding ideas, local priorities, or community projects that you would like to see benefitting from Torfichen Wind Farm, should it go ahead?**

4. Your details

Please provide your name and contact details below in order to authenticate this comments form. If you are not comfortable providing us with your full contact details nor wish to be kept up to date, **please include your postcode as a minimum.** Your contact details will be treated by RES with the strictest of confidence, in line with the General Data Protection Regulations (GDPR) 2018. We may at times share your contact details, in confidence, with third parties who we employ to help process your comments or update you on the project and by providing your details below you consent to this. You may write to RES at any time to ask that your contact details be removed from our records and from any third parties we work with.

Name	
Address	
Postcode	
Email	

If you would like to be kept up to date with the project, please ensure to include your email and/or postal address above and tick the box opposite:

Appendix 12: Report on Feedback from March 2023 consultation – September 2023

Torfichen Wind Farm Proposal

Report on feedback


Image: View from Middleton Mains

September 2023

INDEX

1. INTRODUCTION

1.1 Purpose of this report

RES has considerable experience in developing onshore wind projects throughout the UK and believes in the importance of community consultation to identify issues and concerns, as well as benefits and opportunities, which can be considered when developing and designing a project.

The purpose of this report is to summarise the written feedback received from the community during the March 2023 public exhibitions and subsequent consultation period regarding the design of the proposed development and highlight any changes that have been made to the proposal since. Each section focuses on a key topic area and summarises the feedback received, followed by RES' response.

1.2 March 2023 exhibitions and consultation

RES held two public exhibition events in the local area (North Middleton and Heriot) in March 2023 as part of its pre-application consultation on the proposed Torfichen Wind Farm. These events provided people with the opportunity to learn more about the project, discuss the proposal with the project team, and provide written feedback to RES on the initial early stage (scoping) design.

A range of information was made available, including visualisations prepared to NatureScot guidance which helped to give an impression of what the site could look like from different viewpoints in the area. RES staff were on hand to discuss the proposal and answer any questions. A four-week consultation period followed the exhibitions for people to submit written feedback to RES on the proposal and early stage design. More than 74 people attended the events and 28 comments forms were received by the time that the consultation period closed – providing comments across a variety of topics.

RES included a multiple-choice question on the comments form that asked people about their attitude to the proposal for a wind farm at Torfichen. The breakdown of responses is as follows: 48% responded as supportive; 26% responded as 'neutral'; 22% responded as 'opposed'; and 4% responded that they didn't like wind farms in general.

RES also included a multiple-choice question that asked if the wind farm went ahead as currently designed (scoping layout), what people thought about the turbine and infrastructure layout. The breakdown of responses is as follows: 36% responded that they had concerns about the proposed layout; 36% responded that they were neutral to the proposed layout; 24% responded that they were happy with the proposed layout; and 4% responded that they didn't like wind farms in general.

The consultation feedback submitted to RES has been considered by the project team as part of the design development, in addition to feedback from key consultees and the findings from the detailed technical and environmental studies that have been undertaken. We are grateful to everyone who took the time to engage with us on the proposal.

2. LANDSCAPE and VISUAL feedback

Approximately 43% of respondents provided comments relating to the landscape and visual aspect of the proposal which covered a variety of themes.

2.1 Key themes

The key themes and comments raised within the feedback were:

- **Turbine height:** turbines too big; too visible over wide area; question over the economic viability of smaller turbines.
- **Site location**: will spoil views; visually intrusive for walkers and cyclists; already enough wind farms.
- **Exhibition visualisations**: visualisations were limited; would like wirelines from property.
- **Residential amenity**: site will be visible from local properties; residential amenity will be affected.
- **Aviation lighting:** aviation lighting will cause light pollution.

2.2 RES response to landscape and visual feedback

Wind turbine technology has advanced considerably in recent years, meaning that wind turbines are now taller and more efficient which enables them to generate a significantly greater amount of electricity per wind turbine.

Modern taller wind turbines provide more electricity, which helps address the climate emergency, cost of living crisis, and security of energy supply. The 180m tall wind turbines proposed at Torfichen Wind Farm would allow for far greater benefits in terms of renewable electricity generation per wind turbine than smaller turbines would.

Our landscape architects have undertaken extensive assessment work to inform the design development and turbine layout. Key changes (since the scoping design) include the reduction in turbine numbers from 19 to 18 and the movement of each wind turbine location to varying degrees to refine the design and minimise impacts wherever possible. We are looking to achieve a design that strikes an acceptable balance between the visibility of the proposal and its ability to generate significant amounts of renewable energy. Ultimately, the

acceptability of this design will be assessed by the determining authority in relation to current energy policy and planning requirements having considered feedback from consultees as well as representations by members of the community and wider public.

Wind farms are quite often sited on hills or areas of higher ground in Scotland as the wind regime tends to be better in these locations – with smoother and less interrupted wind. However, hills tend to create more visible sites and so the turbine height needs to be assessed accordingly from a landscape and visual perspective to understand if the proposal may be appropriate from a planning perspective.

The Scottish Government's Onshore Wind Policy Statement, published in December 2022, states in paragraph 3.6.1 that *"Meeting our climate targets will require a rapid transformation across all sectors of our economy and society. This means ensuring the right development happens in the right place. Meeting the ambition of a minimum installed capacity of 20 GW of onshore wind in Scotland by 2030 will require taller and more efficient turbines. This will change the landscape."*

At our March 2023 public exhibition events we provided six visualisation boards showing how the proposal may look based on the early scoping design and layout from six viewpoints within the local area. These viewpoint locations were selected in order to demonstrate the most "localised" effects of the proposed development, which would be of most interest to people attending the exhibitions. At this final set of exhibitions, we have chosen to display the same six viewpoints to show the updated turbine layout. These viewpoints are among a total of 22 agreed with NatureScot, Midlothian Council and Scottish Borders Council which will be assessed in the application.

The photomontages and wireline visualisations presented at the exhibitions have been prepared to well established and recognised standards set by NatureScot. Noting the interest received in additional viewpoints at the March 2023 public exhibitions, we have provided visualisation software at this final set of exhibitions to further help to give an impression of what the proposal could look like from different viewpoints in the area. This software will provide an opportunity for people visiting the exhibitions to view an image of the updated design from a location of choosing.

The Residential Visual Amenity Assessment (RVAA) is an important component of the wider Landscape and Visual Assessment which is undertaken as part of the Environmental Impact Assessment (EIA). Following feedback through the Scoping process and public consultations we have been working carefully with the design to minimise potential impacts of the site on residential amenity by increasing the separation distance from wind turbines to settlements and residential properties.

At Scoping, it was confirmed that all properties within 2km of a proposed turbine in the final development area would be included within a standalone Residential Visual Amenity Assessment (RVAA) that would accompany the Landscape and Visual Impact Assessment. This RVAA is now underway, and properties within 2km have been contacted directly to request access to help inform the findings of the RVAA. In addition, in response to a request at Scoping stage from Heriot Community Council; properties between 2km and 2.5km from the application site will also be assessed in the RVAA using information gathered from publicly accessible areas and combining them into manageable groupings.

Environmental Impact Assessments (EIAs) are a compulsory part of the planning and consenting process for wind farms. The purpose of an EIA is to investigate and mitigate any potential effects of a development on the natural, physical and human environment. The findings from the wide range of technical studies and environmental surveys that have been undertaken over the last couple of years will be written up in a comprehensive Environmental Impact Assessment Report (EIAR) which the Scottish Ministers will take into account when deciding whether or not to grant consent for the wind farm.

In accordance with the Air Navigation Order 2016, en-route obstacles at or above 150m, such as the wind turbines proposed at Torfichen Wind Farm, require to be lit at night with medium intensity red aviation lights. Aviation lighting on turbines at or above 150m is set at 2,000 candela on the nacelles. In some circumstances, not all turbines within a wind farm are required to be lit. Furthermore, the aviation lighting is designed to focus the light across and upwards for the attention of aircraft rather than downward to those at ground level.

The light intensity varies in response to weather conditions and visibility (via an atmospheric conditions and visibility sensor on the turbine) – with lighting dimmed to 10% of their intensity in good visibility (typically greater than 5km) but maximised in cloudy or foggy weather (where visibility is typically less than 5km). Consultation is underway with the Civil Aviation Authority (CAA) to agree a lighting strategy with them. If agreed in time, the agreed lighting strategy will be presented in the planning application which will also include a night-time assessment and visualisations. If CAA response timescales do not allow for this, a "worst-case scenario" will be presented in the assessment at application stage.

3. ENERGY feedback

Approximately 32% of respondents provided comments relating to types of energy generation and the needs case for onshore wind.

3.1 Key themes

The key themes and comments raised within the feedback were:

- **Offshore wind**: prefer offshore wind to onshore.
- **Cost of electricity**: question over whether developing onshore wind reduces fuel bills.
- **Other technologies**: need a diverse energy supply; would prefer other technologies (hydro, marine) that do not industrialise the countryside.
- **General comments**: no wind, no power.
- **Onshore wind needs case**: agree with need but wind farms need to be designed sensitively; there are enough wind farms.
- **Carbon payback**: would like more information on carbon payback.

3.2 RES response to energy feedback

We are in a climate emergency, cost of living crisis and also seeking to enhance the security of our energy supply. Onshore wind can address all of these. This is recognised by the Scottish Government's National Planning Framework 4 (NPF4) which was published in February 2023.

Onshore wind plays an important part in creating a balanced energy mix and is required alongside other technologies, all of which have their merits in relation to cost, efficiency, environmental or social benefits. In response to the climate emergency the focus on developing more onshore wind within Scotland has only strengthened – with national targets now set for installing 20GW of onshore wind across Scotland by 2030 to help towards meeting Net Zero carbon emissions by 2045.

Onshore wind, alongside other renewable energy technologies, can generate the cheapest form of new electricity generation. With the rising cost of living and climate change emergency, it is imperative that we deliver electricity efficiently and at lowest cost to the consumer.

The Torfichen Wind Farm proposal includes a battery energy storage system (BESS) which is anticipated to have a storage capacity akin to the wind farm i.e., a power output capacity of up to 100MW and a storage energy capacity of around 200MWh (megawatt hours). The BESS would help maximise generation capacity and efficiency of the proposal and further contribute to energy security.

Typically, wind farms pay back the carbon within 1-3 years and operate carbon free thereafter. A carbon balance assessment will be provided in the Environmental Impact Assessment Report which will accompany the planning application.

4. ECOLOGY and ORNITHOLOGY feedback

Approximately 11% of respondents provided comments focused on ecology and ornithology.

4.1 Key theme

The key theme raised within the feedback concerned potential impact on wildlife from the wind farm.

4.2 RES response to ecology and ornithology feedback

Protecting and minimising any potential direct or indirect impacts on local wildlife and their habitats is of utmost importance and we take this responsibility seriously. We look to mitigate any potential effects of the development during construction and operation on the habitats and protected species that are found to be present or active within the site.

A wide range of detailed ecological surveys have been undertaken by qualified ecologists as part of the non-avian Ecological Impact Assessment (EcIA). The non-avian Ecological Impact Assessment (EcIA) survey and assessment work is an extensive undertaking, and the findings will be written up in the coming months as part of a comprehensive Environmental Impact Assessment Report (EIAR), which accompanies the planning application, that Scottish ministers will take into account when deciding whether or not to grant consent for the project. The planning application and associated documents such as the EcIA and survey data (excluding any confidential annexes) will become available for public viewing and comment as part of the formal consultation period which will be run by the Scottish Government's Energy Consents Unit once the planning application is submitted.

We are in consultation with relevant consultees, including Midlothian Council, NatureScot, RSPB Scotland, and the Forth District Salmon Fishery Board with regard to designated sites, protected areas and protected species.

A wide range of ecological and ornithological studies have been undertaken as part of the Environmental Impact Assessment work and we are also developing an outline Habitat Management Plan for the site.

5. ACOUSTICS feedback

Approximately 11% of respondents provided comments focused on acoustics.

5.1 Key theme

The key theme raised within the feedback concerned the potential acoustic impact of the wind farm.

5.2 RES response to acoustics feedback

The acoustic profile of the turbines is one of many important considerations that has been assessed and carefully managed as part of the site design. The design process will ensure that the project doesn't exceed the strict acoustic limits which will be set within the planning conditions should consent be granted. These limits correspond to existing background acoustic levels typical in the local area, which will control the wind farm acoustics in relation to nearby residential properties.

Operation and construction acoustic assessments and prediction are undertaken in accordance with the relevant standards, current assessment methodologies and best practice as determined by the regulatory bodies, which include Midlothian Council, the Scottish Government and the UK Institute of Acoustics.

In consultation with Midlothian Council, we have undertaken a background sound survey at a number of locations around the site to measure the existing background sound levels. The results of the background sound survey are being analysed by our acoustics team and will inform the setting of the sound immission limits for the operation of the wind farm. These limits will be agreed with the regulatory authority, and the site will be required to comply with these strict noise limits set within planning conditions.

The acoustic impact of the wind farm will be modelled and the output of this modelled work will be presented in the Acoustic Chapter of the extensive Environmental Impact Assessment Report (EIAR) which will accompany the planning application. The Acoustic Chapter of the EIAR will demonstrate that RES has considered all appropriate measures in the design, construction, and operation phases to minimise the acoustic impact of the wind farm.

6. CONSTRUCTION feedback

Approximately 36% of respondents provided comments focused on construction.

6.1 Key themes

The key themes and comments raised within the feedback were:

- **Access route:** proposed route for turbine deliveries is acceptable.
- **General comments**: general concerns about potential road damage; impact on private water supplies.

6.2 RES response to construction feedback

RES has commissioned surveys to understand traffic flows and volumes on local roads and assess any potential impacts of construction traffic on the local area. This has enabled RES to identify potential pinch points, bottle-necks, and areas which may require traffic management and will help in developing mitigation strategies. The data collected from the traffic surveys will be presented in the Traffic and Transport chapter of the extensive Environmental Impact Assessment Report (EIAR) that will accompany the planning application.

Should the project be consented, a detailed Traffic Management Plan would be developed and agreed with Midlothian Council in consultation with Police Scotland, setting out the steps that RES would take to help mitigate any potential impacts on local traffic and road users and ensure road safety. Some examples of measures that have been taken by RES on other construction projects include: introducing a reducing speed limit for project construction traffic along certain stretches of road; avoiding turbine deliveries between school-drop off and pick-up and/or rush-hours; delivering turbine components at night-time; and, agreeing certain 'routes to site' for daily construction traffic.

As part of the traffic assessment and data-gathering process RES has also commissioned turbine delivery-specific surveys – including swept path analysis along the proposed turbine delivery route as well as detailed assessment of the site access point with regard to visibility splays and safety requirements.

The abnormal load vehicles which deliver the longer turbine components (primarily blades and towers) are specialised multi-axle vehicles, some of which can raise their load height to clear walls and bridges) that are driven by experienced operators. These vehicles have a considerable ability to precisely navigate and manoeuvre along a wide range of roads. Should the project be consented, further detailed survey work and drive-throughs along the route will be undertaken by RES and the turbine haulier to assess any more challenging stretches of the delivery route and ensure that they can be safely navigated.

RES has collected Private Water Supply (PWS) data from Midlothian Council to establish the PWS source locations and source types in order to inform the PWS assessment that will be presented in the EIAR. The findings of the assessment will inform what further work would be required, if any, which may include baseline monitoring of relevant PWS, before, during and after construction. Any work associated with PWS post consent will be enforced through planning condition and subject to agreement with Midlothian Council.

At the first set of public exhibitions we held in March 2023, some residents raised concerns regarding the durability of a cast iron private water main adjacent to the B7007, stating that it had previously been damaged by heavy-goods vehicles. RES contacted the owner of the land which accommodates the private

water main, and were advised that it was replaced with a sturdier alkathene main which has resolved the issue.

RES often establishes local Community Liaison Groups (CLGs) during the construction phase of a wind farm to support regular engagement with the local Community Councils and wider public – in addition to project communications and updates via local newsletters and the project website. This approach ensures that questions and concerns or opportunities can be raised to RES and encourages a constructive dialogue to ensure that the project is delivered with consideration to the local community.

RES' construction team has a wealth of experience in managing construction traffic, having built many wind farms within Scotland and across the UK and Ireland, and works closely with the local community to minimise disruption wherever possible. RES also has a strong track record for safety on its projects and within the company's culture. In fact, RES recently won Health and Safety Team of the Year at the 2022 Safety and Health Excellence (SHE) Awards.

7. COMMUNITY BENEFITS feedback

Approximately 75% of respondents provided comments relating to the community benefit package that will become available should Torfichen Wind Farm be consented. As regards to whether RES' unique Local Electricity Discount Scheme (LEDS) should form a part of the tailored community benefits package for Torfichen Wind Farm, 73% responded 'yes', 4% responded 'no' and 23% responded 'maybe'.

7.1 Example comments

In response to the below question on the comments form, the following comments were received:

Q. Community benefit tends to focus on those Community Council areas closest to the proposal which host the site and/or infrastructure. What are your views on this approach for Torfichen?

- *"It would be a good thing to benefit the local community council."*
- *"The community council is probably best placed to propose how such benefits best utilised."*
- *"As Heriot already gets quite a lot of wind farm money, I would be quite happy for the communities that are further away to get some of the money."*
- *"Agree to benefit those closest on views disrupted most."*

In response to the below question on the comments form, the following suggestions were received:

Q. What ideas, local priorities, or community projects would you like to see benefitting from Torfichen Wind Farm, should it go ahead?

- *"Local group funding"*
- *"Support for local services"*
- *"Help for public transport improvements"*
- *"EV charging points"*
- *"Village hall extension"*
- *"Cheaper electricity bills"*
- *"Planting trees. Encouraging wildlife."*
- *"Tennis courts / Astro pitch"*

7.2 RES response to community benefits feedback

Should the project be consented, a community benefit package will be established to support the communities who host, and are closest to, the project.

RES is proposing a tailored package of benefits for the community from Torfichen Wind Farm that would be worth £5,000 per megawatt (or equivalent) of installed capacity per annum. Based on the current layout design and installed capacity of 108MW this could equate to a tailored community benefit package for the local area worth £540,000 (or equivalent) each year.

We take a tailored approach and consult with the local community, both pre-planning and post-consent (should the project be granted planning permission), to gain an understanding of the local priorities and to seek suggestions for projects that will help to secure long-term economic, social and environmental benefits for the area. This approach ensures the community benefits package that is delivered is aligned with the priorities of the local community, which may involve initiatives that sit outside the parameters of a traditional application-based fund.

This package could include RES' unique Local Electricity Discount Scheme (LEDS), something that has received significant interest from the community as it delivers direct and tangible benefits through offering an annual discount to the electricity bills of those living and working closest to a participating operational wind farm.

Should the project receive consent, the area of benefit for Torfichen Wind Farm will be determined in consultation with locally elected representatives from the closest communities. It is important to note that voluntary community benefits are not a material planning consideration.

RES is also committed to ensuring that, wherever reasonably practicable, local contractors and employees are used in all aspects of wind farm development. Based on the updated design, the Torfichen Wind Farm proposal

is predicted to deliver approximately £5 million of inward investment to the area in the form of jobs, employment, and use of local services during the development, construction and first year of operation.

8. EXHIBITION and GENERAL PROJECT feedback

RES included a multiple-choice question on the comments form that asked people to what extent they felt they had increased their knowledge of the Torfichen Wind Farm proposal having visited the exhibition. The breakdown of responses is as follows: 59% responded 'quite a lot'; 19% responded 'a lot'; 18% responded 'a little'; and 4% responded 'very little'.

Approximately 25% of respondents provided specific comments on the exhibition events, for example: more detail on potential visibility of wind farm from the surrounding area; ability of RES staff to answer questions at this stage in the development process; further information on grid connection; and request for project timescales through to construction and operation.

8.1 RES response to exhibition and general project feedback

We are grateful to everyone who provided feedback on our early scoping design at the public exhibition events we held in March 2023 the local area to engage with people on the proposal (and during the subsequent consultation period).

The purpose of this final suite of public exhibitions is to provide people with an opportunity to review the updated 18 wind turbine layout design, speak with the project team and ask any questions. Whilst the layout design is almost finalised, these events provide people with a further opportunity to submit written feedback again to RES on the updated layout design.

In response to requests for additional viewpoints in the area, we have provided visualisation software at this final set of exhibitions to enable visitors to view an image of the updated design from a location of choosing. As well as updated layout design, infrastructure and constraints drawings, there is also more information on aspects such as the on-site substation, grid connection, and proposed battery energy storage system (BESS).

RES has been advised by the Transmission Owner (TO) that the proposed wind farm will connect to the National Grid via a 132kV connection into Gala North, a new substation near Galashiels. The grid network operators are currently upgrading the grid infrastructure in the country and RES will be required to pay transmission connection charges to National Grid during operation of the wind farm for the grid connection. We have accepted a grid offer from the TO, in this case Scottish Power Transmission (SPT).

SPT, as the TO, is responsible for maintaining and investing in the grid in the south of Scotland. This includes designing connections for transmission grid applications, such as that for the Torfichen Wind Farm, and submitting the planning applications for these connections. As such, the grid route is subject to a separate planning application from the wind farm – and will be submitted as a separate Section 37 planning application under the Electricity Act by the TO once they have finalised their design.

Once the planning application for the grid route is submitted, there will be a consultation period undertaken by the TO during which details of the grid route and method will be available for the public to provide comment to the TO as part of the planning process. Indicative details of the anticipated route of the grid connection for the proposal will also be included by RES within the Proposed Development Description chapter of the Environmental Impact Assessment Report (EIAR) which will accompany the planning application for Torfichen Wind Farm.

Since the wind farm proposal first became public in January 2023, we have undertaken an extensive amount of technical and environmental site survey work. We have also considered feedback from a wide range of key consultees on the proposal including local Community Councils and Midlothian Council.

We are now at a stage where most of the site survey work is complete, the updated 18 wind turbine layout design is being refined and finalised, and the Environmental Impact Assessment (an extensive document which will accompany the planning application) is underway.

A Pre-Application Consultation (PAC) Report will also accompany the planning application submission. The report will summarise the exhibition events, communications activity that has been undertaken on the project and consultation feedback received.

Once the proposal is submitted into planning there will be an opportunity to submit formal comments on the proposal to the determining authority. The Scottish Government's Energy Consents Unit will hold a statutory consultation period whereupon members of the public, as well as statutory consultees, can submit their formal comments on the proposal. These representations will then be assessed against the proposal and a planning decision made by the determining authority in due course.

A copy of the key information presented at this exhibition, including an indicative timeline of the steps required to go through the planning process up to when the wind farm is expected to reach full operation, if consented, can also be found on the website at www.torfichen-windfarm.co.uk together with contact details for the project team.