

**PLANNING
COMMITTEE**

15th September 2021

Planning Application 21/00195/FUL

Construction of a Greener Grid Park comprising energy storage and grid balancing equipment, along with associated infrastructure, landscaping and access.

Land South Of, Astwood Lane, Feckenham, Redditch, Worcestershire, B96 6HP

**Applicant: Mr Michael Fletcher (Statkraft UK LTD)
Ward: Astwood Bank and Feckenham Ward**

(see additional papers for site plan)

The case officer of this application is Mr Paul Lester, Planning Officer (DM), who can be contacted on Tel: 01527 881323 Email: paul.lester@bromsgroveandredditch.gov.uk for more information.

Site Description

The site comprises 2.83 ha of land to the south of Astwood Lane, immediately east of the Feckenham National Grid Substation. The site is located within semi-improved grazing land and comprises one rectangular field and part of two adjacent fields to the east and northeast. The boundaries of the western field are well defined with tall/grown-out hedgerow as well as post and wire and wooden fencing. A large pond is located in the eastern part of the western field, while a water-filled ditch runs along its eastern boundary. Astwood Lane runs to the north of the site, which includes an access corridor through a small field with manmade grassed bund and tall hedgerow. A low voltage overhead electricity transmission line crosses the site from northwest to southeast.

The surrounding area is primarily agricultural, with cultivated fields and grazing land to the north, south and east of the site. The existing National Grid Substation immediately to the west of the site is used for power distribution and is industrial in appearance. The metal pylons and overhead cables associated with the Substation, which are approximately 50 m in height, extend into the surrounding area.

The village of Feckenham is approximately 1 km to the west of the site. The nearest residential properties are Salt Way Farm and Mutton Hall, which lie approximately 350 m to the south and 500 m to the northeast. The site is within the Greenbelt and lies within Flood Zone 1 and is not subject to any ecological or heritage designations,

Proposal Description

The applicant is seeking planning permission for the construction and operation of a Greener Grid Park including an energy management facility, battery storage technology and associated infrastructure, with landscaping and access.

PLANNING COMMITTEE

The development is designed to support the flexible operation of the National Grid and decarbonisation of electricity supply. The development will store, import and export electricity but will not generate any additional electricity nor have any direct on-site emissions of CO₂ in the course of normal operations. Planning permission is sought for the following components.

- 2 no. energy management buildings (20.7 m x 38.6 m x 8.91 m eaves height/10 m ridge height) constructed with pre-galvanised powder coated steel in the northern portion of the site containing mechanical equipment (synchronous condensers) to balance the grid and associated e-houses;
- 40 no. containerised battery units (12.9 m x 2.44 m x 2.59 m) located in the southern portion of the site;
- 5 no. inverter units (6.1 m x 2.44 m x 2.59 m) located adjacent to the batteries;
- 2 no. communications houses (12.19 m x 2.44 m x 2.59 m) near the eastern site boundary;
- 2 no. LV switch houses near the eastern boundary (7.5 m x 9.1 m x 3.5 m);
- 8 no. coolers (9.6 m x 2.4 m x 2.5 m) adjacent to the energy management buildings;
- 4 no. transformers with max height of 10.8 m and 7 m high connecting busbars adjacent to the energy management buildings;
- 2 no. emergency backup diesel generators (6.1 m x 3.6 m x 2.9 m);
- 1 no. welfare facility (12.9 m x 2.44 m x 2.59 m);
- 6 no. security columns of 6 m in height with CCTV cameras;
- 3.4 m palisade/security fence around the perimeter of the main compound;
- Existing pond to be retained with 5 m buffer from new infrastructure; surface of main compound to be covered with permeable crushed aggregate;
- Creation of 1 n.o surface water attenuation pond (822 m²) and 1 no. habitat management pond (607m²) to the east of the main compound

A permanent access for the site for maintenance and operation purposes is proposed from the Astwood Lane. The main components of the facility will be light grey in colour to blend in the development with the adjacent substation which is also grey.

The development will be operated remotely, with occasional inspection and maintenance visits which will occur on average once per month. The proposed welfare facility for visiting staff will contain a WC with a sealed septic tank so that no foul drainage connection is required. The remote operation of the facility is anticipated to result in 11 FTE jobs.

The application also proposes substantial landscaping works. All existing trees will be retained and protected. A significant amount of new planting and biodiversity enhancements are proposed, as shown as the Landscape and Biodiversity Mitigation Plan.

PLANNING COMMITTEE

The features of the landscape scheme are as follows:

- 34 m of Native Hedgerow Planting adjacent to Astwood Lane in order to provide visual screening from the road and replace the hedgerow removed to facilitate access;
- 9,501 m² of Native Woodland and Scrub Planting in the field to the east of the main compound;
- 1,459 m² of Native Woodland Screening Planting to the northeast and southeast of the main compound to screen views of infrastructure from the north and east;
- New habitat management pond and SuDS pond; and
- 465 m² of wildflower and grass seeding on embankments and disturbed ground to create an herb rich strip of wildflower grassland.

60 native trees of 1.5-1.75 m in height will be planted within the proposed woodland areas, along with hundreds of smaller trees. The species to be planted have been selected for their contribution to biodiversity and include species such as English oak, hawthorn, rowan and field maple.

Relevant Policies:

Borough of Redditch Local Plan No. 4

Policy 1: Presumption in Favour of Sustainable Development

Policy 2: Settlement Hierarchy

Policy 5: Effective and Efficient use of Land

Policy 8: Green Belt

Policy 11: Green Infrastructure

Policy 15: Climate Change

Policy 16: Natural Environment

Policy 17: Flood Risk Management

Policy 18: Sustainable Water Management

Policy 19: Sustainable Travel and Accessibility

Policy 20: Transport Requirements for New Development

Policy 22: Road Hierarchy

Policy 36: Historic Environment

Policy 39: Built Environment

Policy 40: High Quality Design and Safer Communities

Others

NPPF National Planning Policy Framework (2021)

NPPG National Planning Practice Guidance

Redditch High Quality Design SPD

National Policy Statement for Energy

National Policy Statement for Electricity Networks Infrastructure

PLANNING COMMITTEE

Relevant Planning History

None

Consultations

Highways Redditch

No objection subject to conditions

- Access gates
- Vehicular access
- Conformity with Submitted Details
- Vehicular visibility splays approved plan
- Construction Environmental Management Plan
- Highway condition survey

Red Kite Network

No objection subject to the following conditions

- Biodiversity Enhancement
- Landscape Ecological Management Plan

WRS - Noise

No object subject to condition

- Noise Assessment

WRS - Lighting

No objection subject to condition

- External Lighting: Full details of any proposed external lighting, in line with the ILE guidance, shall be submitted for comment and approval.

Climate Change Manager

Supports the application

I consider this to be sustainable development. Although the site is in the green belt, this is necessitated by the location of the Feckenham high voltage substation. The overall effect of the development will be to aid decarbonisation, though every effort should still be made to minimise carbon emissions associated with construction of the site, such as related to transport and materials.

PLANNING COMMITTEE

Arboricultural Officer

No objection subject to conditions:

- Tree protection
- Hand excavation in tree protection area.
- No storage of plant/materials in tree protection areas.

Western Power Distribution

No comments received

Conservation Officer

No objection

Worcestershire County Council Countryside Service

No objection

Consultant Conservation and Landscape Officer

No objection subject to a condition
Landscape Ecological Management Plan

Worcestershire Archive and Archaeological Service

No objection subject to conditions relating to:

- The submission of a programme of archaeological work
- Written scheme of investigation

North Worcestershire Water Management

No objection subject to condition relating to:

- Surface water drainage

WRS - Contaminated Land

No objection

Cllr Clayton

No comments received

PLANNING COMMITTEE

Cllr Warhurst

I am objecting on the ground of access to the site and road safety, having tried to reach compromise I am pleased that Church Road Astwood Bank has been discounted due to road safety and complete unsuitability of this route, for 58 artics a day. It could never have worked as a route, so common sense has hopefully prevailed.

However the proposed second route is just as unsuitable which would take 58 articulated vehicles per day directly through Astwood Bank, down Evesham Road and Edgioake Lane. I strongly suggest that Highways and planning officers visit these sites and watch the turmoil unfold when 1 artic passes through this route.

Evesham Road at Astwood Bank is very narrow through the village and only 1 lane can be used in the central section throughout the day. There is no way that the road could take 7 x 44ft artics per hour every day one every nine minutes), gridlock would be the guaranteed outcome all day every day.

This exact same route was turned down for routing for the new Amazon site and it was proven at the time that route could not take more than an occasional articulated vehicle.

Cllr Rouse

Whilst I welcome green energy initiatives and job creation I do need to raise some concerns about this application.

There appears to be a calculation of over 50 lorries per day arriving at the site, for a period of 12-18 months. Assuming each lorry has to travel an average of 40 miles per day to make the trips to and from the site that is a total mileage of over 520,000 miles - or around the distance to travel from the Earth to the Moon and back again. I cannot believe this figure is correct, otherwise it would indicate the carbon cost of transporting materials to the site would never be mitigated by the resulting scheme.

The roads in this area are also not suitable to withstand this volume of traffic and the types of large delivery vehicles required. From whichever direction the site is approached there is insufficient infrastructure to cope with the additional demand and type of vehicles.

I also need to see safety reports compiled around the handling and storage of lithium at this site. I, like many others, will need to be satisfied on the risks around leaks and potential fires, mitigation measures put in place, and contingency planning to ensure the safety of residents, wildlife and nature.

I hope the applicant is able to provide additional detail on the points raised and the mitigations they will deploy to reassure local residents, not just those in the immediate vicinity but those further up in Redditch South too. With the Eastern Gateway increasing HGV traffic along Rough Hill Drive by 10% we need to understand what increase this

PLANNING COMMITTEE

development will cause on the same road and what steps will be taken to mitigate climate harm as well as congestion effects.

Natural England

No Objection

Feckenham Parish Council

Feckenham Parish Council (FPC) held a Parish Meeting on 15.3.21 to assess local public opinion and views on the Feckenham Greener Grid planning application by Statkraft 21/00195/FUL. We noted that this was the largest and most significant development proposal effecting the village for a very long time and thus the outcome of this application would be extremely important. Views of local people covered a number of different topics relevant to this planning application. Whilst there was widespread support for the concept of energy conservation and "green energy measures" there was overwhelmingly more concern about the specifics of Statkraft's proposed scheme. Feckenham Parish Council subsequently held a full formal meeting on 24.3.21 to discuss its response to the planning application and voted unanimously to object to it on the basis that this was the overwhelming majority view of the local population. The Parish Council noted that some of the issues were difficult to comment on at this point because we could not be sure of what might happen in the future - for instance there was uncertainty and great worry about whether this development might subsequently trigger very unwelcome follow-on construction of solar farms occupying large swathes of local agricultural land. Furthermore we were aware that there is a substantial body of published information which draws into question the concept and utility of Lithium Ion Battery Energy Storage Systems (BESS) of 50MW capacity such as Statkraft's current scheme, when compared with other types, size, and siting of alternative BESS facilities - some of which are much larger and some of which use alternative technologies. We therefore doubt that Statkraft's argument that this particular format and layout detailed in their current planning application justifies the strict criteria needed to demonstrate an exceptional need for this particular development in Green Belt Land. This is because the same or better energy saving capacity could well be provided by building larger energy storage facilities elsewhere or by using different configurations of more efficient technology. We request that Redditch Planning Authority take note of the following points in processing and determining the application.

Planning History

This is the third application to site a Battery Energy Storage System (BESS) facility close to the National Grid electrical substation in Feckenham. The first application near to Grade II* listed Shernock Court by ANESCO in 2016 was opposed by FPC, due to environmental and heritage concerns, and was withdrawn by the applicant. The second application (17/01445/FUL) was sited in an existing modern agricultural barn at Saltway Farm on the B4090, it gained planning consent, but was never built and we think this permission expired on 5.2.21. In this second application FPC raised a number of very

PLANNING COMMITTEE

significant safety concerns and requested that the Local Planning Authority (LPA) investigate and address these - but disappointingly it completely failed to do so and granted permission without the due diligence we had expected. Some of these same concerns exist for this current application (see below) and we specifically request that the LPA take these matters seriously and ensure that they are appropriately investigated and addressed this time.

Green Credentials

FPC note that the proposed scheme could make a positive contribution to stabilizing the electricity supply, thereby saving energy - which is a very important environmental issue, however we were not convinced that such grid stabilizing technologies could not be more efficiently sited nearer to where the energy was actually generated and Statkraft have not provided any independent evidence to corroborate their claim that can only be done by siting a small 50MW BESS facility at this particular location. We note that no electricity is actually generated at the National Grid facility in Feckenham and that Statkraft deny that they are going to build any solar farms locally. We did however note that Statkraft had taken some trouble to assess and try to minimise the negative environmental impacts of the development itself, however there were still areas of great concern - see below:

Areas of Concern

Safety:

The technology involved in battery storage facilities is new and evolving and there have already been a large number of serious adverse incidents worldwide involving these units. FPC believes that safety is paramount. Specifically, the presence of large quantities of lithium in the batteries (which is known to be both highly toxic and inflammable) requires a comprehensive independent Health and Safety assessment by the Health and Safety Executive (HSE). This has not yet been done and we believe that such an assessment is a statutory requirement for a facility of this size under Section 4 of The Town and Country Planning (Development Management Procedure) (England) Order 2015, and we therefore request that the LPA make an appropriate referral to HSE. In regard to Fire risks - we request that the LPA consults the Redditch Fire & Rescue Service and obtains a comprehensive assessment of the fire risks and their ability to effectively respond to any adverse events. We think there should also be some planning consultation and risk assessment involving the LPA and Western Power/National Grid who operate the existing substation, as there is no mention of this in the existing documentation. For instance, were the BESS facility to catch fire, what would happen to the electricity supply routed through the substation to Redditch and the surrounding areas?

Location and Design:

Concerns have been raised by local residents who point out that the physical appearance of a large number of metal container buildings is very unsightly and incongruous in precious Green Belt agricultural land. This particular site also has historic connections to the ancient forest of Feckenham and is very close to Feckenham Village with its Conservation Area. The facility will be visible from the top floor of Grade II* Shernock

PLANNING COMMITTEE

Court (we are unsure whether the owners have been consulted in the original list of consultees - certainly they should be). Questions have also been raised about whether this facility could be sited elsewhere (as above). The development site is Green Belt land so FPC request that the LPA are mindful of whether sufficient exceptional need has been demonstrated for this large project on this particular site or whether it could equally well be located elsewhere, for instance, within the existing electricity substation or in existing local power stations, thereby avoiding the unnecessary sacrifice of irreplaceable Green Belt land. As far as design goes suggestions have been made about whether a soil bund construction would be better than the proposed metal fencing and tree screening. A soil bund would provide better visual cover, protection from water runoff, noise screening, and would complement the existing earth bund adjacent to the electricity substation. Concerns have also been raised about the entrance to the facility and whether an alternative or second entrance could be made onto the B4090 via the National Grid substation land - this would have the significant advantage of allowing lorries to enter the site from a different direction, thereby reducing HGV traffic along Astwood Lane.

Environmental Impact & Traffic

The LPA have said that a formal EIA assessment is not required - presumably because the site is less than 5Ha in area. FPC notes that Statkraft have, to some extent, considered environmental impact in their application reports and were trying to minimise its adverse effects. However concerns have been expressed about low frequency noise pollution from electrical units and cooling fans. Such noise pollution is known to carry over long distances and could disturb residents in Feckenham, so we ask that specific consideration is given to minimising noise generation and providing effective noise absorbing shielding or fencing within the development. Preferably any specifications for shielding or fencing should be defined and conditioned at the planning and approval stages. FPC notes that, during the construction phase of the proposed development, a very large number of HGV vehicles would be accessing the site and using the local roads (approximately 58 lorries daily). We specifically request the Highways officer make a careful assessment of this very heavy burden of traffic on the existing road network and Feckenham itself and that robust arrangements are made to prevent any lorries from entering the village and that road access for these HGV vehicles should be defined and precisely conditioned in any subsequent planning approval. Statkraft's current proposals do not contain a formal Transport Plan and FPC conclude that such a Plan would be the most efficient mechanism for minimising these significant adverse traffic impacts. We ask therefore that the LPA require Statkraft to produce a suitable Transport Plan. Furthermore, we question whether a single entrance onto Astwood Lane will be adequate and ask (as above) whether a second access route needs to be constructed via the existing National Grid site.

Ongoing Issues

Whilst FPC accepts that there are time limits within the normal planning consultation process, we are aware that further significant concerns or issues may become apparent after the official consultation period ends. Because of the size and importance of this particular development we ask that the LPA to take a flexible approach and to fully

PLANNING COMMITTEE

consider any further communications we make up until the point where this application is determined.

Additional comments received 27th May 2021; Planning Application 21/00195/FUL
Further comments by Feckenham Parish Council

Feckenham Parish Council wish to draw attention to the following issues in relation to Transport Access and Highways consequences of this Planning Application. This statement is correct as of 25th May 2021, but we note that Statkraft are possibly already revising their access to the development site in relation to our concerns, though we have yet to have sight of any such revisions. We also note that the Council's Highways Officer claims to have done a robust assessment of the current application, but, in our opinion, he has overlooked a number of important factors, and his report is therefore significantly flawed. The three issues are as follows: -

1. At present the sole proposed access to the development site is via Astwood Bank from the Evesham Road, along Astwood Lane. This is a tortuous and narrow road, with significant areas where only single file traffic is possible. For instance, for several hundred metres adjacent to Astwood Bank Primary School, the road is regularly partially blocked by parked cars, and traffic flow is seriously compromised at school drop off times. Astwood Lane also has a 7.5-ton weight restriction on it (there is a sign saying this in Astwood Bank); and use above this level is only permitted for "access". Whilst it is arguable that HGV serving the development area would be "accessing" the site, we question whether the volume of traffic involved might damage the road itself - given the stated weight limits and the sheer number of HGV's involved in building the facility.
2. Statkraft have produced a traffic survey detailing the proposed level of construction, when compared to the current number of HGV's using Astwood Lane. They claim that the construction traffic would only represent a small increase on the existing figures. However, we have questioned the accuracy of their measurements because the stated existing levels of use, do not correspond with our own observations.
3. In any event we suggest that the matter be re-referred to the Council's Highways Officer, so that he could consider whether access from the Evesham Road via the B4090 Saltway and then along Rockhill Lane might be a more sensible option. This alternative route is a completely straight and much wider road (without weight restrictions) and which is not hampered by the presence of a Primary School. However, we note also, that Rockhill Lane also has a 7.5-ton weight limit "except for access". We therefore ask that the Highways Officer consider whether this limit would cause difficulties in relation to this proposed alternative route for construction traffic.

In short, the Parish Council objects to the existing proposal for construction traffic access because it is totally unsuitable; and recommends that the Highways Officer and Statkraft discuss using the B4090 from the Evesham Road as an alternative.

PLANNING COMMITTEE

Pre Application Consultation Exercise by Statkraft

The NPPF recognises that early engagement has significant potential to improve the efficiency and effectiveness of the planning application system for all parties. The Council's adopted Statement of Community Involvement suggests examples of pre-application community involvement.

In order to comply with Covid-19 social distancing requirements in place at the time, the consultation was conducted remotely using a variety of communication methods to reach the widest possible audience. This included letters to local residents, letters and emails to Feckenham Parish Council and Redditch Borough Council Ward Members, a Consultation website, a phone line, postal address and email address for enquiries and consultation responses and enquiries and publicity poster to raise awareness of application placed in window of local shop.

A limited number of queries were raised by members of the public, this covered the following topics:

Source and amount of energy to be stored in the batteries;
Specifications of equipment to be used;
Environmental benefits;
Reason for site being selected;

In addition, Feckenham Parish Council asked a further 10 questions which were responded to by the applicant.

These concerns form a material consideration in the assessment of this planning application and the queries raised have been addressed within this report.

Public Consultation Response

Publicity

- 79 letters sent 18th February 2021 (expired 14th March 2021)
- Site notice posted 18th February 2021 (expired 14th March 2021)
- Press notice published in the Redditch Standard 22nd February 2021 (expired 15th March 2021)

21 representations received objecting to the scheme on the following issues:

Principle

- Development will result in a loss of countryside/agricultural land
- Development will result in a loss of Green Belt land

Form of Development

- Detrimental visual impact
- Loss of views

PLANNING COMMITTEE

Highways and Access

- Development will add to the already congested roads in this area and through Redditch
- Highway safety
- Pedestrian safety concerns

Noise and Disruption

- Concerns regarding the increased noise from traffic and development
- Concerns regarding the disruption during development from site traffic and work
- Delays and disruption caused by highways work

Drainage and Flood Risk

- Drainage in the area is not adequate for the development
- Development will increase the risk of flooding

Biodiversity and Trees

- Destruction of wildlife habitats
- Concerns regarding the removal of tree and hedgerows and the effect this will have on the ecology of the site and wildlife
- Impact on protected species

Public Safety

- Risk of Fire
- Risk of accidents, which would have a detrimental impact on Feckenham

Other Matters

- No green credentials to justify the proposal
- Impact on Feckenham Conservation Area
- Lighting impact

Other issues have been raised but these are not material planning considerations and have not been reported.

Assessment of Proposal

Background

In 2015, the UN Climate Change Conference agreed that in order to limit significant impacts arising from global warming, a worldwide temperature increase would need to be limited to 1.5°C. In response to this, the Intergovernmental Panel on Climate Change (IPCC) published a report (6 October 2018)¹ following the 48th Session in South Korea, to establish the rapid and far-reaching changes which are required to meet this target.

¹ [Global Warming of 1.5 °C — \(ipcc.ch\)](https://www.ipcc.ch)

PLANNING COMMITTEE

Amongst other significant transitions, the IPCC has stated that by 2050, 97% of power will need to be generated from renewables.

The UK's commitment to the 2015 Paris Agreement and its long-term objective of a 2050 decarbonised economy, makes the transition to a decarbonised energy system essential. In October 2017, the Government published a Clean Growth Strategy², focussing on growing national income whilst cutting greenhouse gas emissions. The strategy recognises that the way in which energy is generated in the UK is changing and that complementary mechanisms, including energy storage, will play a vital role.

In July 2017, BEIS and Ofgem published Upgrading our Energy System: Smart Systems and Flexibility Plan³, which sets out 29 actions that the UK Government, Ofgem, and industry will undertake to remove barriers to smart technologies, including storage; enable smart homes and businesses; and make electricity markets work towards flexibility. The SSFP states that:

“By harnessing the potential of energy storage, demand-side response and smarter business models, we have an opportunity to upgrade to one of the most efficient, productive energy systems in the world. This is central to how we deliver secure, affordable and clean energy now and in the future”. This document has recently been updated by the Transitioning to a net zero energy system which was published in July 2021⁴.

In June 2019⁵, the UK became the first major economy in the world to pass laws to end its contribution to global warming by 2050. The target will require the UK to bring all greenhouse gas emissions to net zero by 2050, compared with the previous target of at least 80% reduction from 1990 levels. The UK's 2050 net zero target — one of the most ambitious in the world — was recommended by the Committee on Climate Change, the UK's independent climate advisory body. Net zero means any emissions would be balanced by schemes to offset an equivalent amount of greenhouse gases from the atmosphere, such as planting trees or using technology like carbon capture and storage.

The UK Government published its Energy White Paper⁶ in December 2020. The Paper builds on the Prime Minister's Ten Point Plan to set the energy-related measures consistent with net zero emissions by 2050. One of the key aspects of achieving net zero identified in the paper is the modernisation of the energy system. The Paper indicates that electricity demand in the UK could double by 2050 due to the electrification of transport and heating.

² [Clean Growth Strategy \(publishing.service.gov.uk\)](https://publishing.service.gov.uk)

³ [\[Withdrawn\] Upgrading our energy system: smart systems and flexibility plan - GOV.UK \(www.gov.uk\)](https://www.gov.uk)

⁴ [Transitioning to a net zero energy system: Smart Systems and Flexibility Plan 2021 \(publishing.service.gov.uk\)](https://publishing.service.gov.uk)

⁵ [Climate change targets: the road to net zero? - House of Lords Library \(parliament.uk\)](https://www.parliament.uk)

⁶ [Energy white paper: Powering our net zero future - GOV.UK \(www.gov.uk\)](https://www.gov.uk)

PLANNING COMMITTEE

The Applicant

The applicant Statkraft UK Ltd⁷ is Europe's largest generator of renewable energy; producing hydropower, wind power, solar power, battery storage, and supplying district heating. Statkraft owns and operates 11 wind farms in the British Isles and the Nordic countries with a combined installed capacity of almost 1,000 MW (1 GW).

The Need for the Development

Renewable technologies are intermittent as the amount of energy generated is dependent on weather conditions. It is therefore necessary to balance demand and supply in order to prevent shortages and blackouts.

There is a growing demand by network operators for a broad range of services such as energy storage and management. The proposed development is designed to support the flexible operation of the National Grid and the decarbonisation of the electricity supply. The proposed Greener Grid Park would provide rapid-response electrical back-up and energy management to the National Grid and would also represent an early deployment within the UK of a high-tech grid balancing facility, addressing intermittency and fluctuations in inertia. This is required for several reasons:

Electricity Market Reform

Given the reduction in centralised coal-fired power, increasingly cheap but intermittent renewable energy supply and the transition to electric vehicles, it is increasingly likely there will be peaks and troughs in the UK energy supply and demand.

The development is proposed in response to the requirement for continuity of supply and storage of electricity, particularly during periods of peak demand and over-supply. Electricity Market Reform ('EMR')⁸ is a UK government policy designed to:

- Incentivise investment in secure, low-carbon electricity;
- Improve the security of the UK's electricity supply; and
- Improve affordability for consumers.

It is estimated that over the next decade, the UK will require approximately £100 billion investment in electricity infrastructure to accommodate projected future increases in electricity demand, replace ageing power stations and prevent electricity blackouts. However, old coal power plants are in the process of reducing capacity and closing as they no longer meet the required environmental and performance standards and existing nuclear power plants are reaching the end of their design lives, while the delivery of new nuclear plants has been beset by delays.

⁷ [Statkraft](#)

⁸ [Electricity Market Reform: policy overview - GOV.UK \(www.gov.uk\)](#)

PLANNING COMMITTEE

The Capacity Market

Through the Energy Act 2013⁹, the Capacity Market mechanism was introduced to ensure security of electricity supply at the least cost to the consumer.

To deliver a supply of secure, sustainable and affordable electricity, the UK needs not only investment in new generation projects and innovative technologies but to get the best out of existing assets on the network. The Capacity Market aims to deal with both these issues by bringing forward new investment while maximising current generation capabilities.

The Capacity Market aims to balance the difference between demand and supply and to bring forward investment in new generation projects and innovative technologies, in parallel with maximising the utilisation of the existing generation capacity.

Balancing the Network

Balancing the system to ensure demand is met by supply is a key requirement of the National Grid, and it is becoming more challenging as intermittent generation – such as wind and solar power – becomes a bigger proportion of the overall energy mix. The National Grid has a constant supply of ‘extra power’ available for use when the power required by customers is not equal to the power generated and a reserve supply is needed. The Balancing Mechanism is used to ensure that the network is in balance and reserve power is then used when the network comes under ‘stress’. When unforeseen demand is put on the network, such as when a large power station suddenly comes offline, then the National Grid control room need an alternative source of power.

Climate Emergency

Redditch Borough Council recognises that climate change is one of the greatest challenges facing humanity and is committed to tackling the causes of climate change and reducing carbon emissions in Redditch and being resilient to its impacts. As part of this, the Council declared a climate emergency in September 2019¹⁰ and is committed to making Redditch to net zero by 2050¹¹.

The Council’s plans for tackling this will be called the Action to Reduce Carbon (ARC) Plan. There are nine identified themes for the ARC. Each theme contains specific focal points where carbon can be reduced.

Theme 1: Sustainable Buildings and Workplaces

- Decarbonise energy systems
- Reduce consumption of unnecessary goods & services

⁹ [Energy Act 2013 \(legislation.gov.uk\)](https://www.legislation.gov.uk)

¹⁰ [Public Pack\)Agenda Document for Council, 23/09/2019 19:00 \(redditchbc.gov.uk\)](https://redditchbc.gov.uk)

¹¹ [Climate emergency - redditchbc.gov.uk](https://redditchbc.gov.uk)

PLANNING COMMITTEE

- Embed the waste hierarchy in all service areas

Theme 2: Renewable Energy

- Seek opportunities to embed renewable energy technology within the Council and wider Area

Theme 3: Transport and Travel

- Prioritise & facilitate low carbon fleet option
- Prioritise & facilitate low carbon travel options (Council & Community)
- Facilitate transition to electric vehicles (Residents, Workforce & Visitors)
- Reduce unnecessary miles travelled

Theme 4: Planning / Building Control and Retrofit

- Influence low carbon buildings by introducing a positive bias in our planning system

Theme 5: Community

- Become a positive influence and advocate for climate change through all the work we do

Theme 6: Waste

- Provide and develop a sustainable Waste Management Service to residential homes and business as appropriate.
- View Waste as a resource with a commitment to the Waste Hierarchy
- Deal with Waste as close to source as possible

Theme 7: Biodiversity

- Create opportunity for carbon storage and support habitats and adaptation to climate change

Theme 8: The Low Carbon and Circular Economy and Resources

- Actively encourage a thriving low carbon economy to our Area
- Actively encourage a circular economy within the Area by encouraging & supporting business to function in this way

Theme 9: Procurement

- Encourage sustainability through the supply chain

The planning system is one of the main ways in which climate change can be mitigated and can help places be more resilient to its impacts because it has a key role in place-making by shaping the use of land and buildings through the grant of planning permission in line with a Development Plan.

The electrification of transport and heating are key priorities within the emerging ARC, both of which require grid decarbonisation. The ARC identifies seeking opportunities to embed renewable energy technology within the Council and wider Area.

PLANNING COMMITTEE

Why Feckenham National Grid Substation has been selected

The grid at Feckenham and in the Midlands is subject to voltage variations which leads National Grid to procure reactive power services to manage this. Feckenham Substation has been selected by Statkraft after considering all the substations in the region and assessing the needs of the transmission grid in the Midlands.

The Feckenham National Grid Substation is a key strategic transmission substation in the B17 zone in the West Midlands, as defined in National Grid's Electricity Ten Year Statement¹², which is one specific area National Grid have identified as requiring the stability service.

The Substation is interconnected by 4 x 400kV and 2 x 275 kV circuits which enhance the effectiveness of this complex technology. Only 7 sites in this region allow for connection to 4 x 400kV circuits, of which, just 2 substations are located close to transmission boundaries. In addition, Feckenham is adjacent to 3 transmission boundaries. Given the number of connections and proximity to transmission boundaries, Feckenham Substation is therefore the most appropriate location for the Development within the West Midlands B17 zone.

As outlined in the planning statement, the key criteria in selecting a location for the development include:

- The ability to use underground cables and not overhead electricity transmission lines
- Separation from residential properties and settlements;
- Existing visual screening provided by trees and hedgerows around the perimeter of the Site;
- Ease of access to the site for construction; and
- Lack of environmental constraints (e.g. ecological/landscape designations, heritage assets, flood risk, etc.).

Alternative sites within 1 km of the grid connection point were considered, with a focus on areas outside of the Green Belt to the south of Alcester Road/Salt Way.

Summary of Constraints Table

Location	Constraints
North of Feckenham NG Substation	Green Belt <ul style="list-style-type: none">• Road• Public footpaths• Overhead electricity transmission lines
West of Feckenham NG Substation	Green Belt <ul style="list-style-type: none">• Proximity to Feckenham (visual/amenity)

¹² [3.3 North Wales and the Midlands boundaries | National Grid ESO](#)

REDDITCH BOROUGH COUNCIL

PLANNING COMMITTEE

	impacts) <ul style="list-style-type: none">• Public footpaths• Some residential properties• Setting of heritage assets in Feckenham (Scheduled Monument and numerous listed buildings)• Overhead electricity transmission lines
South of Feckenham NG Substation	Shurnock Meadows Local Wildlife Site <ul style="list-style-type: none">• Several residential properties• Grade II* Listed Shurnock Court• Public bridleways and footpaths• Overhead electricity transmission lines
East of Feckenham NG Substation	Green Belt <ul style="list-style-type: none">• Grade II Listed Mutton Hall• Public bridleway and footpaths• Overhead electricity transmission lines• Few residential properties
Application Site	Green Belt <ul style="list-style-type: none">• Overhead electricity transmission line

The development has been proposed strategically sited adjacent to the National Grid Feckenham Substation which lies immediately to the west of the Site. Given the close proximity to the substation, lengthy transmission cables will not be required, ensuring efficient connection to the National Grid, minimising disturbance and costs. The substation can accommodate the transfer of electricity to and from the Development at an acceptable cost which will provide valuable support to the grid, protecting customers at times when high demand places stress on the local and national electricity network.

Principle of Development

The application site lies outside of any defined settlement. Under the locational strategy for the Borough, set out in Policy 2 Settlement Hierarchy, development is in the first instance directed to the existing urban areas and defined rural settlements. It would need to be demonstrated that a rural location was essential for the development or the proposal would conflict with the locational strategy. Furthermore, the site is located in the West Midlands Green Belt where development is strictly controlled. It is these matters which determine whether the principle of development in this location and for the proposed purpose is acceptable.

PLANNING COMMITTEE

Green Belt

The National Policy Statement for Energy (NPS EN-1)¹³ sets out the government's policy for the delivery of major energy infrastructure. The proposed battery installation is part of a national programme of essential energy infrastructure to support the transition towards a low carbon future.

Section 5.10 of EN1 looks specifically at the issues surrounding the development of energy infrastructure projects in the Green Belt. It recognises at paragraph 5.10.3 that although the re-use of previously developed land can make an important contribution to sustainable development, it may not be possible for many forms of energy infrastructure.

Paragraph 5.10.17 states that when located in the Green Belt, energy infrastructure projects are likely to comprise inappropriate development. Very special circumstances will not exist unless the harm by reason of inappropriateness, and any other harm, is outweighed by other considerations.

There is no specific definition of very special circumstances. However, paragraph 5.10.17 states that the extent to which a development's physical characteristics are such that it has limited or no impact on the fundamental purposes of Green Belt designation, should be considered.

Paragraph 148 of the National Planning Policy Framework (NPPF) states that inappropriate development is, by definition, harmful to the Green Belt and should not be approved except in very special circumstances.

Paragraph 151 goes on to state that while elements of many renewable energy projects may be considered inappropriate in the Green Belt, the wider environmental benefits associated with increased production of energy from renewable sources may constitute very special circumstances.

The NPPF states that the fundamental aim of Green Belt policy is to prevent urban sprawl by keeping land permanently open; the essential characteristics of Green Belts are their openness and their permanence. The proposed development site is located within the Birmingham Green Belt, which serves five purposes, as set out in paragraph 138 of the NPPF:

- a) to check the unrestricted sprawl of large built up areas;
- b) to prevent neighbouring towns from merging into one another;
- c) to assist in safeguarding the countryside from encroachment;
- d) to preserve the setting and special character of historic towns; and
- e) to assist in urban regeneration, by encouraging the recycling of derelict and other urban land.

¹³ [1938-overarching-nps-for-energy-en1.pdf \(publishing.service.gov.uk\)](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/342221/1938-overarching-nps-for-energy-en1.pdf)

PLANNING COMMITTEE

Local Policy

Policy 8 Green Belt states that applications for development in the Green Belt will be determined in line with national planning guidance on Green Belts and other relevant policies within the development plan.

Openness

The Courts have, over the years, made a number of rulings on how the effects of a development on openness should be assessed. These judgments have established that both the spatial and visual aspects should be assessed in order to arrive at a rounded decision on the effects on openness.

The Planning Practice Guidance (PPG) summarises the position as follows:

Assessing the impact of a proposal on the openness of the Green Belt, where it is relevant to do so, requires a judgment based on the circumstances of the case... these include, but are not limited to:

- Openness is capable of having both spatial and visual aspects;
- The duration of the development and its remediability; and
- The degree of activity likely to be generated, such as traffic generation.

In terms of the the spatial aspect of openness, the site comprises 2.83 ha and the footprint of the Development would be less than 25% of the size of the existing Substation. The proposed infrastructure will have a maximum height of 10m, which is much less than that of infrastructure at the Substation and the electricity pylons in the surrounding area, which are typically 50m in height. Overall, it is considered that the spatial impact of the development would be minor.

In terms of visual impact on openness, the site of the proposed battery facility is directly adjacent to the Feckenham National Grid Substation. This comprises large-scale infrastructure, including the substation, pylons, overhead cables and access roads. The substation can be seen from vantage points surrounding the site, where it is viewed as built development. Clearly the proposal will have an impact on openness from the introduction of structures in an area currently free of any development. As a remotely operated facility, the degree of activity likely to be generated by the Development once operational would be negligible. Overall, while there would be some loss of openness in spatial and visual terms, the impact of the Development on the openness of the Green Belt would be limited.

Impact on the purposes of the green belt

When considering proposals in the Green Belt, the NPPF states that the extent to which a development's physical characteristics are such that it has limited or no impact on the

PLANNING COMMITTEE

fundamental purposes of Green Belt designation should be considered. The essential characteristics of Green Belts are their openness and their permanence.

As noted above, paragraph 138 of the NPPF sets out the five purposes of the Green Belt:

- a) to check the unrestricted sprawl of large built up areas;
- b) to prevent neighbouring towns from merging into one another;
- c) to assist in safeguarding the countryside from encroachment;
- d) to preserve the setting and special character of historic towns; and
- e) to assist in urban regeneration, by encouraging the recycling of derelict and other urban land.

To check the unrestricted sprawl of large built up areas

It is not considered to play a role in preventing the unrestricted sprawl of large built up area as the land is too contained by surrounding development to have any significant relationship with the wider countryside between the settlements of Feckenham and Astwood Bank. The site is located within the countryside but it does not adjoin built-up areas associated with these settlements. Therefore, the development would not increase the sprawl of these areas as it is both separated by areas of open green space and is not a form of development which would comprise an extension to an urban/built up area.

Overall, the presence of the existing substation and a potential energy storage facility in the parcel would provide a physical barrier to any residential expansion. It is not necessary for the substation and surrounding land to be in the Green Belt to achieve this, nor is it appropriate given that the existing substation erodes the openness in this location.

To prevent neighbouring towns from merging into one another

The South Worcestershire Green Belt Assessment (2018) (SWGBA)¹⁴ indicates that the Green Belt segment (E1) in which the Site is located only makes a low contribution to preventing neighbouring towns from merging into one another. The Site is visually well contained and screened by existing vegetation and the Substation adjacent to the west. The development will therefore not appear to be associated with Feckenham or Astwood Bank and would not create the perception of the coalescence of these settlements. Nor it is considered that it would set a precedent for future commercial or residential development in these areas.

To assist in safeguarding the countryside from encroachment

Overall, given the scale of the existing substation and the significant area of which it occupies, it is considered that the substation has a significant urbanising influence over

¹⁴ [Green Belt Study - South Worcestershire Development Plan \(swdevelopmentplan.org\)](http://swdevelopmentplan.org)

PLANNING COMMITTEE

the countryside characteristic of the parcel and thus significantly compromises the site's contribution to assisting the safeguarding of the countryside from encroachment.

The Landscape Visual Assessment at Appendix 1a indicates that due to the retention of existing vegetation and new woodland and hedgerow planting, views of the development from the surrounding area will be very limited and will be seen in the context of the existing substation and overhead power lines. Overall, the proposed development in the context of the existing substation with significant woodland screening, will not result in an impermeable encroachment into the countryside.

To preserve the setting and special character of historic towns

The SWGBA indicates that Green Belt segment E1 makes a limited contribution to preserving the setting and character of historic towns.

To assist in urban regeneration, by encouraging the recycling of derelict and other urban land

It is considered that the proposed development of a battery facility, which is not necessarily considered to be an urban use, will have no impact on the parcel's contribution to assisting urban regeneration by encouraging the recycling of derelict and other urban land.

There are no alternative sites on derelict or urban land where this development could be located. The development will not have any impact on the functioning of the Green Belt to direct future development of other types towards derelict and urban land.

Very Special Circumstances

The proposal has been identified as representing inappropriate development in the Green Belt by definition. Further harm has been identified as a result of the limited impact on openness of the development and harm to the landscape and visual character of the area. The development can therefore only be approved in very special circumstances. The following very special circumstances have been put forward:

Decarbonisation, Net Zero and the Climate Emergency

While the development will not generate energy, it will increase the energy efficiency of the grid and reduce carbon emissions in the energy sector. It will enable the grid to support a greater proportion of renewable energy and will store energy from intermittent sources such as solar and wind energy, so that it can be used efficiently when required.

The main function of the development, for grid stabilisation to reduce the need for coal and gas-fired turbines to maintain inertia on the grid. In combination with other similar developments at strategic locations on the grid, this will facilitate the permanent closure of fossil fuel power stations as they will no longer be required to stabilise the grid.

PLANNING COMMITTEE

The development will therefore support the National Grid's target to operate the electricity system with zero carbon grid by 2025. As such, the environmental and decarbonisation benefits of the development are comparable to that of a new wind or solar farm, except with a smaller spatial footprint than a new solar farm and lower level of visual impact than a wind farm.

The contribution of the development to the decarbonisation of the grid should be afforded significant weight in light of the Climate Emergency declared by Redditch Borough Council in 2019, the UK's commitment to achieving net zero greenhouse gas emissions by 2050 and the Government's commitment to provide a flexible grid as set out in the Energy White Paper.

The development comprises infrastructure which is essential for the storage and supply of renewable energy to the National Grid, and as such, the environmental benefits contribute to very special circumstances.

Suitability of Location

In order to be operationally viable, the Development must be located within 1 km of the grid connection point at the existing Substation, which itself is situated on Green Belt land.

The National Grid has identified the need for grid stabilisation infrastructure in the West Midlands and an assessment of grid connection points in the region has confirmed that Feckenham National Grid Substation is the most suitable location for this type of infrastructure.

The assessment of alternative sites outside of the Green Belt indicates that all potential sites within 1 km of the grid connection are subject to significant environmental and planning constraints such as existing residential development, a local wildlife site and Grade II* listed Shurnock Court.

The site itself is not subject to any significant environmental constraints and is well contained visually by existing hedges and trees. It is therefore a far more appropriate location for the Development than the non-Green Belt sites considered, the development of which would have resulted in unacceptable impacts in terms of environment and amenity.

Biodiversity Gain

The development will incorporate significant improvements to wildlife habitats within and adjacent to the Site. A substantial area of intensively grazed grassland will be converted to high value habitats including mixed broadleaved deciduous woodland and scrub, a wildlife pond and a sustainable drainage pond which will be suitable for great crested newts. The Development will also retain and protect the existing hedgerows, (except for a

PLANNING COMMITTEE

small section removed to create access) trees and ponds at the Site. The landscape and biodiversity enhancements will deliver a considerable biodiversity net gain of over 40% over the baseline scenario and should therefore be accorded substantial weight in the planning balance.

Conclusion on Green Belt Matters

In conclusion, it is not considered that that the proposed development would conflict with the five purposes of the Green Belt; namely the sprawl of built up areas or the merging of neighbouring towns. Set within the context of the existing substation, associated infrastructure and it would not lead to encroachment of the countryside.

Whilst there would be some effects on openness in both spatial and visual terms, these are very limited in terms of the surrounding context, the low scale of development, and proposed additional planting.

Very special circumstances relating to the locational need; innovative nature of the technology proposed; and the sustainability and energy resilience benefits of the proposal in helping contribute to the national target of decarbonisation by balancing the supply and demand of the electricity network have been put forward. Support has also been found in paragraph nos. 8 and 152 of the NPPF for the scheme as well as policies in Local Plan in view of both National and local planning policy to address climate change and the Council's own commitment to this though its declaration of a Climate Emergency, greater weight should be afforded to this.

Any harm, moderate or otherwise, to the Green Belt attracts substantial weight. The 'very special circumstances' required to approve 'inappropriate' development in the Green Belt will not exist unless the potential harm to the Green Belt, by reason of inappropriateness and any other harm resulting from the proposal, is clearly outweighed by other considerations.

It is a finely balanced decision, but it is considered that the applicant has demonstrated that very special circumstances exist which justify this proposal in the Green Belt. On balance, it is concluded that the environmental, economic and social benefits that will be delivered as a result of this proposal are sufficient to outweigh any impact caused by inappropriate development in the Green Belt.

Loss of Agricultural Land

Paragraph 174(b) of the NPPF as amplified by Footnote 53 of the NPPF states - "Where significant development of agricultural land is demonstrated to be necessary, areas of poorer quality land should be preferred to those of a higher quality."

The application site has a provisional agricultural land classification (ALC) grade of 4 of 5 (poor quality agricultural land with severe limitations which significantly restrict the range

PLANNING COMMITTEE

and level of yield of crops)¹⁵ and has no known history of crop cultivation. ALC Grades 1, 2 and subgrade 3a are considered within the 'best and most versatile' land category in the planning system. The proposed layout has been designed to minimise land take and built development is restricted to one well-defined field. The loss of such land constitutes a slight dis-benefit of the proposal but not one which would justify refusal. The proposed development complies with NPPF Paragraph 170 with regard to preserving best and most versatile agricultural land and Local Plan Policy 5 in terms of making efficient use of land.

Design

Policy 39 states development in the Borough should contribute positively to the local character of the area, responding to and integrating with distinctive features in the surrounding environment, particularly if located within a historic setting. All development proposals should:

- Seek to optimise the potential of the site to accommodate sustainable development through making the most efficient use of the space available
- Be resilient to the effects of climate change, whilst also protecting and enhancing local distinctive and historic features to improve the character and quality of the local environment
- Incorporate features of the natural environment including infrastructure

Policy 40 deals with good design. It states that good design should contribute positively to making the Borough a better place to live, work and visit. All development should be of a high-quality design that reflects or compliments the local surroundings and materials.

The design of the proposed buildings is of a standard appearance which is designed with functionality in mind. The size and scale of the site is not higher than the neighbouring substation, as discussed in the landscape and visual impact section of the committee report and would not be visually intrusive or detrimentally harmful to the area's character.

The proposed layout has been influenced by the operational requirement for the energy blocks and associated equipment and the site characteristics. The main components include the battery units, inverters, transformers, switchgear containers, spares container, auxiliary transformer, CCTV, security fencing and access and turning area.

In this particular context it is considered that the proposal responds to the requirements of the policies outlined above.

It is also worth stating that a variety of energy infrastructure is in rural and Green Belt areas. Power Stations, overhead electricity lines and their pylons, substations and above ground installations associated with pipelines are situated in these locations where necessary to deliver, reliable, secure energy supplies to the country.

¹⁵ [Provisional Agricultural Land Classification \(ALC\) - data.gov.uk](https://data.gov.uk)

PLANNING COMMITTEE

Heritage Assets

The application site is near the Grade II* Shurnock Court (NHLE ref 1099994), Grade II 1 Water Pumps (NHLE ref 100063) which is adjacent to the Grade II Mutton Hall (NHLE ref 1157335). In accordance with section 66 of the Planning (Listed Buildings and Conservation Areas) Act 1990 (LBCA), special regard has been paid to the desirability of preserving listed structures or their settings or any features of special architectural or historic interest which they may possess.

Policy 36 Historic Environment is relevant in that it sets out that designated heritage assets will be given the highest level of protection and should be conserved and enhanced. Non-designated heritage assets will also need to be conserved and enhanced in a manner appropriate to their significance. Applications for development affecting any heritage assets or its setting must be accompanied by a heritage statement.

Paragraph 199 of the NPPF states that: “When considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset’s conservation (and the more important the asset, the greater the weight should be). This is irrespective of whether any potential harm amounts to substantial harm, total loss or less than substantial harm to its significance.”

Paragraph 202 of the NPPF states that: “Where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal”. Paragraph 206 of the NPPF outlines that Local planning authorities should look for opportunities for new development within.... the setting of heritage assets, to enhance or better reveal their significance. Proposals that preserve those elements of the setting that make a positive contribution to the asset (or which better reveal its significance) should be treated favourably.

Following review of the submitted Heritage assessment (Cultural Heritage Report) it is concluded that no harm to the significance of any other designated or non-designated heritage assets, either directly or through changes to their setting, is anticipated because of the proposed development.

Objectors have commented on the impact on the Feckenham Conservation Area and related settlement. The Zone of Theoretical Visibility (ZTV) submitted as part of the Landscape Visual Impact indicates that there will not be any intervisibility with Feckenham and therefore there is no potential indirect effects upon the Conversation area.

It is considered that the proposed development would not conflict with the relevant legislation cited above and would accord with the requirements of the development plan in respect of Policy 36 of the BORLP4. Any residual adverse impacts upon the setting of these heritage assets could be mitigated by planning conditions with respect to landscaping.

PLANNING COMMITTEE

Flood Risk and Drainage

Policy 17 deals with flood risk. It states, amongst other things, that all developments should fall within Flood Zone 1 and where a site falls outside this categorisation a comprehensive flood risk assessment will be required. Development should incorporate water efficiency measures and appropriate sustainable drainage techniques.

The proposed development site is situated in the catchment of the Brandon Brook. The site falls within Flood Zone 1 and it is not considered that there is any significant fluvial flood risk to the site. Risk to the site from surface water flooding is indicated as low based on the EA's flood mapping. There is some pooling around the existing pond, which is proposed to be retained.

North Worcestershire Water Management have reviewed the Drainage Impact Assessment. They conclude that the proposed outline drainage layout is generally acceptable: the proposed SuDS and habitat ponds are welcome. However, a full construction drainage plan will need to be provided to and approved by the LPA.

The proposal is therefore considered acceptable in relation to Policy 17 which seeks to ensure that adequate drainage provision is provided on site, subject to a condition surface water drainage condition.

Highways and Highway Impact during Construction Phase

The development itself when operational would have little daily impact on the local highway network. Visits to the site are likely to be infrequent for maintenance works predominantly. The sites import and export functions can be managed remotely. The traffic and trips generated with the operational phase of the development would not have a severe impact on highway safety. The proposed is considered acceptable subject to planning conditions.

Construction Programme

Construction is expected to take up to 18 months with peak periods expected in months 1-3 and 8-9. During the peak period of construction, approximately 58 two-way HGV vehicle movements per day are expected to occur, with additional car or van movements expected from staff. Up to 20 staff are expected on site during the peak phase of construction, which would result in an additional 40 two-way car or LGV movements per day, although staff will be encouraged to car share so this figure is likely to be considerably reduced. Therefore, a maximum of 98 two-way vehicle movements per day can be expected during the peak phase of construction.

During the other phases of construction, the intensity of vehicle deliveries and the number of staff present on site will be much less than stated above. The above vehicle estimates therefore, represents a worst-case scenario.

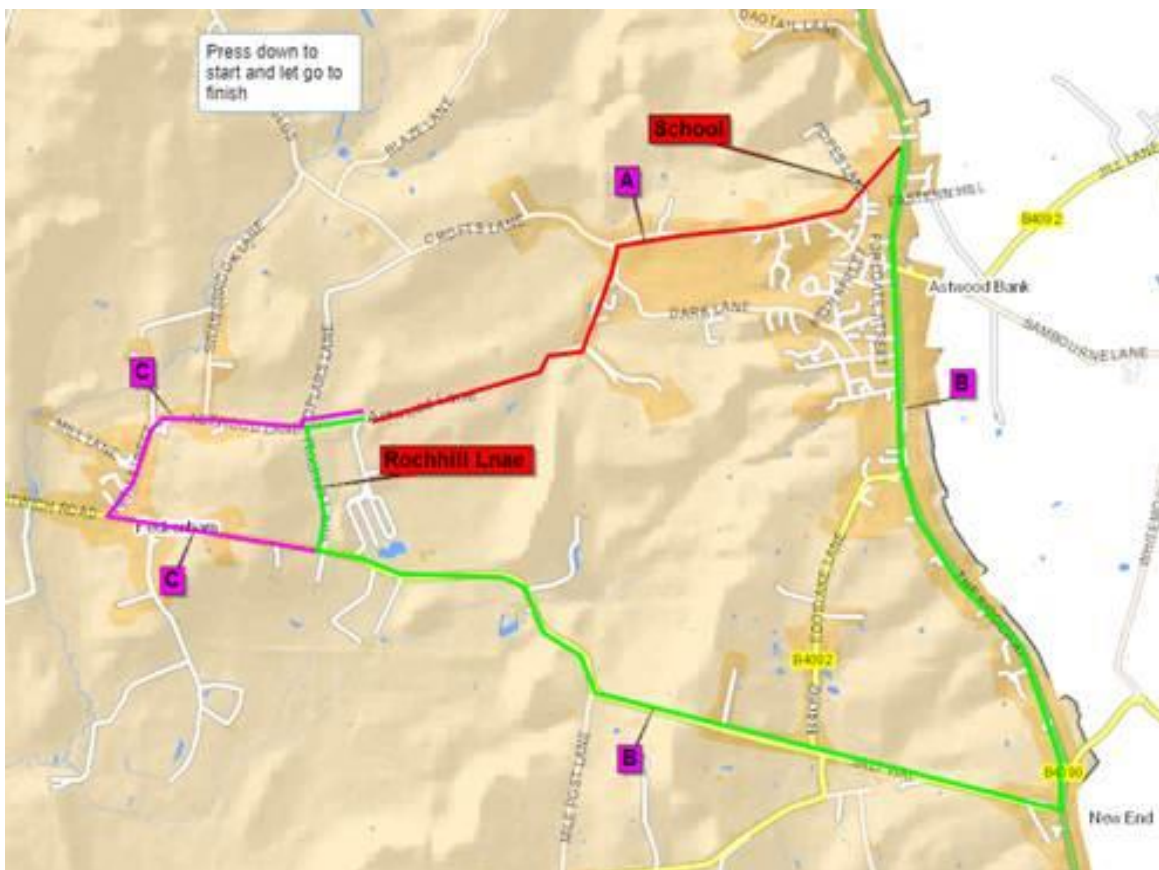
PLANNING COMMITTEE

In addition to the above vehicle movements a small number of Abnormal Load Vehicles (ALV) deliveries will be required during the construction phase (8-12 abnormal loads in total depending on the final contractor). All ALVs will be transported by escort vehicles and temporary road closures would be in place during ALV movements.

The routing of these vehicles has been discussed in length between County Highways and the applicant and. As originally considered County Highways had no objection to the use of Feckenham village. However, following a site visit and further consideration of High Street, Church Road these roads are not considered to be appropriate for HGVs and Abnormal Load Vehicles (ALVs) deliveries due to the parked cars, traveling through residential areas, school and the narrowness of the roads in places. County Highways also noted that alternative routes considered travelling via Edgioake Lane to the Saltway, this proposed route is deemed to be unacceptable since vehicles turning right here would cause congestion due to the width of the road at this location and would also require the HGV's to travel through an urban environment.

County Highways preference is for the HGV's to travel via the A441 The Ridgeway/Saltway junction to Rock Hill Lane, as shown on the green route (B) on the plan below. This has now been agreed by the applicant.

Routing Plan by County Highways



PLANNING COMMITTEE

Rockhill Lane will require upgrades and post development remedial works as the developer has stated within the Technical Note in order to make it suitable for HGVs. The developer would be required to enter into an agreement with the Council to agree on the scope of works required and all cost would be borne by the developer.

A further assessment of Rockhill would be required, it is recommended a joint site visit with the developer would be required to assess the current condition and to agree and works required in order to make it suitable for HGVs.

In terms of Abnormal Load Vehicles, the applicant has confirmed that 8-12 abnormal loads in total would be required for the development. Following discussion with the Worcestershire Abnormal Loads teams, in this instance the grey route indicated below on the attached plan which involves Church Rd and Astwood Lane would be acceptable.

All ALVs will be transported by escort vehicles and temporary road closures would be in place during ALV movements. An Abnormal Load Route Assessment will be undertaken for the anticipated ALV prior to delivery. ALVs are required to approach the site from the east via the ALV route due to constraints on the General Traffic Route.

A detailed pre commencement Construction Environmental Management Plan condition is proposed by the Highways Authority. On this basis along with the other proposed conditions, County Highways have no objection.

NPPF paragraph 111 sets out that development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe. According severe its ordinary meaning of 'very great', that is a strict test. Nevertheless, NPPF paragraph 110 sets out that planning should ensure that safe and suitable access can be achieved, and that any significant impacts arising from development in respect of capacity and congestion can be mitigated to an effective degree. Consequently, it is appropriate to take account of the effects of development on the safe and efficient operation of the highway network as part of the overall planning balance as to the acceptability of a proposal, even if they would not be severe.

Given the nature of the nature of the highway network as set out above, a maximum of 98 two-way vehicle movements per day during the peak phase of construction total of at least 16 weeks would not be insignificant. Even with mitigation measures in place, based on this the proposal would have an adverse effect on the safe and efficient operation of the highway network in conflict with the relevant provisions the NPPF paragraph 110. Nevertheless, subject to the mitigation measures set out above, as disruption during construction would be temporary and relative to existing levels of traffic, such effects cannot reasonably be described as severe.

It is noted that many objectors are concerned with a range of highways issues. However, based upon the response from County Highways there are no justifiable grounds on which an objection could be maintained on highway grounds.

PLANNING COMMITTEE

Therefore, it is considered that the proposed development would deliver sustainable development in accordance with the requirements of Policy 46, and Policies 19, 20 and 22.

Landscape

The impact on the openness of the area and its character, amenity and distinctiveness has already been set out. The site is not subject to any special landscape designation. A Landscape and Visual Appraisal (LVA) has been carried out by Arcus. The LVA has assessed landscape character and visual amenity and the resulting landscape and visual effects of the proposed development on the receiving landscape and visual resource.

The LVA indicates that the site is of medium landscape sensitivity due to the absence of landscape designations, degraded boundary features together with the presence of landscape detractors such as the Substation, power lines and larger scale modern farm and business park buildings. The LVA indicates that the site could absorb the Development due to its location immediately adjacent to the Substation as it would be viewed as a continuation of similar infrastructure and not as a prominent standalone development.

Regarding landscape effects on the Green Belt, the development would be contained to a small geographical area and would retain all field margin trees and hedgerows (with the exception of 22 m of hedgerow at the site access point which would be replaced by 35 m of proposed native hedgerow). The development would be seen in the context of a large existing substation which covers an area over four times the size of the Development.

Given the scale and height of the development when compared to the adjacent Feckenham substation, and with the proposed mitigation measures, it is considered that the receiving landscape has the capacity to accommodate the Development without adverse effects on the openness of the Green Belt. The siting of the Development immediately adjacent to the existing substation would be perceived as a contiguous extension to the power infrastructure and would be confined within the current field boundaries which would be maintained and enhanced by mitigation planting.

In terms of visual effects, views of the Development from the surrounding areas would be predominantly from groups of residential properties to the east of the Site on elevated ground on the outskirts of Astwood Bank. However, these views would be barely discernible due to intervening vegetation and farm buildings.

A Landscape and Biodiversity Mitigation Plan has been produced to provide woodland and hedgerow planting and other habitats around the northern, eastern areas within the site boundary. This is to screen and assimilate the Development into the landscape and provide biodiversity and green infrastructure benefits.

PLANNING COMMITTEE

The existing Feckenham substation visibility would also be reduced through woodland planting. The development whilst potentially resulting in short term combined cumulative effects would be in close proximity to the similar infrastructure of the substation, with time it would be contained and partially screened by the proposed mitigation planting and existing hedgerow boundaries.

WCC Landscaping Adviser has reviewed the Landscape and Visual Appraisal, they conclude that this application is satisfactory, subject to the implementation of the Landscape and Biodiversity Mitigation Plan.

It is recognised that any mitigation planting would take time to mature and reduce the visibility of the development. However, the development is considered to be in line with Policy 11 and 16 of the Borough of Redditch Local Plan. The proposed development would result in high quality design that would comply with Policies 39, 40 and the Worcester landscape and biodiversity guidelines and published landscape character assessment.

Ecology and Biodiversity

In line with Policy 46, appropriate mitigation measures must be implemented to ensure protection of the natural environment, with benefits from development to biodiversity captured.

A Preliminary Ecological Appraisal (PEA) has been undertaken. The PEA incorporates the results of a Phase 1 Habitat Survey, Ornithological Walkover, Great Crested Newt Habitat Survey, Badger Survey and Bat Roost Assessment. Surveys for great crested newts ('GCN') and reptiles have also been undertaken and standalone Ecological Impact Assessments for GCN and reptiles are submitted with this application

No statutory or non-statutory designated sites occur within the site boundary. In terms of statutory designations, Wylde Moor SSSI is located 1.1 km to the southwest of the site. No European/International statutory designated sites are located within 5 km. There are 7 non-statutory sites within 2 km of the site, the closest of which is Shurnock Meadows Local Wildlife Site, 500m to the south of the site.

Natural England have no objection to the proposal and Red Kite have raised no objection to the scheme, subject to the imposition of suitable conditions relating to the ecological mitigation and enhancement.

Subject to implementation of appropriate mitigation measures, the proposed development would comply with Policy 46 of BORLP4 11, 16.

PLANNING COMMITTEE

Ground Conditions

WRS have reviewed the planning application site for potential contaminated land issues of which none have been identified. Therefore, WRS have no adverse comments to make with regards to contaminated land.

Residential Amenity

Development should not be permitted that has a prejudicial impact on residential amenity. The proposed development is some distance from the nearest residential properties. It is not considered that the operation of the site would have a notable impact on residential amenity. The impact of construction would be limited through an appropriate construction management plan.

In terms of environmental effect, the proposal is for battery storage. It would not result in any emissions from the site. This includes odour and fumes. Furthermore, the development would not be overly noisy although there would be some noise from the equipment the impacts would not be widespread or significant.

The role of battery storage in the move to a low-carbon economy is noted. The exploitation of precious metals is an adverse impact from the production of batteries, and recycling of spent batteries is a growing industry. However, these are not specific planning matters to which weight should be applied in decision taking.

Overall, it is not considered that the proposal would have a significant adverse impact on residential amenity or the environment and no objection is raised in this regard.

Public Safety

An issue that has been raised through the public consultation responses is concerns over public safety, particularly from fire.

A fire safety report has been submitted to provide further information on this issue.

The facility would use rechargeable lithium ion-based batteries as these are the most suited to this type of storage. In the UK, according to Department for Business, Energy & Industrial Strategy and Ofgem, 1GW of lithium-ion battery storage that has been built since 2017¹⁶. The use of lithium-ion in rechargeable batteries is well established in the UK. Battery fires are a rare occurrence due to the multiple levels of prevention, protection and mitigation measures that go into their design, manufacture, distribution and operation.

The Fire Safety document outlines that the Statkraft project team will develop the following safety documents during the design phase to ensure fire safety risks are

¹⁶ [Transitioning to a net zero energy system: Smart Systems and Flexibility Plan 2021 \(publishing.service.gov.uk\)](https://publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/611117/Transitioning_to_a_net_zero_energy_system_Smart_Systems_and_Flexibility_Plan_2021.pdf)

PLANNING COMMITTEE

considered and mitigated as best as reasonably practicable. The following documents capture the safety requirements of a Greener Grid Park.

1. Fire Strategy Report
2. Fire Risk Assessment
3. Evacuation strategy
4. Fire Safety Drawings
5. A Fire Safety Manual is produced containing design information and operational records.

It is considered this could be conditioned as part of any planning approval.

In addition, it will provide a full description of the fire safety design, in regard to the management of the buildings, housekeeping and other functions. Thus, providing a continuously updated record of all aspects of the buildings and the buildings users that affect its fire safety. As well as specific site measures for the Green Grid Park.

It is also worth noting that while public safety is a material planning consideration, planning legislation would only form the primary statute where there was no other specific legislation to address the particular issue. For example, in the construction of a dwelling, fire risk is managed through the building control process. A similar situation applies here; the facility is an industrial process and would be subject to the regulations specific to the operation of this form of plant.

Therefore, officers are satisfied that public safety is adequately addressed and that the proposed development would not present an unacceptable risk to nearby residents or property.

Planning Balance and Conclusion

The proposed development comprises essential electrical infrastructure to support the functioning and stability of the National Grid in the West Midlands. It will support the aims of the meeting the UK's Net Zero carbon emissions commitments and the Climate Emergency.

The applicant has shown that the West Midlands region has been specifically identified by National Grid as requiring more stability on the network. This development proposal has significant potential to help deliver further sustainable development opportunities and carbon & emission reductions in the local area

As well as the reasoning regarding the location of the development adjacent to the Feckenham substation. The applicant has used a multidisciplinary approach to designing the proposed layout to avoid negative impacts on the surrounding environment or on residential amenity. The development has been designed to mitigate any potential effects in terms of landscape, ecology, and residential amenity.

PLANNING COMMITTEE

The impacts on the local landscape character and the Green Belt, and the impacts on ecology are found to be minimal. Very special circumstances have been demonstrated to account for the siting of the proposal in a Green Belt location. Impacts on the Green Belt have been demonstrated to be relatively negligible and are otherwise outweighed by the benefits of the proposal.

Landscape enhancements including a habitat management area with native species mixed broadleaved woodland and two new ponds are proposed, which will result in a significant increase in biodiversity in and around the site and ensure that the Development is well integrated into the wider landscape.

In conclusion, the proposed development is in accordance with adopted local plan policies and is strongly supported by Government Policy, which encourages sustainable development which assists in the transition towards a low carbon future.

RECOMMENDATION:

That having regard to the development plan and to all other material considerations, planning permission be GRANTED subject to the following conditions:

Conditions:

1. The development to which this permission relates must be begun not later than the expiration of three years beginning with the date of the grant of this permission.

Reason: In accordance with the requirements of Section 91(1) of the Town and Country Planning Act 1990 as amended by Section 51 of the Planning and Compulsory Purchase Act 2004.

2. The development hereby approved shall be carried out in accordance with the following plans and drawings:

Site Location Plan	Planning Drawing 1 – 3419-REP-023
Constraints Plan	Planning Drawing 2 – 3419-REP-026
Site Layout Plan	Planning Drawing 3 - 3419-DR-P-0001, Rev 16
Landscape and Biodiversity Mitigation Plan	Planning Drawing 4 - 3419-DR-LAN-101, Rev B
Indicative Battery Container/Welfare Facility	Planning Drawing 5 - 3419-DR-P-0005
Indicative Inverter Cabinet	Planning Drawing 6 - 3419-DR-P-0006
Indicative Transformer & HV Compound	Planning Drawing 7 - 3419-DR-P-0007
Indicative Cooler	Planning Drawing 8 - 3419-DR-P-

PLANNING COMMITTEE

	0008
Indicative Energy Management Building	Planning Drawing 9 - 3419-DR-P-0009
Indicative Palisade Fence Detail	Planning Drawing 10 - 3419-DR-P-0010
Indicative Palisade Gate Detail	Planning Drawing 11 - 3419-DR-P011, Rev 1
Indicative Diesel Generator	Planning Drawing 12 - 3419-DR-P-0012
Indicative Communications Room	Planning Drawing 13 - 3419-DR-P-0013
Indicative Security Column	Planning Drawing 14 - 3419-DR-P-0014
Indicative LV Switch House	Planning Drawing 15 - 3419-DR-P-0015
Access Junction Visibility Assessment	Planning Drawing 16 - 3419-DR-P0004,Rev 1

Reason: To provide certainty to the extent of the development hereby approved in the interests of proper planning.

3. Prior to installation the structures, including battery containers, storage and utility containers, generators and transformers, and fencing shall be finished in a colour to be agreed in writing by the Local Planning Authority. The structures and fencing shall be retained and maintained in the agreed finish for the lifetime of the development.

Reason: In the interests of visual amenity.

4. No development shall take place until an assessment on the potential for noise from the development affecting residential or commercial properties in the area has been submitted to and been approved in writing by the Local Planning Authority.

If the assessment indicates that noise from the development is likely to affect neighbouring affecting residential or commercial properties then a detailed scheme of noise mitigation measures shall be submitted to and approved in writing by the Local Planning Authority prior to the commencement of the development.

The noise mitigation measures shall be designed so that nuisance will not be caused to the occupiers of neighbouring noise sensitive premises by noise from the development. The noise assessment shall be carried out by a suitably qualified acoustic consultant/engineer and shall take into account the provisions of BS 4142:2014+A1:2019.

The approved scheme shall be implemented prior to the commencement of the use and be permanently maintained thereafter.

PLANNING COMMITTEE

Reason: In order that noise levels may be agreed prior to the commencement of works on site which may require changes to the design and to safeguard the amenities of nearby occupiers.

5. Prior to the commencement of any works on site including any site clearance, demolition, excavations or import of machinery or materials, the trees or hedgerows which are shown as retained on the approved plans both on or adjacent to the application site shall be protected with fencing around the root protection areas. This fencing shall be constructed in accordance with the guidance in the British Standard BS5837:2012 and shall remain as erected until the development has been completed.

Reason: In order to protect the trees which form an important part of the amenity of the site.

6. No works of any kind shall be permitted within or through the Root Protection Areas of trees or hedges on and adjacent to the application site without the prior specific written permission of the Local Planning Authority. This specifically includes any works such as changes in ground levels, installation of equipment or utility services, the passage or use of machinery, the storage, burning or disposal of materials or waste or the washing out of concrete mixing plants or fuel tanks.

Reason: In order to protect the trees which form an important part of the amenity of the site

7. Any excavations within the root protection areas must be carried out by hand and in accordance with BS5837:2012.

Reason: In order to protect the trees which form an important part of the amenity of the site.

8. All retained trees and their Root Protection Areas must be protected during clearance and construction phase in accordance with BS5837:2012, using suitable protective fencing and/or ground protection as appropriate. No storage of plant/materials within the Root Protection Areas of any retained trees.

Reason: In order to protect the trees which form an important part of the amenity of the site.

9. The development hereby approved shall not be occupied until the proposed access gates have been set back a minimum 10 metres from the adjoining carriageway edge and made to open inwards only.

Reason: In the interests of highway safety.

PLANNING COMMITTEE

10. The Development hereby approved shall not be occupied until the first 5 metres of the access into the development, measured from the edge of the carriageway, has been surfaced in a bound material.

Reason: In the interests of highway safety

11. The development hereby approved shall not be brought into use until the access, parking and turning facilities have been provided as shown on drawing 3419-DR-P-0004 Rev 1 and 3419-DR-P-0001 Rev 16.

Reason: To ensure conformity with submitted details.

12. The Development hereby approved shall not commence until the visibility splays shown on drawing 3419-DR-P-0004 Rev 1 have been provided. The splays shall at all times be maintained free of level obstruction exceeding a height of 0.6m above adjacent carriageway.

Reason: In the interests of highway safety.

13. The Development hereby approved shall not commence until a Construction Environmental Management Plan has been submitted to and approved in writing by the Local Planning Authority. This shall include but not be limited to the following:-

- a. Measures to ensure that vehicles leaving the site do not deposit mud or other detritus on the public highway;
- b. Details of site operative parking areas, material storage areas and the location of site operatives facilities (offices, toilets etc);
- c. The hours that delivery vehicles will be permitted to arrive and depart, and arrangements for unloading and manoeuvring.
- d. Details of any temporary construction accesses and their reinstatement.
- e. A highway condition survey, timescale for re-inspections, and details of any reinstatement.
- f. Details of the proposed route for the Abnormal Loads and HGV's
- g. Details of any temporary improvements to the highway

The measures set out in the approved Plan shall be carried out and complied with in full during the construction of the development hereby approved. Site operatives' parking, material storage and the positioning of operatives' facilities shall only take place on the site in locations approved by in writing by the local planning authority.

PLANNING COMMITTEE

Reason: To ensure the provision of adequate on-site facilities and in the interests of highway safety.

14. The Development hereby approved shall not commence until a condition survey of the highways to be used by construction traffic has been carried out in association with the Highways Authority. The methodology of the survey shall be approved in writing by the Local Planning Authority and Highways Authority and shall assess the existing state of the highway.

No building or use hereby permitted shall be occupied or the use commenced until a second condition survey has been submitted for the written approval of the Local Planning Authority, which shall identify defects attributable to the traffic ensuing from the development. Any necessary remedial works shall be completed at the developer's expense in accordance with a scheme to be agreed in writing by the Local Planning Authority.

Reason: To ensure that any damage to the adopted highway sustained throughout the development process can be identified and subsequently remedied at the expense of the developer.

15. Prior to the installation of any lighting within the site, a detailed lighting scheme including lighting levels at the boundary of the site shall be submitted to and approved in writing by the Local Planning Authority. Any lighting shall be carried out in accordance with the approved details.

Reason: The plans do not currently show any lighting to serve the development and without details it is unclear whether the visual qualities of the area will be affected as a result of their levels, number and position.

16. No development shall take place until a programme of archaeological work including a Written Scheme of Investigation(s), has been submitted to and approved by the local planning authority in writing. The scheme shall include an assessment of significance and research questions; and:
- a. The programme and methodology of site investigation and recording.
 - b. The programme for post investigation assessment.
 - c. Provision to be made for analysis of the site investigation and recording.
 - d. Provision to be made for publication and dissemination of the analysis and records of the site investigation
 - e. Provision to be made for archive deposition of the analysis and records of the site investigation
 - f. Nomination of a competent person or persons/organisation to undertake the works set out within the Written Scheme of Investigation.

Reason: In accordance with the requirements of paragraph 199 of the National Planning Policy Framework.

PLANNING COMMITTEE

17. The development shall not be occupied until the site investigation and post investigation assessment has been completed in accordance with the programme set out in the Written Scheme(s) of Investigation approved under condition (16) and the provision made for analysis, publication and dissemination of results and archive deposition has been secured.

Reason: In accordance with the requirements of paragraph 199 of the National Planning Policy Framework.

18. No works or development shall take place above foundation level until complete details for scheme for surface water drainage have been submitted to, and approved in writing by the Local Planning Authority.

This should include, but is not limited to:

A detailed drainage layout showing all proposed private foul and surface water connections and SuDS features. This should show the proposed discharge rate for the 100 year AEP + CC.

Details of any existing site drainage features and evidence these have been allowed for and where appropriate connected to the proposed site drainage
Calculations in an electronic format.

A plan showing the exceedance flows from any flooded volumes on the site.

The approved scheme shall be fully implemented prior to the first use of the development hereby approved.

Reason: In order to ensure satisfactory drainage conditions that will not create or exacerbate flood risk on site or within the surrounding local area.

19. Notwithstanding the submitted details, prior to above ground works a Landscape and Ecological Management Plan (LEcMP) shall be submitted to, and be approved in writing by, the local planning authority. The content of the LEcMP shall include, but not limited to the following:

- a) Description and evaluation of features to be managed.
- b) Ecological trends and constraints on site that might influence management.
- c) Aims and objectives of management including those in relation to dormice and bats.
- d) Appropriate management options for achieving aims and objectives including appropriate enhancement measures.
- e) Prescriptions for management actions.
- f) Preparation of a work schedule (including an annual work plan capable of being rolled forward over a 10-year period).
- g) Details of the body or organisation responsible for implementation of the plan.

PLANNING COMMITTEE

h) Legal and funding mechanism(s) by which the long-term implementation of the plan will be secured by the developer.
Ongoing monitoring and remedial measures.

The plan shall also set out (where the results from monitoring show that conservation aims and objectives of the LECMP are not being met) how contingencies and/or remedial action will be identified, agreed and implemented so that the development still delivers the fully functioning biodiversity objectives of the originally approved scheme. The approved plan will be implemented in accordance with the approved details.

Reason: To safeguard the visual amenities of the area and to increase the biodiversity of the site, to mitigate any impact from the development.

20. Notwithstanding the submitted details, prior to above ground works a scheme for biodiversity enhancement, such as incorporation of permanent bat roosting feature(s) and or nesting opportunities for birds, shall be submitted to and agreed in writing with the Local Planning Authority. The approved details thereafter shall be implemented, retained and maintained for their designed purpose in accordance with the approved scheme. The scheme shall include, but not limited to, the following details:

- a. Description, design or specification of the type of feature(s) or measure(s) to be undertaken.
- b. Materials and construction to ensure long lifespan of the feature/measure
- c. A drawing(s) showing the location and where appropriate the elevation of the features or measures to be installed or undertaken.
- d. When the features or measures will be installed and made available.

Reason: To increase the biodiversity of the site, to mitigate any impact from the development.

21. Notwithstanding the details outlined in the submitted Fire Safety document, prior to the commencement of development a site-specific Fire Statement shall be submitted to and approved by the Local Planning Authority. The development must be carried out in accordance with the provisions of the approved Fire Statement unless otherwise approved in writing by the Local Planning Authority.

Reason: To ensure that the development incorporates the necessary fire safety measures.

Procedural matters

This application is reported to Planning Committee for determination because the application is for major development (more than 1000 sq metres of new commercial / Industrial floorspace), and as such the application falls outside the scheme of delegation to Officers.

**PLANNING
COMMITTEE**
