

ANGUS COUNCIL

DEVELOPMENT MANAGEMENT REVIEW COMMITTEE – 18 JUNE 2019

LAND EAST OF CRUDIE ACRE COTTAGE, ARBROATH

REPORT BY THE DIRECTOR OF LEGAL AND DEMOCRATIC SERVICES

ABSTRACT:

The Committee is asked to consider an application for a review of the decision taken by the planning authority in respect of the refusal of planning permission for construction of a battery electricity storage facility comprising containerised battery storage units, inverters and transformers, DNO substation, client switchgear container, electrical grid compound, welfare and parts storage containers and ancillary development including formation of access track, security fencing, CCTV and landscaping, application No 18/00810/FULL, at Land East of Crudie Acre Cottage, Arbroath.

1. RECOMMENDATIONS

It is recommended that the Committee:-

- (i) review the case submitted by the Planning Authority (**Appendix 1**); and
- (ii) review the case submitted by the Applicant (**Appendix 2**).

2. ALIGNMENT TO THE ANGUS LOCAL OUTCOMES IMPROVEMENT PLAN

This Report contributes to the following local outcomes contained within the Angus Local Outcomes Improvement Plan 2017-2030:

- Safe, secure, vibrant and sustainable communities
- An enhanced, protected and enjoyed natural and built environment

3. CURRENT POSITION

The Development Management Review Committee is required to determine if they have sufficient information from the Applicant and the Planning Authority to review the case. Members may also wish to inspect the site before full consideration of the appeal.

4. FINANCIAL IMPLICATIONS

There are no financial implications arising directly from the recommendations in the Report.

5. CONSULTATION

In accordance with Standing Order 48(4), this Report falls within an approved category that has been confirmed as exempt from the consultation process.

NOTE: No background papers, as defined by Section 50D of the Local Government (Scotland) Act 1973, (other than any containing confidential or exempt information) were relied on to any material extent in preparing the above Report.

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Appendix 1 – Submission by Planning Authority
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ANGUS COUNCIL'S SUBMISSION ON GROUNDS OF REFUSAL**APPLICATION NUMBER – 18/00810/FULL****APPLICANT- CORONATION POWER LIMITED**

**CONSTRUCTION OF A BATTERY ELECTRICITY STORAGE FACILITY COMPRISING
CONTAINERISED BATTERY STORAGE UNITS, INVERTERS AND TRANSFORMERS,
DNO SUBSTATION, CLIENT SWITCHGEAR CONTAINER, ELECTRICAL GRID
COMPOUND, WELFARE AND PARTS STORAGE CONTAINERS AND ANCILLARY
DEVELOPMENT INCLUDING FORMATION OF ACCESS TRACK, SECURITY
FENCING, CCTV AND LANDSCAPING AT LAND TO EAST OF CRUDIE ACRE
COTTAGE ARBROATH**

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Angus Council

Application Number:	18/00810/FULL
Description of Development:	Construction of a Battery Electricity Storage Facility comprising Containerised Battery Storage Units, Inverters and Transformers, DNO Substation, Client Switchgear Container, Electrical Grid Compound, Welfare and Parts Storage Containers and Ancillary Development including Formation of Access Track, Security Fencing, CCTV and Landscaping
Site Address:	Land To East Of Crudie Acre Cottage Arbroath
Grid Ref:	362082 : 741652
Applicant Name:	Coronation Power Limited

Report of Handling**Proposal**

Planning Permission is sought for the formation of a battery electricity storage facility comprising battery storage units, associated plant, welfare and storage containers and engineering works on a 0.79HA area of agricultural land to the north west of Arbroath outwith but immediately adjacent to the development boundary and to the north of the Crudie Acres/East Muirlands Road allocated housing site which is currently under construction.

The development would consist of 15 containerised battery storage units, inverters and 15 transformers on skids, a DNO substation, a switchgear container, an electrical grid compound, a welfare and parts storage container and security columns, which would all be contained within a fenced compound (palisade fence to the north and west and acoustic fence to the south and east). A new access is proposed off the C51 Road to the east of the site and an improved track following the south boundary of the field is proposed. Landscape planting is also proposed.

The Site Location Plan Planning Drawing 001 Ref: 3055-REP-001 Date: 30/08/2018, amends and supersedes Site Location Plan Planning Drawing 001 Ref: 3055-REP-001 Date: 01/08/2018, in that it shows the proposed access track and junction that would merge with the C51 Road.

Planning Drawing 002 Site Layout Plan Drawing Number 3055-DR-P-0001 Rev 10 Date; 10/12/18 amends and supersedes Planning Drawing 002 Site Layout Plan Drawing Number 3055-DR-P-0001 Rev 8 Date; 28/08/18, in that it shows the proposed access track and junction that would merge with the C51 Road and provides an amended layout an noise attenuation measures to earlier site layout drawings.

Publicity

The application was subject to normal neighbour notification procedures.

The application was advertised in the Dundee Courier on 2 November 2018 for the following reasons:

- Contrary to Development Plan

The nature of the proposal did not require a site notice to be posted.

Planning History

Pre-Application Enquiry Reference: 18/00439/PREAPP for "Erection of a battery storage facility" at Land To East Of Crudie Acre Cottage, Arbroath, was provided to the applicant on 15 June 2018. The advice provided to the applicant indicated that an application for planning permission for this form of development at this site would be refused planning permission because the site was adjacent to the Arbroath development boundary and there was no public interest and social, economic, environmental or operational considerations confirm there is a need for the proposed development that cannot be met on a site within a development boundary.

Planning application 16/00354/FUL for the erection of 287 dwellings and associated open space, parking and infrastructure was approved planning permission in November 2016. That application related to the development of the allocated Crudie Acres/East Muirlands Road site to the immediate west of the current application site but within the development boundary. The approved plans indicated that a large green area would be formed along the north section of the site providing a green edge to that development and the Arbroath development boundary.

Applicant's Case

The Supporting Statement provides an overview of the site and site selection process. It indicates that the development would provide a grid balancing service to the National Grid to balance peaks and troughs associated with electricity supply and demand and to avoid strains on transmission and distribution networks and to keep the electricity system stable.

It indicates the applicant considered a range of potential development sites across Scotland, targeting developments on land in close proximity to grid supply points with adequate import and export capacities that could accommodate battery storage developments. A total of 46 potential development sites were identified across Scotland. Within Angus, a total of 3 substation locations were reviewed for potential at Arbroath, Lunanhead and Bridge of Dun and potential developable sites were identified at all three. The Arbroath site is one of the few places where there is capacity to connect to the grid and a formal grid connection offer was submitted. Once the connection offer was received this confirmed that the project could be viably connected to the network.

The potential site at Lunanhead was discounted because it was found to be part of a recently deceased estate which limited the possibility of getting reasonable dialogue for lease negotiations. The potential site at Bridge of Dun was discounted as the land is on an agricultural tenancy and the tenant refused to agree to terms. This has left the development site close to the Arbroath substation as the only viable development site identified by the applicant in Angus. A description of the scale, nature and components of the proposal is provided and it is indicated the development would have economic and employment benefits in the form contract opportunities for local and regional contractors both for construction activities themselves and throughout the supply chain.

The planning history is discussed, including the pre-application enquiry (reference: 18/00439/PREAPP), and it is indicated refinements to the design were undertaken throughout the pre-application process as new information and feedback became available. The proposal is discussed in relation to EIA screening and the Scheme of Delegation and assessed in the context of development plan policy, supplementary guidance and National Planning Framework considerations. The Statement concludes the development would contribute to the Angus Local Development Plan's (ALDP) overarching aims of respecting environmental assets; developing a sustainable approach to growth and development; and sustainable economic growth. It considers the development complies with the ALDP in its entirety and also draws support from wider material considerations including Energy Storage and Management Drivers, National Energy Policy, NPF3 and SPP. The statement concludes that the development accords with the Development Plan and the associated benefits outweigh the minimal visual and other environmental impacts of the Development.

The Ecological Report consists a desk study and site visit for the investigation of habitats and protected species within the site including bats, badgers, water voles, red squirrels, reptiles, amphibians and birds. The Report concludes the site was assessed to be of low ecological value and no evidence of protected species was recorded within the site. The report indicates no further surveys are required, however, in

order to ensure legal compliance and mitigate potential impacts from the proposed development, measures are recommended in relation to breeding birds (time of vegetation removal outwith bird nesting season) and reptiles and amphibians (Reasonable Avoidance Measures including pre-vegetation clearance check by an experienced ecologist).

The Flood Risk Assessment indicates the site is located adjacent to Hercules Den Burn which is classed as Medium likelihood of flooding (Moderate to High Risk). A steady 1D Hydraulic model has confirmed that flows during the 1:200 year return period, plus a 20 % allowance for climate change, would be contained within the channel of Hercules Den Burn. The Assessment recommends finished floor levels should be set to no lower than the 1:200 year flood event, plus climate change and freeboard, which equates to 34.56 m AOD. The access track leading to the main compound area should be flush to the ground to ensure no loss of conveyance on the floodplain downstream of the Site. Flood resistant doors should be fitted to all buildings. The operator of the development shall sign up to SEPA's Floodline warning service to ensure the site is protected during extreme weather events. In order to ensure that the risk of flooding at the development due to bridge blockage is minimised, the operator shall commit to checking the bridge downstream is clear from debris at the same time as the maintenance visits for the development. The development should be classed as 'essential infrastructure' under SEPA's Flood Risk and Land Use Vulnerability Guidance as it has to be located near the existing substation for operational reasons, which itself is located close to Hercules Den Burn. The Assessment concludes it is therefore acceptable as an exception to the risk framework outlined in Scottish Planning Policy.

The Utilities Report indicates details on the presence of underground and overhead utilities and provides a full utilities search for assets in the vicinity of the site. Plans of the identified underground and overhead utilities and consultation correspondence with operators and interested parties are provided.

The Noise Impact Assessment consists a background noise survey at two locations, noise modelling - including mitigation options modelled - and an assessment of impact. For mitigation options modelled, the following measures were incorporated to minimise noise levels at noise-sensitive receptors:

- The AC units were placed together at the south-western end of the Development site and the compound was shielded by a 2.5 m high acoustic fence;
- The inverter units, are housed within enclosures, allowing for a conservative 15 dB attenuation of the sound emission (enclosures typically offer a 15 dB attenuation where air intake / duct apertures are required); and
- An acoustic fence was positioned around the perimeter of the Development on all sides (3 m height to the northern, western and eastern boundaries, and 4.5m in height to the southern boundary) to provide screening for the NSRs in the new housing development to the south and existing dwellings to the north and east of the Development. It should be noted that the acoustic fence in the model was lifted 0.1m off the ground to allow water to flow freely in the event of flooding (see the Flood Risk Assessment submitted as part of the planning application for further details).

The report concludes the assessment of noise impact was undertaken in accordance with BS4142:2014. Subject to the mitigation measures detailed in this report, and given the level of conservatism in the assessment and the context of the local environment, the assessment concludes it is anticipated that noise due to the Development will be acceptable at the closest, and therefore all residential dwellings. The Noise Impact Assessment is supported by additional information provided on 16 January 2019 at the request of the Environmental Health Service.

Consultations

Community Council - There was no response from this consultee at the time of report preparation.

Angus Council - Roads - Offered no objection to the proposal subject to the attachment of conditions regulating the provision, standard and maintenance of visibility splays at the junction with Hillend Road.

Scottish Water - There was no response from this consultee at the time of report preparation.

Forward Planning Section - There was no response from this consultee at the time of report preparation.

Scottish Environment Protection Agency - SEPA offered no objection to the proposal but comments that they would strongly recommend that an alternative location is found for the proposed site away from the Hercules Den Burn, however as the proposed development is deemed as essential infrastructure and is required to be located next to the existing substation for operational reasons, we have no objection to the proposed development.

Angus Council - Flood Prevention - This Service offered no objection to the proposal subject to the attachment of conditions regulating the height and design of containers and type of surface material.

Angus Council Environmental Health - This Service offered no objection subject to the attachment of conditions regulating the attenuation of plant and equipment noise and the light spillage from external lighting.

SSE Plc - Offered no objection to the proposal subject to consultation by the applicant with regards to the high voltage overhead lines and cables which cross and are in proximity to the proposed development and the extra high voltage tower line that lies to the south / south west of the proposed development.

Representations

1 letters of representation were received, of which 0 offered comments which neither supported nor objected to the proposal, 1 objected to the proposal and 0 supported the proposal.

The main points of concern were as follows:

- Traffic and road safety impacts through the introduction of the site access junction merging on to a bend on the public road and at an area with the driveways of residential property opposite.

This matter is addressed in the Assessment Section below.

Development Plan Policies

Angus Local Development Plan 2016

Policy DS1 : Development Boundaries and Priorities
Policy DS3 : Design Quality and Placemaking
Policy DS4 : Amenity
Policy PV5 : Protected Species
Policy PV6 : Development in the Landscape
Policy PV9 : Renewable and Low Carbon Energy Development
Policy PV12 : Managing Flood Risk
Policy PV13 : Resilience and Adaptation
Policy PV15 : Drainage Infrastructure
Policy PV20 : Soils and Geodiversity

TAYplan Strategic Development Plan

The proposal is not of strategic significance and policies of TAYplan are not referred to in this report.

The full text of the relevant development plan policies can be viewed at Appendix 1 to this report.

Assessment

Sections 25 and 37(2) of the Town and Country Planning (Scotland) Act 1997 require that planning decisions be made in accordance with the development plan unless material considerations indicate otherwise.

The site is located outside but immediately adjacent to the development boundary of Arbroath. The local development plan indicates that Angus Council has defined development boundaries to protect the landscape setting of Angus towns and villages and prevent the uncontrolled spread of development. Development boundaries provide the definition between built up areas and the open countryside. Policy DS1 states that the focus of development will be sites allocated or otherwise identified for development within the local development plan and indicates that proposals for sites outwith but contiguous with a development boundary will only be acceptable where it is in the public interest and social, economic, environmental or operational considerations confirm there is a need for the development that cannot be met within a development boundary.

The site is located outwith but adjacent to the development boundary of Arbroath. There is some public interest in having infrastructure which helps ensure a reliable source of power in the electricity network at times of peak demand. However, the applicant's justification for the proposed site suggests that the site has been chosen because there is a willing landowner, capacity in the substation and the location avoids lengthy transmission cables. The information submitted does not consider alternative sites within a development boundary (including the Arbroath development boundary) and as such it cannot be concluded that there is a need for the development which cannot be met within a development boundary. There is available employment land in Arbroath and other Angus towns as well as other potentially suitable sites within towns outside of existing employment areas. It is noted that a similar proposal has recently been granted planning permission at Orchardbank Business Park in Forfar (ref: 17/00848/FULL) which illustrates that this type of development can be located within a development boundary.

The proposed site is located to the immediate north of the Crudie Acres housing development. Housing allocation A1 of the local development plan required that that the housing development formed a landscaped edge to the town. That housing development (which is currently under construction) has been designed so that there is green space on its northern edge to allow a soft and defensible development boundary for Arbroath and to allow a landscaped transition from the built up area to the open countryside. The proposed Battery Electricity Storage Facility would erode the landscape setting of Arbroath by introducing an industrial type of development with palisade fencing, 4m high acoustic fencing, plant and machinery and other functional apparatus which would introduce a new hard boundary to Arbroath which would undermine the planned landscaped edge which would come forward as part of the housing development and undermining one of the policy requirements of that housing allocation.

The proposal is contrary to Policy DS1 because the development would undermine the landscape setting of Arbroath and no evidence has been submitted to demonstrate that there is a need for the proposed development which could not be accommodated within a development boundary.

The site is located on prime quality agricultural land (Class 2 and 3.1 in the Macaulay Land Capability for Agriculture maps). Policy PV20 of the local development plan seeks to safeguard prime agricultural land and only allows development of prime quality land in limited circumstances including where: development proposals support delivery of the development strategy and policies in this local plan; are small scale and directly related to a rural business or mineral extraction; or constitute renewable energy development and are supported by a commitment to a bond commensurate with site restoration requirements. The proposal would not involve renewable energy generation and is for electricity storage only. It is not directly related to a rural business or mineral extraction and is contrary to Policy DS1.

The proposal does not accord with any of the acceptable circumstances allowing the development of prime quality agricultural land and is contrary to Policy PV20.

The application site is located in an area which is identified on the SEPA flood maps as potentially subject to flooding from the adjacent burn and from surface water. Policies PV12 and PV13 deal with managing flood risk and resilience and adaptation and indicate, among other things, that there will be a general presumption against built development proposals on the functional floodplain; which involve land raising

resulting in the loss of the functional flood plain; or, which would materially increase the probability of flooding to existing or planned development. The Flood Risk Framework in Table 3 indicates that medium to high risk areas of coastal or watercourse flooding are generally not suitable for civil infrastructure; but may be suitable for essential infrastructure within built up areas which are designed and constructed to remain operational during floods and not impede water flow.

The flood risk information submitted indicates that the development should be classed as 'essential infrastructure' under SEPA's Flood Risk and Land Use Vulnerability Guidance as it has to be located near the existing substation for operational reasons, which itself is located close to Hercules Den Burn. The Assessment concludes it is therefore acceptable as an exception to the risk framework outlined in Scottish Planning Policy.

SEPA has offered no objection to the proposal on flood risk grounds but has indicated that they would strongly recommend that an alternative location is found for the proposed site away from the Hercules Den Burn. Angus Council's Roads Service has reviewed the submitted the flood risk information and has noted that the battery storage containers would require to be elevated above the ground by 300mm on steel supports to ensure that the facility remains operational during a 1 in 200 year (plus a climate change allowance) flood event. The Roads Service has offered no objection to the proposal, subject to the attachment of planning conditions regulating the finished height of the proposed containers and requiring a permeable access track surface material. Notwithstanding SEPAs recommendation that an alternative location away from the Hercules Den Burn be considered, they have not objected to the proposal and the Roads Service is satisfied that the information submitted shows that while the site would be subject to a level of flood risk, steps could be taken to mitigate that risk.

Policies DS3 and PV6 deal with design quality and development in the landscape and indicate, among other things, that development which has an adverse effect on landscape will only be permitted where the site selected is capable of accommodating the proposed development; the siting and design integrate with the landscape context and minimise adverse impacts on the local landscape; potential cumulative effects with any other relevant proposals are considered to be acceptable; and, mitigation measures and/or reinstatement are proposed where appropriate. Policy DS4 deals with amenity impacts and indicates that development will not be permitted where there is an unacceptable adverse impact on the surrounding area or the environment or amenity of existing or future occupiers of adjoining or nearby properties.

The existing electricity substation benefits from a substantial mature landscape framework which largely mitigates its visual impact; and the planned housing development incorporates a large landscaped/open space area along its northern edge to reflect the edge of settlement location and provide a soft edge to the town. The applicant has submitted noise assessment information which indicates that in order to safeguard the residential amenity of nearby housing, an acoustic fence measuring 4.6m in height would be required along the southern boundary of the site where it borders the housing development, with a 3.1m high acoustic fence along the other boundaries.

The applicant's supporting statement indicates that the development would result in limited visual impact on landscape character and visual amenity and appropriate mitigation measures in the form of a landscaping scheme would be provided. A landscaping scheme has not been submitted and it is hard to see how a landscaping scheme could effectively mitigate the impact of the development having regard to the proximity of acoustic fencing to the site boundary and the limited space remaining. The development is located in a sensitive location on the edge of Arbroath and it would not be desirable to see such an expanse of tall timber fencing of that height in this location. Tall timber fencing of that height would be more suitable in an existing employment area rather than a location in the open countryside.

Public comment in objection was submitted that raises concerns regarding traffic and road safety impacts through the introduction of the site access junction merging on to a bend on the public road and at an area with the driveways of residential property opposite. The Roads Service considered the application in terms of the traffic likely to be generated by the proposal and its impact on the public road network and has offered no objection subject to planning conditions regulating the provision, standard and maintenance of visibility splays at the junction with Hillend Road. Having regard to that advice, it is considered that the proposal could be accommodate without unacceptable impacts on the public road network.

The Environmental Health Service reviewed the submitted Noise Impact Assessment (NIA) and offered no objection subject to the attachment of conditions regulating the attenuation of plant and equipment noise and the light spillage from external lighting. Were the proposal otherwise acceptable, these matters could be regulated by condition. This form of development is not anticipated to create a significant amount of waste beyond the construction period and there would be space for the storage of operational waste and recyclates within the site.

The proposal would not require altered drainage arrangement or a connection to the water supply and would use a sustainable drainage system for surface water disposal. This is compatible with the policy aims of PV15.

Policy PV5 deals with protected species and indicates development proposals which are likely to affect protected species will be assessed to ensure compatibility with the appropriate regulatory regime. The submitted Ecological Report assessed the site to be of low ecological value and no evidence of protected species was recorded within the site. More general mitigation recommendations for breeding birds and reptiles and amphibians were provided in the report and, were the proposal otherwise acceptable, awareness of this recommended mitigation could be raised through the attachment of an advisory note.

In terms of remaining matters, SSE offered no objection to the proposal, subject to consultation by the applicant with regards to the high voltage overhead lines and cables which cross and are in proximity to the proposed development and the extra high voltage tower line that lies to the south / south west of the proposed development. This matter could be dealt with by attachment of an advisory note were the proposal otherwise acceptable.

In conclusion, the proposed battery electricity storage facility proposal is contrary to Policy DS1 because the development would undermine the landscape setting of Arbroath and no evidence has been submitted to demonstrate that there is a need for the proposed development which could not be accommodated within a development boundary; and is contrary to Policy PV20 because it does not accord with any of the acceptable circumstances allowing the development of prime quality agricultural land. There are no material considerations that justify the grant of planning permission contrary to the development plan.

Human Rights Implications

The decision to refuse this application has potential implications for the applicant in terms of his entitlement to peaceful enjoyment of his possessions (First Protocol, Article 1). For the reasons referred to elsewhere in this report justifying the decision in planning terms, it is considered that any actual or apprehended infringement of such Convention Rights, is justified. Any interference with the applicant's right to peaceful enjoyment of his possessions by refusal of the present application is in compliance with the Council's legal duties to determine this planning application under the Planning Acts and such refusal constitutes a justified and proportionate control of the use of property in accordance with the general interest and is necessary in the public interest with reference to the Development Plan and other material planning considerations as referred to in the report.

Equalities Implications

The issues contained in this report fall within an approved category that has been confirmed as exempt from an equalities perspective.

Decision

The application is Refused

Reason(s) for Decision:

1. The proposal is contrary to Policy DS1 of the Angus Local Development Plan 2016 because the development would undermine the landscape setting of Arbroath and no evidence has been submitted to demonstrate that there are any social, economic, environmental or operational considerations that confirm there is a need for the proposed development that cannot be met within a development boundary.

2. The proposal is contrary to Policy PV20 of the Angus Local Development Plan 2016 because the proposal would involve the development of prime agricultural land and does not comply with any of the circumstances which allow for the development of prime quality agricultural land.

Notes:

Case Officer: Fraser MacKenzie
Date: 30 January 2019

Appendix 1 - Development Plan Policies

Angus Local Development Plan 2016

Policy DS1 : Development Boundaries and Priorities
All proposals will be expected to support delivery of the Development Strategy.

The focus of development will be sites allocated or otherwise identified for development within the Angus Local Development Plan, which will be safeguarded for the use(s) set out. Proposals for alternative uses will only be acceptable if they do not undermine the provision of a range of sites to meet the development needs of the plan area.

Proposals on sites not allocated or otherwise identified for development, but within development boundaries will be supported where they are of an appropriate scale and nature and are in accordance with relevant policies of the ALDP.

Proposals for sites outwith but contiguous* with a development boundary will only be acceptable where it is in the public interest and social, economic, environmental or operational considerations confirm there is a need for the proposed development that cannot be met within a development boundary.

Outwith development boundaries proposals will be supported where they are of a scale and nature appropriate to their location and where they are in accordance with relevant policies of the ALDP.

In all locations, proposals that re-use or make better use of vacant, derelict or under-used brownfield land or buildings will be supported where they are in accordance with relevant policies of the ALDP.

Development of greenfield sites (with the exception of sites allocated, identified or considered appropriate for development by policies in the ALDP) will only be supported where there are no suitable and available brownfield sites capable of accommodating the proposed development.

Development proposals should not result in adverse impacts, either alone or in combination with other proposals or projects, on the integrity of any European designated site, in accordance with Policy PV4 Sites Designated for Natural Heritage and Biodiversity Value.

*Sharing an edge or boundary, neighbouring or adjacent

Policy DS3 : Design Quality and Placemaking

Development proposals should deliver a high design standard and draw upon those aspects of landscape or townscape that contribute positively to the character and sense of place of the area in which they are to be located. Development proposals should create buildings and places which are:

- o Distinct in Character and Identity: Where development fits with the character and pattern of development in the surrounding area, provides a coherent structure of streets, spaces and buildings and retains and sensitively integrates important townscape and landscape features.
- o Safe and Pleasant: Where all buildings, public spaces and routes are designed to be accessible, safe and attractive, where public and private spaces are clearly defined and appropriate new areas of landscaping and open space are incorporated and linked to existing green space wherever possible.
- o Well Connected: Where development connects pedestrians, cyclists and vehicles with the surrounding area and public transport, the access and parking requirements of the Roads Authority are met and the principles set out in 'Designing Streets' are addressed.
- o Adaptable: Where development is designed to support a mix of compatible uses and accommodate changing needs.
- o Resource Efficient: Where development makes good use of existing resources and is sited and designed to minimise environmental impacts and maximise the use of local climate and landform.

Supplementary guidance will set out the principles expected in all development, more detailed guidance on the design aspects of different proposals and how to achieve the qualities set out above. Further details on the type of developments requiring a design statement and the issues that should be addressed will also be set out in supplementary guidance.

Policy DS4 : Amenity

All proposed development must have full regard to opportunities for maintaining and improving environmental quality. Development will not be permitted where there is an unacceptable adverse impact on the surrounding area or the environment or amenity of existing or future occupiers of adjoining or nearby properties.

Angus Council will consider the impacts of development on:

- Air quality;
- Noise and vibration levels and times when such disturbances are likely to occur;
- Levels of light pollution;
- Levels of odours, fumes and dust;
- Suitable provision for refuse collection / storage and recycling;
- The effect and timing of traffic movement to, from and within the site, car parking and impacts on highway safety; and
- Residential amenity in relation to overlooking and loss of privacy, outlook, sunlight, daylight and overshadowing.

Angus Council may support development which is considered to have an impact on such considerations, if the use of conditions or planning obligations will ensure that appropriate mitigation and / or compensatory measures are secured.

Applicants may be required to submit detailed assessments in relation to any of the above criteria to the Council for consideration.

Where a site is known or suspected to be contaminated, applicants will be required to undertake investigation and, where appropriate, remediation measures relevant to the current or proposed use to prevent unacceptable risks to human health.

Policy PV5 : Protected Species

Angus Council will work with partner agencies and developers to protect and enhance all wildlife including its habitats, important roost or nesting places. Development proposals which are likely to affect protected species will be assessed to ensure compatibility with the appropriate regulatory regime.

European Protected Species

Development proposals that would, either individually or cumulatively, be likely to have an unacceptable adverse impact on European protected species as defined by Annex 1V of the Habitats Directive

(Directive 92/24/EEC) will only be permitted where it can be demonstrated to the satisfaction of Angus Council as planning authority that:

- o there is no satisfactory alternative; and
- o there are imperative reasons of overriding public health and/or safety, nature, social or economic interest and beneficial consequences for the environment, and
- o the development would not be detrimental to the maintenance of the population of a European protected species at a favourable conservation status in its natural range

Other Protected Species

Development proposals that would be likely to have an unacceptable adverse effect on protected species unless justified in accordance with relevant species legislation (Wildlife and Countryside Act 1981 and the Protection of Badgers Act 1992) subject to any consequent amendment or replacement.

Further information on protected sites and species and their influence on proposed development will be set out in a Planning Advice Note.

Policy PV6 : Development in the Landscape

Angus Council will seek to protect and enhance the quality of the landscape in Angus, its diversity (including coastal, agricultural lowlands, the foothills and mountains), its distinctive local characteristics, and its important views and landmarks.

Capacity to accept new development will be considered within the context of the Tayside Landscape Character Assessment, relevant landscape capacity studies, any formal designations and special landscape areas to be identified within Angus. Within the areas shown on the proposals map as being part of 'wild land', as identified in maps published by Scottish Natural Heritage in 2014, development proposals will be considered in the context of Scottish Planning Policy's provisions in relation to safeguarding the character of wild land.

Development which has an adverse effect on landscape will only be permitted where:

- o the site selected is capable of accommodating the proposed development;
- o the siting and design integrate with the landscape context and minimise adverse impacts on the local landscape;
- o potential cumulative effects with any other relevant proposal are considered to be acceptable; and
- o mitigation measures and/or reinstatement are proposed where appropriate.

Landscape impact of specific types of development is addressed in more detail in other policies in this plan and work involving development which is required for the maintenance of strategic transport and communications infrastructure should avoid, minimise or mitigate any adverse impact on the landscape.

Further information on development in the landscape, including identification of special landscape and conservation areas in Angus will be set out in a Planning Advice Note.

Policy PV9 : Renewable and Low Carbon Energy Development

Proposals for renewable and low carbon energy development* will be supported in principle where they meet the following criteria:

- o the location, siting and appearance of apparatus, and any associated works and infrastructure have been chosen and/or designed to minimise impact on amenity, landscape and environment, while respecting operational efficiency;
- o access for construction and maintenance traffic can be achieved without compromising road safety or causing unacceptable change to the environment and landscape;
- o the site has been designed to make links to the national grid and/or other users of renewable energy and heat generated on site;
- o there will be no unacceptable impact on existing or proposed aviation, defence, seismological or telecommunications facilities;

- o there will be no unacceptable adverse impact individually or cumulatively with other existing or proposed development on:
 - o landscape character, setting within the immediate and wider landscape (including cross boundary or regional features and landscapes), sensitive viewpoints and public access routes;
 - o sites designated for natural heritage (including birds), scientific, historic, cultural or archaeological reasons;
 - o any populations of protected species; and
 - o the amenity of communities or individual dwellings including visual impact, noise, shadow flicker.
- o during construction, operation and decommissioning of the energy plant there will be no unacceptable impacts on:
 - o groundwater;
 - o surface water resources; or
 - o carbon rich soils, deep peat and priority peatland habitat or geodiversity.

Where appropriate mitigation measures must be supported by commitment to a bond commensurate with site restoration requirements.

Consideration may be given to additional factors such as contribution to targets for energy generation and emissions, and/or local socio-economic economic impact.

Supplementary guidance will be prepared to set out a spatial framework to guide the location of onshore wind farm developments, consistent with the approach set out in Table 1 of Scottish Planning Policy. It will also provide further detail on the factors which should be taken into account in considering and advising on proposals for all types of renewable energy development.

Prior to the adoption of that supplementary guidance, the Council will apply the principles and considerations set out in Scottish Planning Policy in assessing the acceptability of any planning applications for onshore wind farms.

*infrastructure, activity and materials required for generation, storage or transmission of energy where it is within the remit of the council as local planning authority (or other duty). Includes new sites, extensions and/or repowering of established sites for onshore wind.

Policy PV12 : Managing Flood Risk

To reduce potential risk from flooding there will be a general presumption against built development proposals:

- o on the functional floodplain;
- o which involve land raising resulting in the loss of the functional flood plain; or
- o which would materially increase the probability of flooding to existing or planned development.

Development in areas known or suspected to be at the upper end of low to medium risk or of medium to high flood risk (as defined in Scottish Planning Policy (2014), see Table 4) may be required to undertake a flood risk assessment. This should demonstrate:

- o that flood risk can be adequately managed both within and outwith the site;
- o that a freeboard allowance of at least 500-600mm in all circumstances can be provided;
- o access and egress to the site can be provided that is free of flood risk; and
- o where appropriate that water-resistant materials and construction will be utilised.

Where appropriate development proposals will be:

- o assessed within the context of the Shoreline Management Plan, Strategic Flood Risk Assessments and Flood Management Plans; and
- o considered within the context of SEPA flood maps to assess and mitigate surface water flood potential.

Built development should avoid areas of ground instability (landslip) coastal erosion and storm surges. In areas prone to landslip a geomorphological assessment may be requested in support of a planning application to assess degree of risk and any remediation measures if required to make the site suitable

for use.

Policy PV13 : Resilience and Adaptation

Development should not require an increase in the provision and / or maintenance of flood defences.

To increase resilience to the effects of climate change such as flood and drought, extreme weather events and rising sea levels Angus Council may require development proposals to incorporate adaptation measures including:

- o use of flood resistant materials and construction techniques;
- o removal of culverts and other engineering works where opportunity arises and avoidance of development over or requiring new culverts or other unnecessary engineering works unless there is no practical alternative;
- o minimising the area of impermeable surfaces by using permeable surfaces where possible for car parking and hard landscaping and where appropriate, green roofs and green infrastructure; and
- o natural flood management measures which reduce water flow and enhance biodiversity and the quality of the water environment. Such schemes can contribute to local green networks, biodiversity and provision of amenity open space and should form an integral part of the design process.

Policy PV15 : Drainage Infrastructure

Development proposals within Development Boundaries will be required to connect to the public sewer where available.

Where there is limited capacity at the treatment works Scottish Water will provide additional wastewater capacity to accommodate development if the Developer can meet the 5 Criteria*. Scottish Water will instigate a growth project upon receipt of the 5 Criteria and will work with the developer, SEPA and Angus Council to identify solutions for the development to proceed.

Outwith areas served by public sewers or where there is no viable connection for economic or technical reasons private provision of waste water treatment must meet the requirements of SEPA and/or The Building Standards (Scotland) Regulations. A private drainage system will only be considered as a means towards achieving connection to the public sewer system, and when it forms part of a specific development proposal which meets the necessary criteria to trigger a Scottish Water growth project.

All new development (except single dwelling and developments that discharge directly to coastal waters) will be required to provide Sustainable Drainage Systems (SUDs) to accommodate surface water drainage and long term maintenance must be agreed with the local authority. SUDs schemes can contribute to local green networks, biodiversity and provision of amenity open space and should form an integral part of the design process.

Drainage Impact Assessment (DIA) will be required for new development where appropriate to identify potential network issues and minimise any reduction in existing levels of service.

*Enabling Development and our 5 Criteria (<http://scotland.gov.uk/Resource/0040/00409361.pdf>)

Policy PV20 : Soils and Geodiversity

Development proposals on prime agricultural land will only be supported where they:

- o support delivery of the development strategy and policies in this local plan;
- o are small scale and directly related to a rural business or mineral extraction; or
- o constitute renewable energy development and are supported by a commitment to a bond commensurate with site restoration requirements.

Design and layout should minimise land required for development proposals on agricultural land and should not render any farm unit unviable.

Development proposals affecting deep peat or carbon rich soils will not be allowed unless there is an overwhelming social or economic need that cannot be met elsewhere. Where peat and carbon rich soils are present, applicants should assess the likely effects of development proposals on carbon dioxide

emissions.

All development proposals will incorporate measures to manage, protect and reinstate valuable soils, groundwater and soil biodiversity during construction.

TAYplan Strategic Development plan

The proposal is not of strategic significance and policies of TAYplan are not referred to in this report.

Our ref: PCS/161961
Your ref: 18/00810/FULL

Fraser MacKenzie
Angus Council
Angus House
Orchardbank Business Park
Forfar
DD8 1AN

If telephoning ask for:
Paul Lewis

7 November 2018

By email only to: PLNProcessing@angus.gov.uk

Dear Mr MacKenzie

Town and Country Planning (Scotland) Acts

Planning application: 18/00810/FULL

**Construction of a Battery Electricity Storage Facility comprising Containerised Battery Storage Units, Inverters and Transformers, DNO Substation, Client Switchgear Container, Electrical Grid Compound, Welfare and Parts Storage Containers and Ancillary Development including Formation of Access Track, Security Fencing, CCTV and Landscaping
Land to East of Crudie Acre Cottage, Arbroath.**

Thank you for your consultation which SEPA received on 25 October 2018.

Advice for the planning authority

We have **no objection** to this planning application, but please note the advice provided below.

1. Flood Risk

- 1.1 We have no objection to the proposed development on flood risk grounds. Notwithstanding this we expect Angus Council to undertake its responsibilities as the Flood Prevention Authority.
- 1.2 We have reviewed the information provided in this consultation and it is noted that the application site lies within the medium likelihood (0.5% annual probability or 1 in 200 year) flood extent of the SEPA Flood Map, and may therefore be at medium to high risk of flooding.
- 1.3 A Flood Risk Assessment (FRA) has been submitted in support of the application where hydrological analysis and 1D hydraulic model have been undertaken.
- 1.4 Plate 5 shows the location of the cross sections used within the 1D steady Flood modeller



Chairman
Bob Downes
Chief Executive
Terry A'Hearn

Perth Strathearn House

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tel 01738 627989 fax 01738 630997
www.sepa.org.uk • customer enquiries 03000 99 66 99

model. The upstream boundary of the model is located at the boundary edge, which is contrary to best practice. We would have expected to see the upstream boundary located further upstream to ensure the backwater effect and potential flow-paths are taken into account.

- 1.5 Catchment descriptors were downloaded from the FEH web service for the Hercules Den Burn. It is stated that the “FEH web service identifies that Hercules Den Burn drains a catchment area of 5.17km², as shown in plate 8”. We would highlight that the catchment area shown within Plate 8, and downloaded from FEH web service is 3.33km². This is also shown in appendix C within the IH124, FEH rainfall runoff and ReFH2 outputs. However, we accept the predicted design flows used within the hydraulic model. Therefore we recommend the text is amended within the FRA to indicate a catchment area of 3.33km².
- 1.6 Within the FRA it is stated that; finished floor levels will be set a minimum of 600mm above the 1 in 200 year plus climate change flood level, the fence around the proposed site will have a 100mm gap between the ground level and bottom of the fence, the access track will be flush to existing ground levels, and flood resistant doors will be fitted to all buildings. We accept all these recommendations. We would strongly recommend that an alternative location is found for the proposed site away from the Hercules Den Burn, however as the proposed development is deemed as essential infrastructure and is required to be located next to the existing substation for operational reasons, we have no objection to the proposed development.

Caveats & Additional Information for Applicant

- 1.7 The SEPA Flood Maps have been produced following a consistent, nationally-applied methodology for catchment areas equal to or greater than 3km² using a Digital Terrain Model (DTM) to define river corridors and low-lying coastal land. The maps are indicative and designed to be used as a strategic tool to assess flood risk at the community level and to support planning policy and flood risk management in Scotland. For further information please visit <http://www.sepa.org.uk/environment/water/flooding/flood-maps/>
- 1.8 Please note that we are reliant on the accuracy and completeness of any information supplied by the applicant in undertaking our review, and can take no responsibility for incorrect data or interpretation made by the authors.
- 1.9 The advice contained in this letter is supplied to you by SEPA in terms of Section 72 (1) of the Flood Risk Management (Scotland) Act 2009 on the basis of information held by SEPA as at the date hereof. It is intended as advice solely to Angus Council as Planning Authority in terms of the said Section 72 (1). Our briefing note “*Flood Risk Management (Scotland) Act 2009: Flood risk advice to planning authorities*” outlines the transitional changes to the basis of our advice in line with the phases of this legislation and can be downloaded from <http://www.sepa.org.uk/environment/land/planning/guidance-and-advice-notes/>

2. Drainage

- 2.1 The applicants should confirm if there will be toilets as part of the welfare facilities in addition to portaloos used during construction.
- 2.2 If there are to be toilet facilities these should be connected to the foul sewer. There is a



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new development adjacent to the site, and the applicants and there may be time to agree access the new foul sewer which is currently under construction. If there is no possibility of connecting to the foul sewer, we would preference for foul drainage to go to total soakaway as it is unlikely there will be enough dilution for any foul drainage emission to surface water at this location.

- 2.3 The site appears to be a low risk development but basic SuDS will still be required for the general compound and access track. The applicants are welcome to discuss options with the local SEPA team based in Arbroath.

Regulatory advice for the applicant

3. Regulatory requirements

- 3.1 Details of regulatory requirements and good practice advice for the applicant can be found on the [Regulations section](#) of our website. If you are unable to find the advice you need for a specific regulatory matter, please contact a member of the regulatory services team in the local SEPA office at:

SEPA, 62 High Street, Arbroath, DD11 1AW, Tel: 01241 874370

If you have any queries relating to this letter, please contact me by telephone on 0131 273 7334 or e-mail at planning.se@sepa.org.uk

Yours sincerely

Paul Lewis
Senior Planning Officer
Planning Service

ECopy to: Jamie Gilliland, Arcus Consultancy Service Ltd - JamieG@arcusconsulting.co.uk

Disclaimer

This advice is given without prejudice to any decision made on elements of the proposal regulated by us, as such a decision may take into account factors not considered at this time. We prefer all the technical information required for any SEPA consents to be submitted at the same time as the planning or similar application. However, we consider it to be at the applicant's commercial risk if any significant changes required during the regulatory stage necessitate a further planning application or similar application and/or neighbour notification or advertising. We have relied on the accuracy and completeness of the information supplied to us in providing the above advice and can take no responsibility for incorrect data or interpretation, or omissions, in such information. If we have not referred to a particular issue in our response, it should not be assumed that there is no impact associated with that issue. For planning applications, if you did not specifically request advice on flood risk, then advice will not have been provided on this issue. Further information on our consultation arrangements generally can be found on our [website planning pages](#).



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From:Coburn, Allan

Sent:Fri, 23 Nov 2018 11:47:36 +0000

To:MacKenzieF

Subject:RE: Consultation for Land To East Of Crudie Acre Cottage Arbroath - 18/00810/FULL

Fraser,

Based on the conversation I had with Andrew Mott (Arcus Consulting) and what is noted in his e-mail below, I am prepared to withdraw SSE's objection subject to an advisory note, as outlined below, being attached to the application.

Advisory Note

□ Full consultation must be undertaken with SSE with regards to the high voltage overhead lines and cables which cross and are in proximity to the proposed development, as well as the extra high voltage tower line that lies to the south / south west of the proposed development. These consultations should commence forthwith in order to determine the best outcome for all interested parties with regards to the safety of all concerned. □

Regards

Allan Coburn



Allan Coburn

Wayleaves Project Manager

North Caledonia Region

If so, please advise any key points the condition or advisory note wording should address.

Kind Regards,

Fraser

Fraser MacKenzie : Planning Officer (Development Standards) : Angus Council : Place : Planning :
Angus House : Orchardbank Business Park : Forfar : DD8 1AN : Telephone - 01307 473351 : E-mail
mackenzief@angus.gov.uk



www.angus.gov.uk/angusdesignawards

From: Andrew Mott [<mailto:andrewm@arcusconsulting.co.uk>]

Sent: 21 November 2018 13:20

To: MacKenzieF

Cc: Jamie Gilliland; allan.coburn@sse.com

Subject: RE: Consultation for Land To East Of Crudie Acre Cottage Arbroath - 18/00810/FULL

Hi Fraser

Thank you for your email last week. I have since had a discussion with Allan Coburn at SSE. They have advised there is one 33kv overhead line which crosses the site and another which is to the east/southeast which may have some implications on the Development. The line which crosses the site will need to be undergrounded to facilitate the development and the other may also require undergrounding or at least there will be considerations for working in proximity to the line.

Allan has advised that the Developer contact the SSE commercial team to discuss this and ensure a quote is provided for the required works. This would then form part of the formal grid connection offer that the Developer has. I have advised the Developer of this requirement so they will progress this.

As this isn't a clear planning matter I assume the requirement for these works could be added as an advisory note to any planning consent, should the Council wish.

I trust that this is sufficient at this stage but please let me know should you require anything further.

Kind regards

Andrew Mott

Principal Consultant

Tel: 01904 715470

Email: andrewm@arcusconsulting.co.uk

Mobile: 07388388797

Arcus Consultancy Services Ltd

1C Swinegate Court East

3 Swinegate

York

YO1 8AJ

www.arcusconsulting.co.uk



From: MacKenzieF [<mailto:MacKenzieF@angus.gcsx.gov.uk>]

Sent: 14 November 2018 16:52

To: Jamie Gilliland

Subject: FW: Consultation for Land To East Of Crudie Acre Cottage Arbroath - 18/00810/FULL

Dear Sir,

Planning Permission Application Reference: 18/00810/FULL

Construction of a Battery Electricity Storage Facility comprising Containerised Battery Storage Units, Inverters and Transformers, DNO Substation, Client Switchgear Container, Electrical Grid Compound, Welfare and Parts Storage Containers and Ancillary Development including Formation of Access Track, Security Fencing, CCTV and Landscaping

Land To East Of Crudie Acre Cottage, Arbroath

Please see below the consultation response from SSE for this application. Can you provide comment in relation to the matters raised.

Please don't hesitate to contact me if you have any queries or wish to discuss further.

Yours faithfully,

Fraser MacKenzie

Fraser MacKenzie : Planning Officer (Development Standards) : Angus Council : Place : Planning :
Angus House : Orchardbank Business Park : Forfar : DD8 1AN : Telephone - 01307 473351 : E-mail [□
mackenzief@angus.gov.uk](mailto:mackenzief@angus.gov.uk)



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From: Coburn, Allan [<mailto:allan.coburn@sse.com>]
Sent: 14 November 2018 16:32
To: MacKenzieF
Subject: RE: Consultation for Land To East Of Crudie Acre Cottage Arbroath - 18/00810/FULL

Hi Fraser,

Given the stage that this proposal is now at, I would hope that the developer / applicant has been in touch with Scottish Hydro Electric Transmission Ltd (SHETL) with regards to the proximity of the EHV tower line, HV lines, along with any other associated plant & equipment. However, on the List of Neighbours Notified, I noticed that neither SHETL nor Scottish Hydro Electric Power Distribution (SHEPD) have been notified, but only those noted in John McGlashan Place which I can't find on our GIS or googlemaps.

Until evidence can be presented that the necessary consultations have been undertaken with ourselves with regards to the EHV tower line, HV lines, along with any other associated plant & equipment, we would have serious concerns, not necessarily an outright objection, with regards to the proposal. These consultations would help to determine any conditions that would require to be met along with any mitigation measures required for the proposal to proceed if planning permission is granted.

Regards

Allan Coburn



Allan Coburn

Wayleaves Project Manager

North Caledonia Region

M: +44(0)7767 852276

Landline: 01382 882832

Internal:20832

E: allan.coburn@sse.com

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DD2 3TN

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ANGUS COUNCIL

PLACE PLANNING

CONSULTATION SHEET

PLANNING APPLICATION NO

18/00810/FULL

Tick boxes as appropriate

ROADS

No Objection

Interest

(Comments to follow within 14 days)

Date

06	11	18
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Memorandum

Place Directorate – Infrastructure
Roads & Transportation

TO: DEVELOPMENT STANDARDS MANAGER, PLANNING

FROM: TRAFFIC MANAGER, ROADS

YOUR REF:

OUR REF: CH/AG/ TD1.3

DATE: 20 NOVEMBER 2018

SUBJECT: **PLANNING APPLICATION REF. NO. 18/00810/FULL – PROPOSED ERECTION OF CONTAINERISED BATTERY STORAGE UNITS, INVERTERS AND TRANSFORMERS ON SKIDS ON LAND TO EAST OF CRUDIE ACRES COTTAGE, ARBROATH**

I refer to the above planning application.

The National Roads Development Guide, adopted by the Council as its road standards, is relative to the consideration of the application and the following comments take due cognisance of that document.

The site is located on the west side of the classified Arbroath to Hillend road on land to the east of Crudie Acres cottage.

Submitted drawing no. 3055-DR-P-0010 Revision 1 shows a proposed access from the public road with a visibility splay of 215 metres in a north-westerly direction and 180 metres in a south-easterly direction.

Submitted drawing no. 3055-DR-P-001 Revision 8 shows two parking spaces for the proposal. This will be adequate as the facility will, after construction only be visited for maintenance purposes.

I have considered the application in terms of the traffic likely to be generated by it, and its impact on the public road network. As a result, I do not object to the application but would recommend that any consent granted shall be subject to the following conditions:

- 1 That, prior to the commencement of development, the visibility splays shall be provided at the junction of the proposed access with Arbroath to Hillend road in accordance with the details shown on drawing no. 3055-DR-P-0010 Revision 1.
Reason: to ensure a safe and suitable access in the interests of road safety.

- 2 That, within the above visibility splays nothing shall be erected, or planting permitted to grow to a height in excess of 1050 millimetres above the adjacent road channel level.
Reason: to provide and maintain adequate sightlines in the interests of road safety.
- 3 That, an advisory, informative note be added to the decision notice to inform the applicant that the verge crossing at the proposed access must be formed and constructed in accordance with the standards of Angus Council.
An application form for the purpose can be downloaded from the council website.

I trust the above comments are of assistance but should you have any queries, please contact Adrian Gwynne on extension 3393.

A handwritten signature in black ink, appearing to be 'pp' or similar initials.

From:PetrieM
Sent:Mon, 31 Dec 2018 12:11:49 +0000
To:MacKenzieF
Cc:ThomsonSD
Subject:RE: Consultation for Land To East Of Crudie Acre Cottage Arbroath - 18/00810/FULL

Hi Fraser,

I can now advise that I have had a chance to look at the revised noise impact assessment and my thoughts on this are below.

The applicant has remodelled the noise sources for this application and revised the layout plan to minimise the noise impact at existing and future receptors. This has been done by placing the air conditioning units together in an enclosure with additional acoustic fencing and a revision of the acoustic fencing around the perimeter. This has improved the noise levels at nearby receptors.

This now means the predicted LAeq is 30dBA at night at the new housing plots, the same as the background level. This has been corrected by 3dB to give a rating level of 33dBA which is 3dB over the background. BS4142 states a difference of around 5dB is likely to be an indication of an adverse impact and where the rating level does not exceed the background, this is an indication of the specific sound source having a low impact.

This mean ideally any predicted specific noise source should have a rating level less that the background in order to be of low impact. This is not the case here however both background and source levels are relatively low here. BS4142:2014 states "Where background sound levels are low, absolute levels might be as, or more, relevant than the margin the rating level exceeds the background. The 2014 iteration of BS4142 does not specify what low levels are, however the previous iteration did and stated that 30dBA background and 35dBA rating levels were low, therefore I consider the background and predicted source levels to be low here.

This means an alternative assessment method and condition are appropriate here, and I consider NR curves would be most appropriate. The predicted LAeq is said to be 30dBA externally which should mean compliance with the NR20 condition I would likely recommend for this site. One concern I have is that 30dBA was modelled at 1.5m and the proposed houses to the south are 2 storey dwellings with windows up to a height of 4.5m. Whilst the barrier proposed is 4.5m, the higher receiver location will mean that it is less effective in mitigating noise than at ground floor level.

Therefore, I would be obliged if the applicant could demonstrate compliance with NR20 with windows slightly open at 4.5m within bedrooms of the proposed properties to the south before I can support this application.

If you require any further information please do not hesitate to contact me.

Kind regards

Martin

From: MacKenzieF

Sent: 11 December 2018 16:49

To: PetrieM

Subject: RE: Consultation for Land To East Of Crudie Acre Cottage Arbroath - 18/00810/FULL

Good Afternoon Martin,

Please find attached a revised Noise Impact Assessment the applicant has provided for this site that seeks to address the matters you identified with the initial assessment provided.

Can you please review and advise if this is acceptable? Please don't hesitate to contact if you wish to discuss further.

Kind Regards,

Fraser

Fraser MacKenzie : Planning Officer (Development Standards) : Angus Council : Place : Planning :
Angus House : Orchardbank Business Park : Forfar : DD8 1AN : Telephone - 01307 473351 : E-mail –
mackenzief@angus.gov.uk



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From: PetrieM

Sent: 20 November 2018 16:29

To: MacKenzieF

Subject: RE: Consultation for Land To East Of Crudie Acre Cottage Arbroath - 18/00810/FULL

No bother Fraser.

Yes and I would like them to address the points raised

Cheers

MP

From: MacKenzieF
Sent: 20 November 2018 16:28
To: PetrieM
Cc: ThomsonSD
Subject: RE: Consultation for Land To East Of Crudie Acre Cottage Arbroath - 18/00810/FULL

Thank you Martin,

Just to clarify, is this an objection from the Environmental Health Service and does the applicant need to address the issues you have identified with the NIA on this basis?

Kind Regards,

Fraser

Fraser MacKenzie : Planning Officer (Development Standards) : Angus Council : Place : Planning :
Angus House : Orchardbank Business Park : Forfar : DD8 1AN : Telephone - 01307 473351 : E-mail –
mackenzief@angus.gov.uk



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From: PetrieM

Sent: 20 November 2018 16:23

To: MacKenzieF

Cc: ThomsonSD

Subject: FW: Consultation for Land To East Of Crudie Acre Cottage Arbroath - 18/00810/FULL

Hi Fraser

I can now advise that I have had a chance to peruse the documents supporting the above application and have visited the site and my observations on this are below:

This application contains a significant amount of plant equipment and as such has the potential to lead to loss of residential amenity through noise. Due to this the application has been supported by a noise impact assessment (NIA), conducted in line with BS4142:2014 which I agree is the correct methodology but I have some issues with how this assessment was concluded.

- The applicant has correctly identified receptors at Crudie Acres, Bottle End Cottage and the new housing development at East Muirlands Road, however the farmhouse at Crudie Acres is not the closest receptor, there is a cottage which is significantly closer (1 Crudie Acres Cottage) which will increase the prediction at these receptors.
- BS4142 compares a predicted noise rating level for the proposed development against a measure representative LA90. The applicant is considering only the night time period which I am content with as this is a 24/7 process and the night time period will be the most important and challenging time to protect. To this end the applicant has measured the background noise levels at 2 locations and selected a representative background based on the LA90. The applicant has chosen 30dBA for the new housing development, a level which I agree is representative, and 26dBA for Crudie Acres with which I disagree, I would prefer 24dBA, the modal value be used.
- The NIA considers the noise emissions from the air conditioning units and inverters, with noise from the transformers considered negligible. I would prefer some heed to be paid to this as these can give rise to low frequency noise complaints and the closest receptors will only be some 30m away.
- Once the source noise level LAeq has been predicted, BS4142 states it should be corrected for acoustic features to produce a rating level. The NIA states that there should be no acoustic corrections which I fundamentally disagree with. The consultant has stated that the a/c units will switch off but not in synchronisation, therefore no penalty for intermittency is required nor tonality. Fans are often tonal by their very nature, however if they truly are not tonal, BS4142 states *"Where the specific sound features characteristics that are neither tonal nor impulsive, though otherwise are readily distinctive against the residual acoustic environment, a penalty of 3*

dB can be applied.". This noise will be readily distinctive therefore the very minimum correction in my opinion is +3dB.

- The consultant has set a target level of background plus 5dB for this application to achieve, which this proposal achieve, only just not withstanding my above points. Generally the preference for BS4142 assessment is that the rating level not exceed the background for which BS4142 describes as "low impact". Taking this and my points above, this application will have a higher than "low impact" upon the acoustic environment. I would proviso this by stating that the absolute levels are actually very low, for which the standard states "*Where background sound levels and rating levels are low, absolute levels might be as, or more, relevant than the margin by which the rating level exceeds the background. This is especially true at night.*" Due to this I may be able to support the assessment if the rating level is higher than the background as long as the absolute levels remain very low, however I would prefer all reasonable measures be taken to try and keep the rating levels as low as possible.

If you require any further details please do not hesitate to contact me.

Kind regards

Martin

From: ACESSENVArbroath
Sent: 25 October 2018 14:07
To: NelsonH; PetrieM
Subject: FW: Consultation for Land To East Of Crudie Acre Cottage Arbroath - 18/00810/FULL

Flare 432096

From: CaneyV
Sent: 25 October 2018 13:10
To: ACESSENVArbroath <accessenvarbroath@angus.gov.uk>
Subject: Consultation for Land To East Of Crudie Acre Cottage Arbroath - 18/00810/FULL

Regards,

Veronica.

Veronica Caney Clerical Officer Angus House : Planning Service, Orchardbank Business Park, Forfar, DD8 1AN

Tel : 01307 473242



www.angus.gov.uk/angusdesignawards

From:PetrieM
Sent:Sat, 19 Jan 2019 16:29:07 +0000
To:MacKenzieF
Cc:ThomsonSD
Subject:RE: 18/00810/FULL

Hi Fraser

I have had a chance to look over the additional information along with the original information and my thoughts on this are below.

The applicant has provided further noise modelling, looking at first floor level in terms of NR curves and I am reasonably content with this information. Some assumptions were made regarding the octave band noise levels of the inverters, in that they are assumed to be of a similar frequency spectrum as the air conditioning units. If they have a significantly different octave banding, noise associated with them could make the noise levels higher than predicted. There is however a reasonable amount of head room built into the prediction, therefore I am happy that this be controlled through condition, which I have recommended below.

I have also recommended a condition controlling external lighting.

If you have any queries with regard to this please do not hesitate to contact me.

Kind regards

Martin

- All plant or equipment shall be so enclosed, attenuated and/or maintained such that any noise therefrom shall not exceed Noise Rating 35 between 0700 and 2300 hours daily, or Noise Rating 20 between 2300 and 0700 hours daily, within any neighbouring residential property, with all windows slightly open, when measured and/ or calculated and plotted on a rating curve chart.
- All external lighting shall be sufficiently screened and aligned so as to ensure that there is no direct illumination of neighbouring land and that light spillage beyond the boundaries of the site is minimised to a degree that it does not adversely affect the amenity of the neighbouring land.

From: MacKenzieF
Sent: 17 January 2019 10:35
To: Andrew Mott
Cc: Jamie Gilliland; PetrieM; TaylorE
Subject: FW: 18/00810/FULL

Good Morning Andrew,

Planning Permission Application: 18/00810/FULL

Construction of a Battery Electricity Storage Facility comprising Containerised Battery Storage Units, Inverters and Transformers, DNO Substation, Client Switchgear Container, Electrical Grid Compound, Welfare and Parts Storage Containers and Ancillary Development including Formation of Access Track, Security Fencing, CCTV and Landscaping

Land To East Of Crudie Acre Cottage, Arbroath

Thank you for providing this. I have provided the further noise assessment information attached and below to Martin in the Environmental Health Service for review (the e-mail address you had for Martin appears to be incorrect).

The draft report of handling is awaiting sign-off. I had received notification of the Roads Service (Flooding) withdrawing their objection and the requirement for further flood risk investigation and have amended the draft report accordingly. If the submitted information is satisfactory for addressing the outstanding noise matters I will do similarly for that section of the report.

I have extended the Processing Agreement (attached) to allow further time for Martin to assess this new information and for me to amend the report accordingly, if the matter is satisfactorily addressed. The application will still be refused however it would be to your benefit that the noise matter is resolved if the refusal decision were successfully appealed. I hope you are agreeable to extension to the 01 February 2019 for determination of the application.

Please don't hesitate to contact me if you have any queries or require further information.

Kind Regards

Fraser MacKenzie : Planning Officer (Development Standards) : Angus Council : Place : Planning :
Angus House : Orchardbank Business Park : Forfar : DD8 1AN : Telephone - 01307 473351 : E-mail –
mackenzief@angus.gov.uk



www.angus.gov.uk/angusdesignawards

From: Andrew Mott [<mailto:andrewm@arcusconsulting.co.uk>]
Sent: 16 January 2019 20:19
To: MacKenzieF
Cc: Jamie Gilliland; petriem@angus.gcsx.gov.uk
Subject: 18/00810/FULL

Hi Frazer

Further to my previous emails please find attached a letter from our acoustics consultant addressing Martin Petrie's latest comments, requiring an assessment against NR20. As can be seen by the assessment presented in the attached letter the operation of the Development results in no exceedances of NR20 with a partially open window of bedrooms at the nearest façade. I trust that this is satisfactory and now removes any initial objection Environmental Health had with the application. Given this I would appreciate it if you could be confirmed that noise will not form one of the reasons for refusal of the application.

You will have also seen the email from the Roads Department on Monday afternoon regarding the previous SUDS issue where they have now also removed their objection.

If you require anything further from me please let me know.

Kind regards

Andrew Mott

Principal Consultant

Tel: 01904 715470

Email: andrewm@arcusconsulting.co.uk

Mobile: 07388388797

Arcus Consultancy Services Ltd

1C Swinegate Court East

3 Swinegate

York

YO1 8AJ

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From:Kirts-MathiesonG
Sent:Mon, 17 Dec 2018 13:18:00 +0000
To:MacKenzieF
Cc:CorriganJ
Subject:RE: Planning Permission Application: 18/00810/FULL

Hello Fraser

Further to your email below I have now considered the above planning application and have the following observations with regard to flood risk:

Observations

1. The planning application is for the construction of a Battery Electricity Storage Facility comprising Containerised Battery Storage Units, Inverters and Transformers, DNO Substation, Client Switchgear Container, Electrical Grid Compound, Welfare and Parts Storage Containers and Ancillary Development including Formation of Access Track, Security Fencing, CCTV and Landscaping at Land to East of Crudie Acre Cottage in Arbroath.
2. The location of the proposed development site lies within the medium/high probability flood envelope as given on SEPA's indicative flood map. It is therefore likely to be at risk of flooding during an event of this return period.

Requirements

3. A FRA has been submitted as part of this planning application by Arcus Consultancy Services that has recommendations for flooding for the proposed development form Hercules Den. I notice that SEPA has also commented to this planning application and I would agree with their comments on the submitted FRA. I would have recommended that an alternative location is found for the proposed site away from the Hercules Den Burn, however as the proposed development is deemed as essential infrastructure and is required to be located next to the existing substation for operational reasons, I have no objection to the proposed development.

4. However, no detailed information for the proposed surface water drainage scheme has been submitted to date and I would therefore require a Drainage Impact Assessment to be submitted by the applicant for the proposed development. The submitted DIA should include the following information:
- A plan showing the existing and proposed drainage arrangement for the development.
 - A summary of how the drainage design would provide SUDS in accordance with “The SUDS Manual, CIRIA C753”. This should include a summary of the SUDS to be incorporated. If infiltration techniques are proposed, soil classification, evidence of porosity test and groundwater levels, in accordance with BRE Digest 365 should be provided.
 - An assessment of flood risk showing that:
 - a. there would be no surface flooding (e.g. of proposed access roads and car-parks, etc.) within the site for the critical 1 in 30 year rainfall event;
 - b. there would be no flooding of the proposed development from surface water drainage systems for the critical 1 in 200 year rainfall event;
 - c. and that the proposed development would not increase the risk of flooding out-with the site for critical rainfall and flood events up to and including the 1 in 200 year return period.

Please note that any calculations submitted will require to be signed off as being correct by a Chartered or Incorporated Engineer or Hydrologist. An allowance for climate change of an additional 30% should be included in the calculations.

- Confirmation of who would be responsible for maintaining the proposed SUDS.

I require the condition in item 4 above to be satisfactorily addressed before I can give my final comments on the proposed drainage scheme.

From:Kirts-MathiesonG
Sent:Mon, 14 Jan 2019 15:10:20 +0000
To:MacKenzieF
Cc:liamn@arcusconsulting.co.uk
Subject:Planning Permission Application: 18/00810/FULL

Fraser

Further to the conversation I had with Liam Nevis (Arcus Consulting) last week, I withdraw my previous objection to this planning application.

I can confirm that no further information is required, given that all the battery storage containers will have a minimum FFL of 34.56m AOD and they will be raised from the ground using 300 mm high steel supports resting on 300 mm concrete plinths at each corner of the container. This is to ensure that the facility remains operational during a 1 in 200 year flood event plus climate change plus 600mm freeboard level and a 1 in 1000 year event. In addition they propose to have a permeable access track at existing ground level.

If you require any further information regarding the above please let me know.

Kind regards

Georgia

Georgia Kirts-Mathieson, Design Engineer, Engineering & Design Services, Roads Division, Place – Technical & Property, Angus Council, Angus House, Sylvie Way, Forfar DD8 1AN Tel: (01307) 473367



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5.4kg CO₂ in the atmosphere and 3 sheets of A4 paper = 1 litre of water

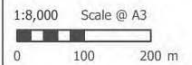
Letter received from Mr Edward Bodman, 2 Bottlend Cottage, Old Forfar Road, Arbroath, received 29/11/18 reads as follows:-

PLANNING APPLICATION REF 18/00810/FULL

"I have concerns about the proposed road merging onto the bend at grid ref 622 416 as it's on a bend and there is also a dip in the road it also has a blind spot from traffic coming down from East Muirlands Road and although the 30 mile sign has been moved down beyond the bend and the 40mph sign moved between here and Denfield drivers still speed up and down the road and has been a lot or near misses at the bend in both directions, also our house and No 1 Bottlend Cottage have driveways basically opposite the proposed road and so for these reasons I am objecting to the proposed plans."

E BODMAN

- Land Under Control of Applicant
- Planning Application Boundary



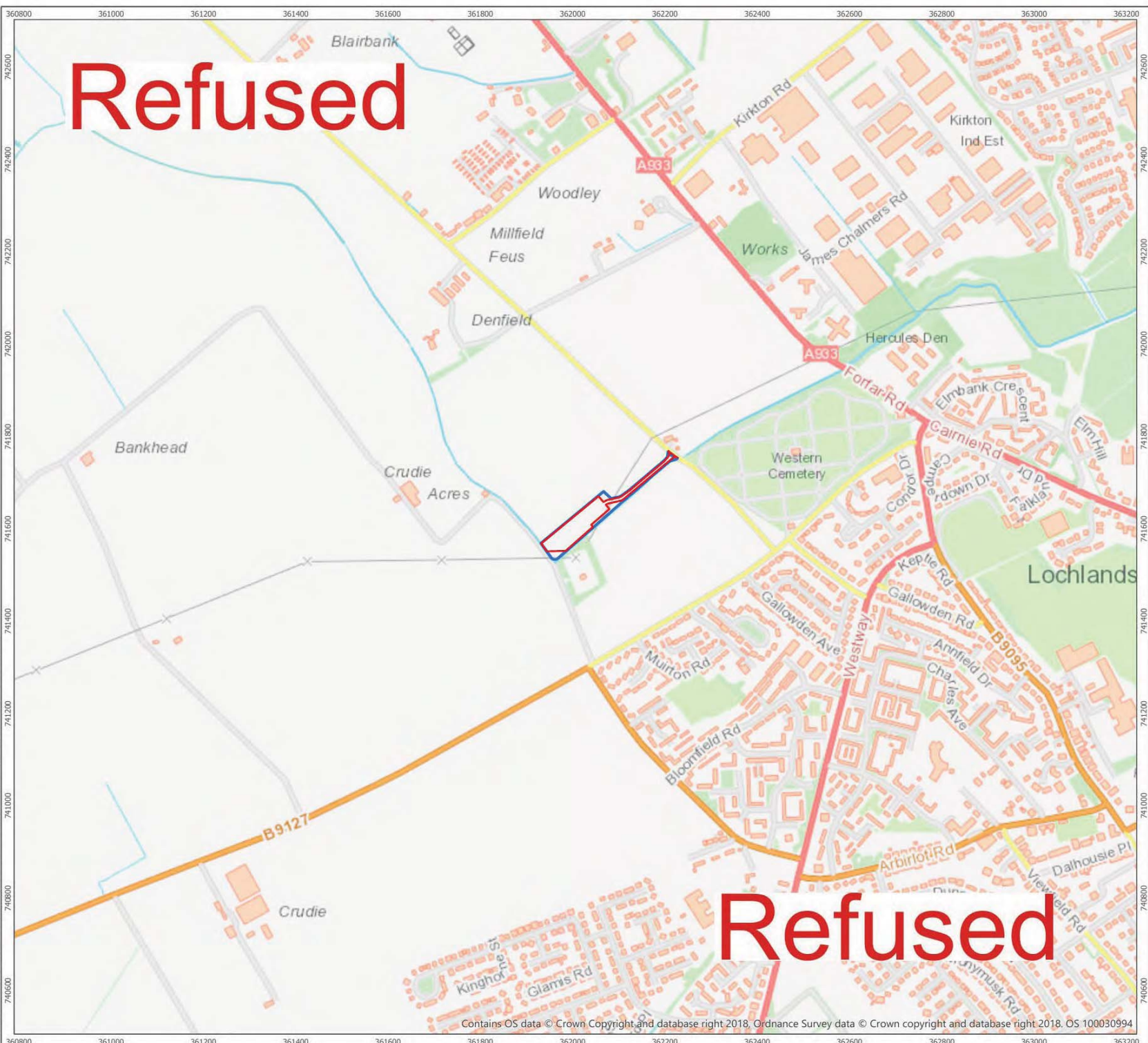
Produced By: KE	Ref: 3055-REP-001
Checked By: AM	Date: 30/08/2018

Site Location Plan
Planning Drawing 001

Arbroath Battery Electricity Storage
Planning Application

Refused

Refused





Refused

ACCESS GATE
6m SECURITY COLUMN

4 INVERTERS + 1 TRANSFORMER ON SKID
11.17m x 2.06m x 2.7m

BATTERY CONTAINER
12.9m x 2.44m x 2.59m

ACOUSTIC FENCE

6m SECURITY COLUMN

ELECTRICAL GRID COMPOUND
42.6m x 20.0m

ACOUSTIC FENCE

AC EQUIPMENT COMPOUND
6.0m x 6.0m

ACCESS TRACK (6m)

EXISTING VEGETATION

WELFARE
6.1m x 2.43m x 2.6m

CAR PARKING X 2
5.0 m x 2.5m

6m SECURITY COLUMN

CLIENT SWITCHGEAR CONTAINER
7.5m x 2.9m x 3.2m

DNO SWITCHROOM
6.0m x 3.6m x 3.4m

DNO METER POINT
E361971, N741558

6m SECURITY COLUMN

Sinks

Sub Sta

SCALE - 1:1000



Refused

LEGEND:

- SITE BOUNDARY (0.81ha)
- LAND UNDER CONTROL OF APPLICANT (0.95ha)
- - - OVERHEAD LINE 15 m OFFSET
- ACOUSTIC FENCE

NOTE: TOTAL FENCED AREA = 0.53 Ha

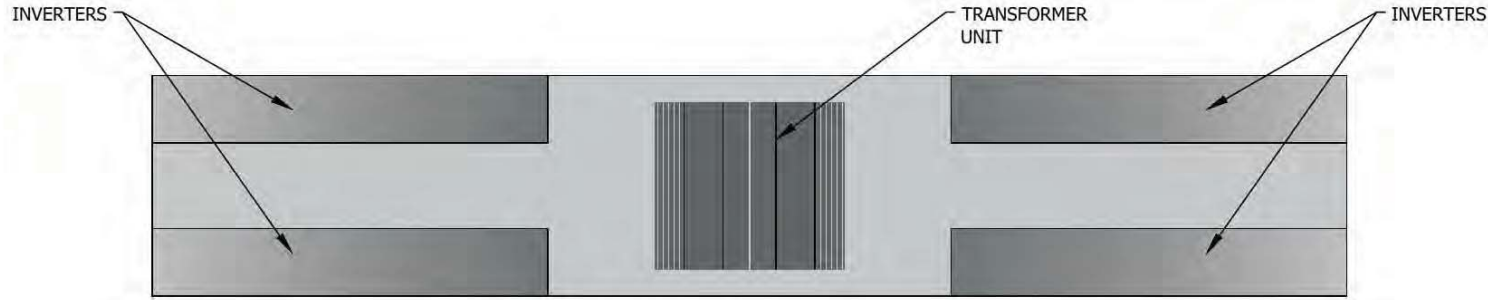
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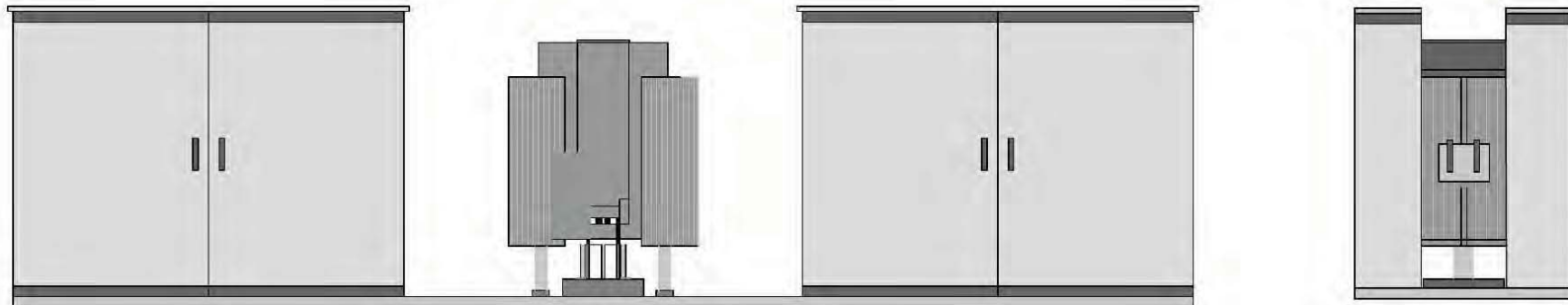
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Client CORONATION POWER		Designed KB		Drawn KB		Checked DB		Approved AM				Drawing Number 3055-DR-P-0001	
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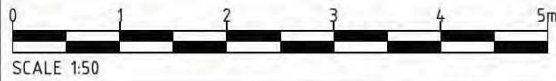
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ELEVATION

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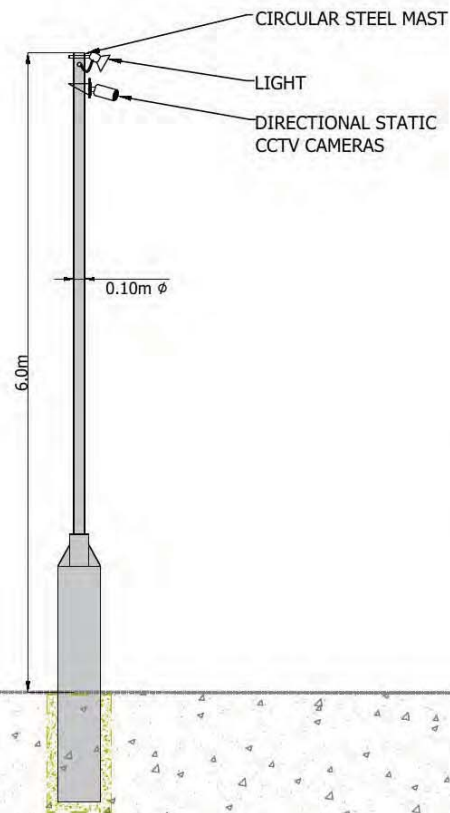
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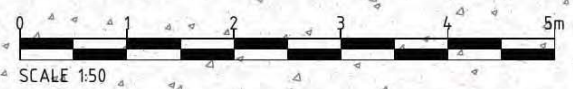
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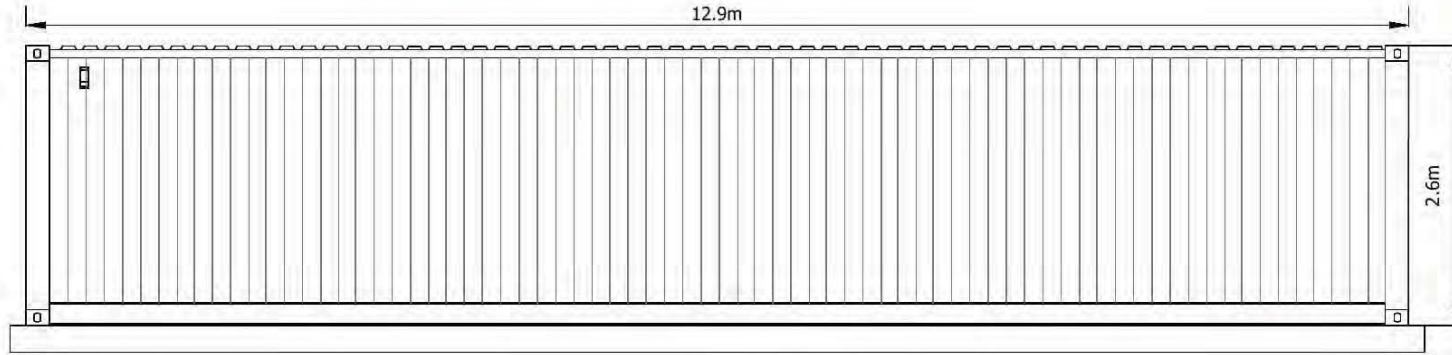


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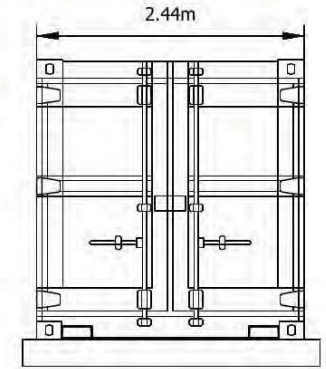
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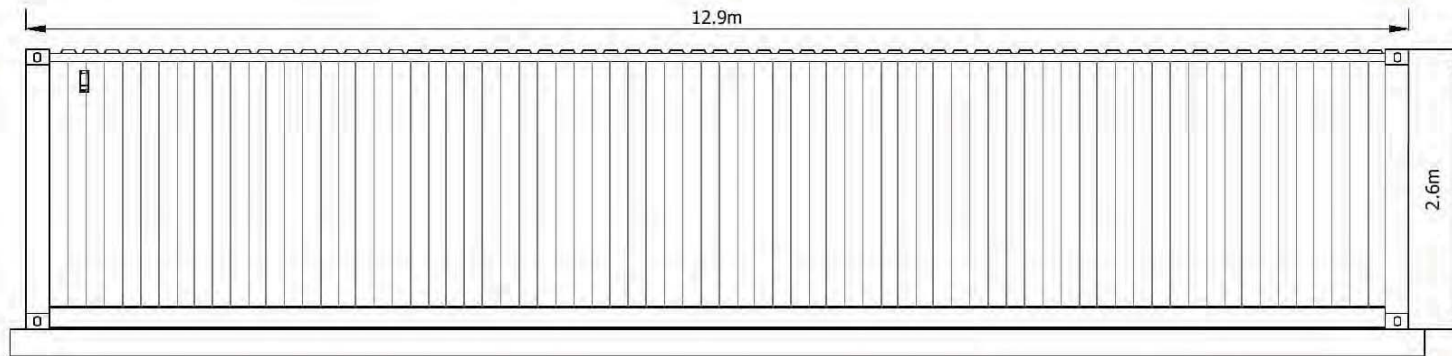
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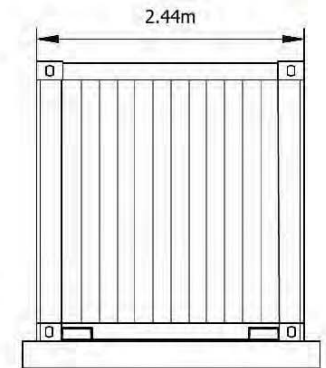
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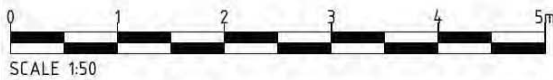
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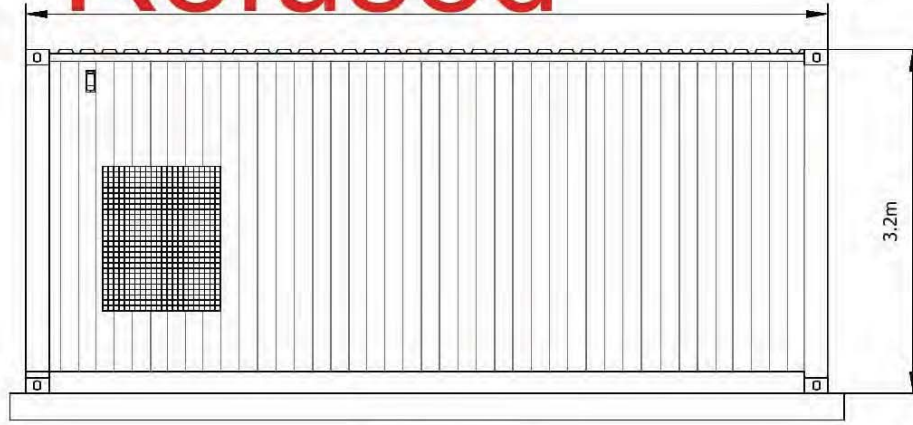


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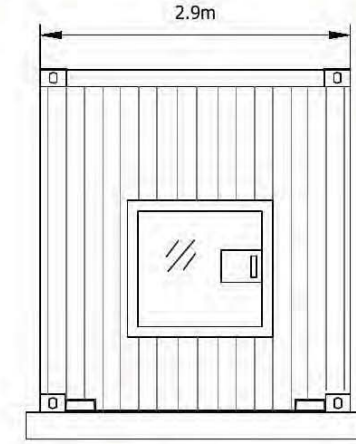
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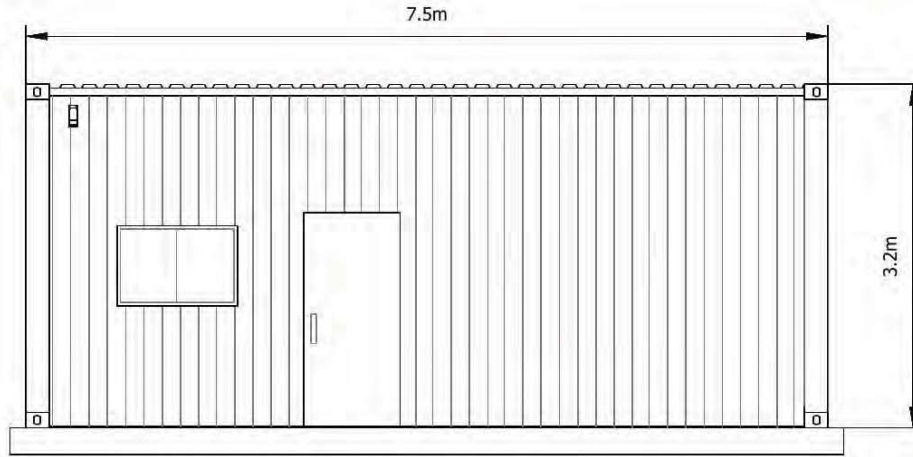
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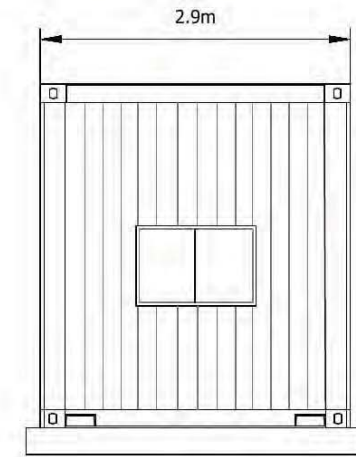
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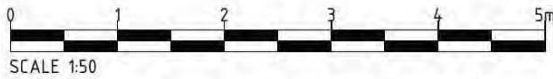
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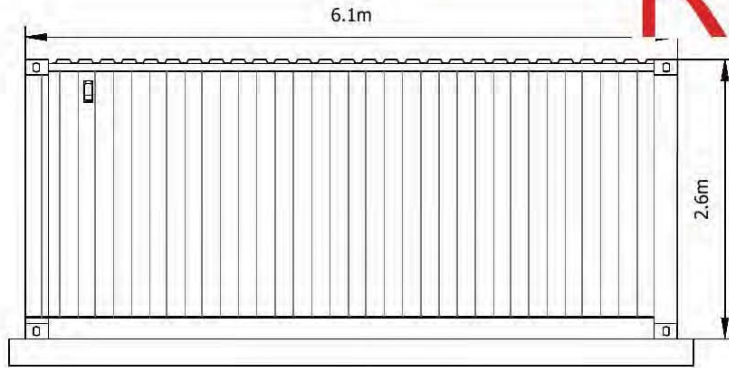
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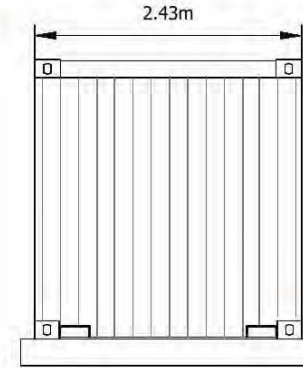
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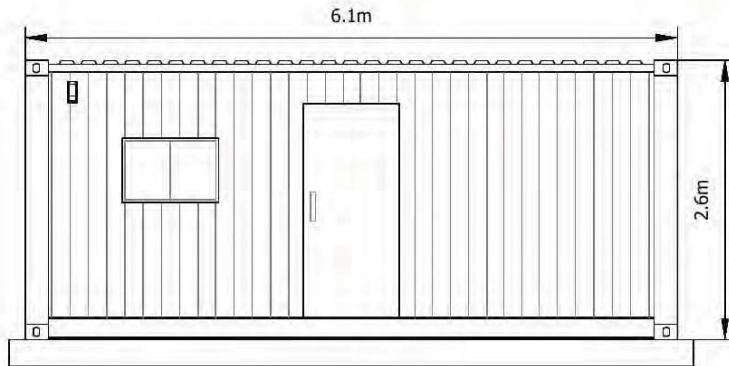
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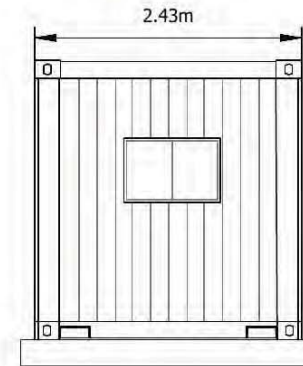
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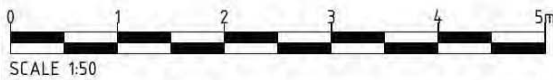
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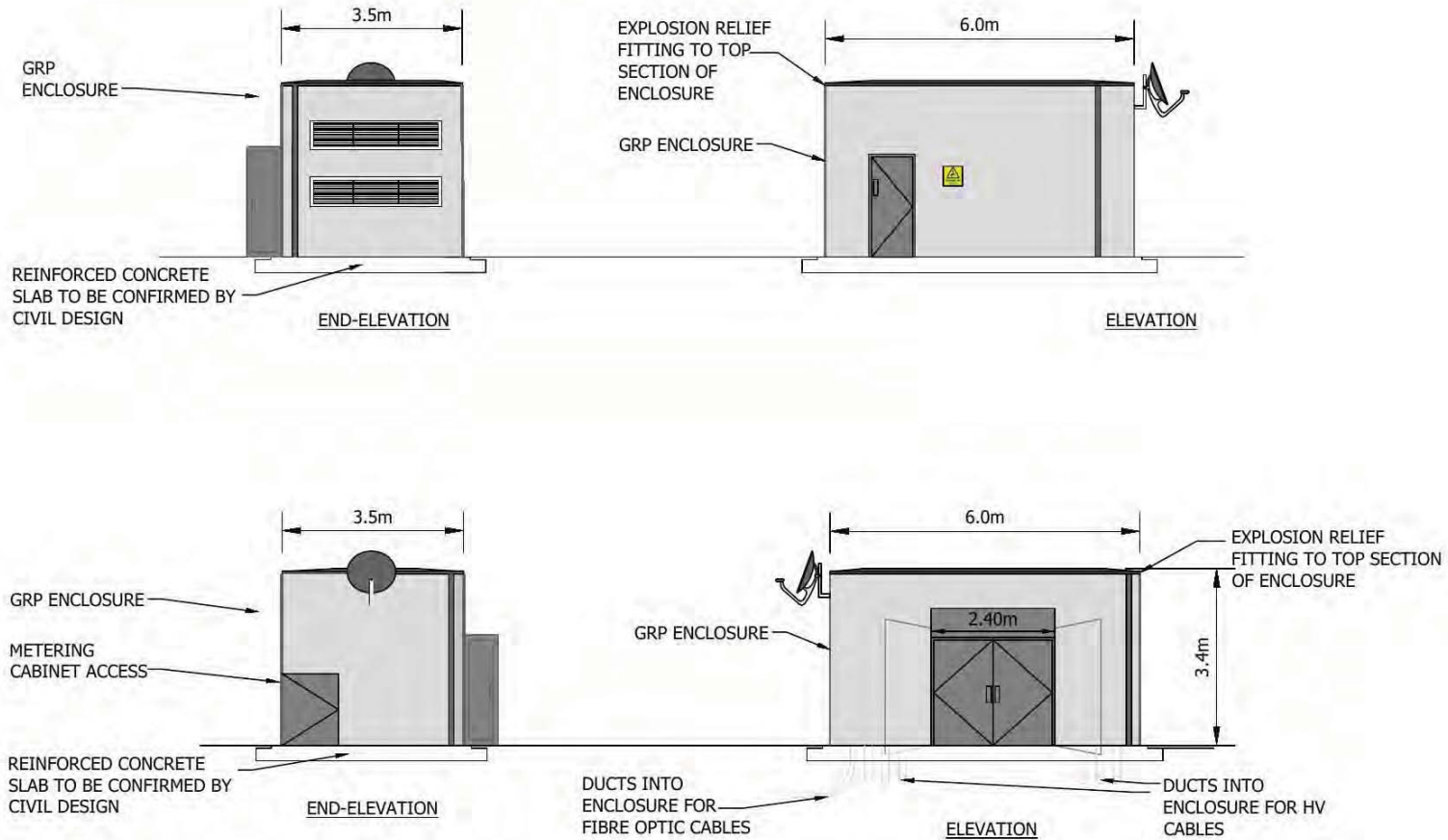


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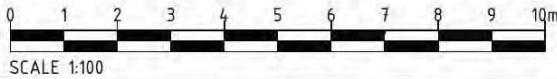
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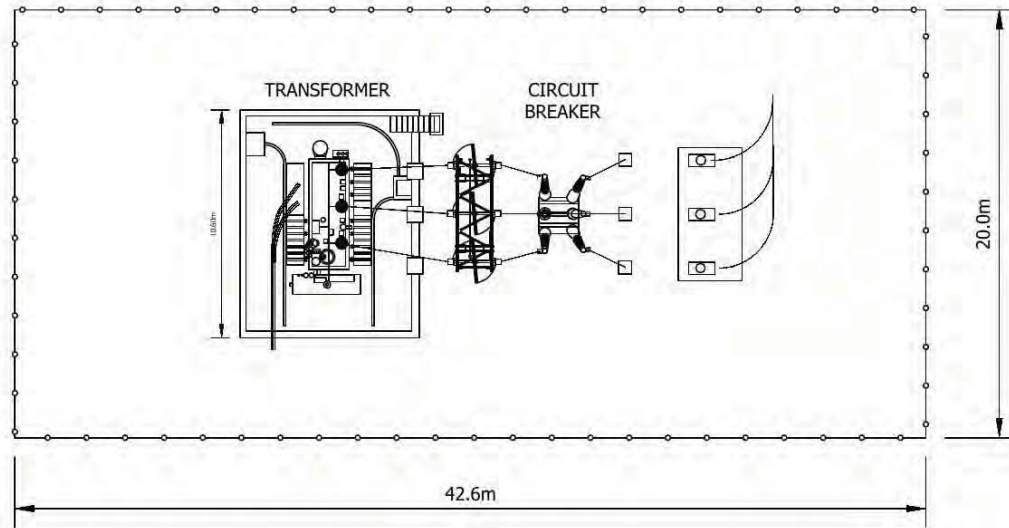


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Client CORONATION POWER		Designed KB		Drawn KB					
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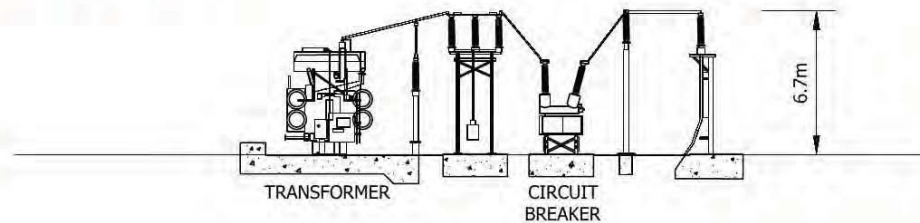


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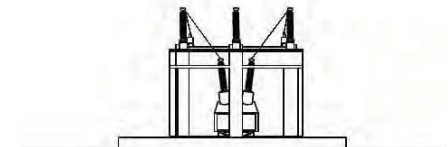


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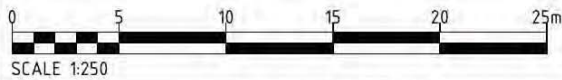
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FRONT ELEVATION



END ELEVATION



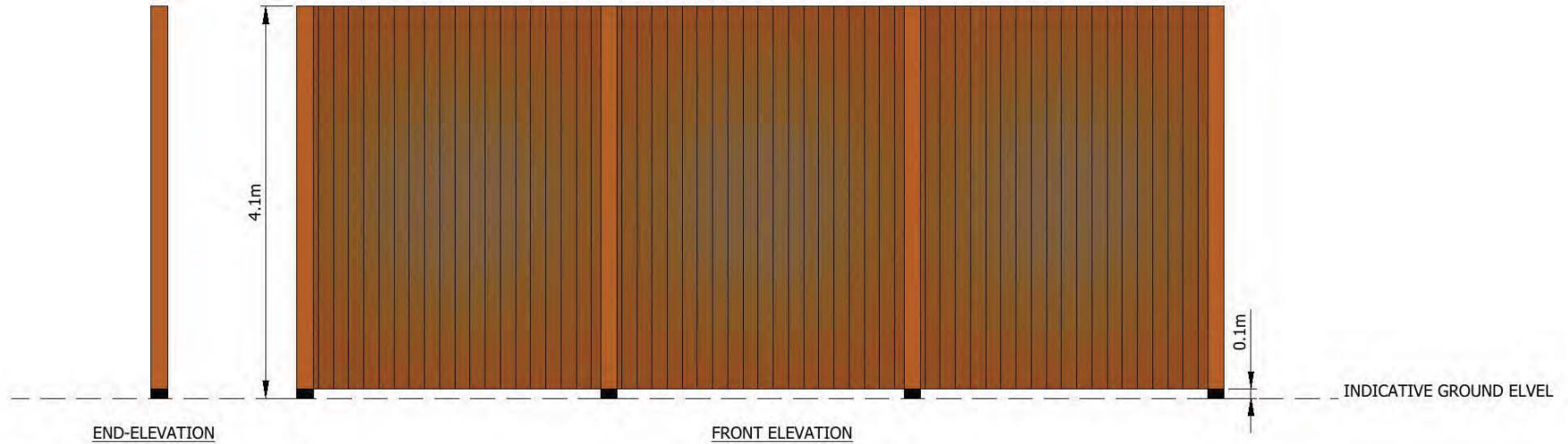
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Client CORONATION POWER		Designed DB		Drawn DB		Checked AM		Approved AM		Drawing Number 3055-DR-PRE-0002		Rev -	
		Arcus Internal Project No. 3055		Date 12/07/18									
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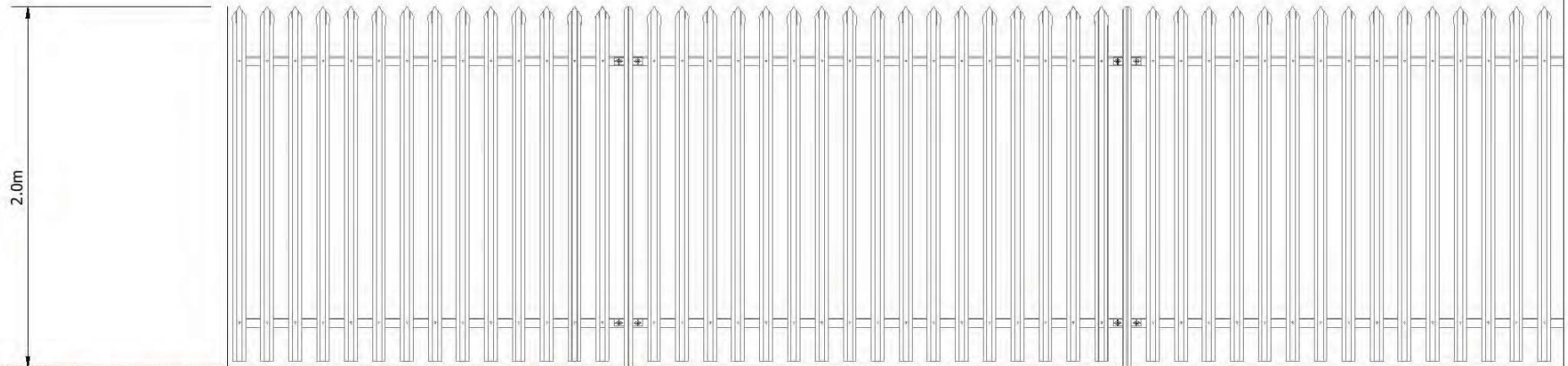


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Project Title ARBROATH BATTERY STORAGE PERTH AND KINROSS		Drawing Title PLANNING DRAWING 009b INDICATIVE NOISE ATTENUATION FENCE DETAIL				Purpose of issue PLANNING		THIS DOCUMENT HAS BEEN PREPARED IN ACCORDANCE WITH THE SCOPE OF ARCUS' APPOINTMENT WITH ITS CLIENT AND IS SUBJECT TO THE TERMS OF THAT APPOINTMENT. ARCUS ACCEPTS NO LIABILITY FOR ANY USE OF THIS DOCUMENT OTHER THAN BY ITS CLIENT AND ONLY FOR THE PURPOSES FOR WHICH IT WAS PREPARED AND PROVIDED		Arcus Consultancy Services 7th Floor 144 West George Street Glasgow, G2 2HG Tel: +44 (0)141 221 9997 Fax: +44 (0)141 221 5610 www.arcusconsulting.co.uk	
Client CORONATION POWER		Designed DB		Drawn DB		Checked AM		Approved AM		Drawing Number 3055-DR-PRE-0009b	
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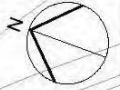


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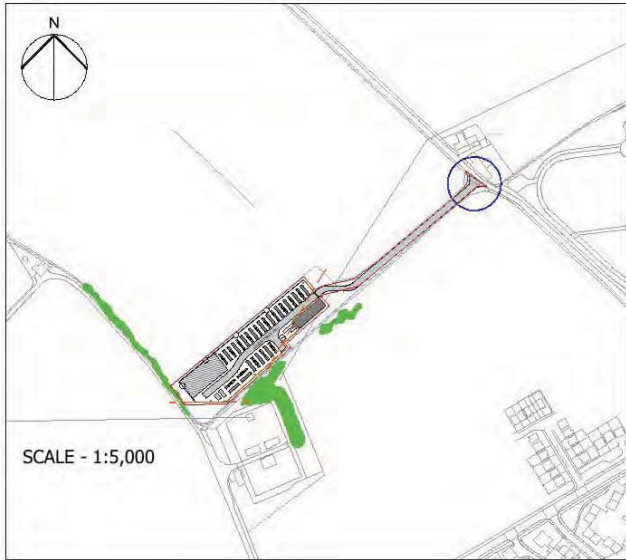
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Client CORONATION POWER		Designed DB Drawn DB Arcus Internal Project No. 3055 Scale @ A3 1:25	Checked AM Approved AM Date 06/08/18	Drawing Number 3055-DR-PRE-0009a		Rev -			



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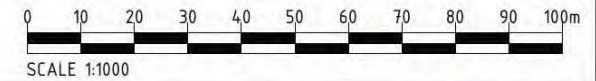
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- INDICATIVE VISIBILITY SPLAY. VEGETATION AND ROADSIDE TREES SHOULD BE TRIMMED OR MANAGED TO MAXIMUM HEIGHT OF 0.8m WITHIN THIS AREA.
 - PLANNING APPLICATION BOUNDARY
 - SPLAY JUNCTION



SCALE - 1:5,000

SCALE - 1:1,000

Refused



Plot Date : 28 August 2018 14:32:32
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Client CORONATION POWER		Designed KB	Drawn KB	Checked DB	Approved AM	Arcus Internal Project No. 3055	
		Date 13/08/18		Scale @ A3 1:1000		Drawing Number 3055-DR-P-0010	Rev 1
						Arcus Consultancy Services 7th Floor 144 West George Street Glasgow, G2 2HG Tel: +44 (0)141 221 9997 Fax: +44 (0)141 221 5610 www.arcusconsulting.co.uk	



AC10





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AC10



AC10







AC10



TOWN AND COUNTRY PLANNING (SCOTLAND) ACT 1997
(AS AMENDED)
TOWN AND COUNTRY PLANNING (DEVELOPMENT MANAGEMENT PROCEDURE)
(SCOTLAND)
REGULATIONS 2013

PLANNING PERMISSION REFUSAL
REFERENCE : 18/00810/FULL

To **Coronation Power Limited**
c/o Arcus Consultancy Service Ltd Jamie Gilliland
FAO Jamie Gilliland
7th Floor
144 West George Street
Glasgow
United Kingdom
G2 2HG

With reference to your application dated 23 October 2018 for planning permission under the above mentioned Acts and Regulations for the following development, viz.:-

Construction of a Battery Electricity Storage Facility comprising Containerised Battery Storage Units, Inverters and Transformers, DNO Substation, Client Switchgear Container, Electrical Grid Compound, Welfare and Parts Storage Containers and Ancillary Development including Formation of Access Track, Security Fencing, CCTV and Landscaping at Land To East Of Crudie Acre Cottage Arbroath for Coronation Power Limited

The Angus Council in exercise of their powers under the above mentioned Acts and Regulations hereby **Refuse Planning Permission (Delegated Decision)** for the said development in accordance with the particulars given in the application and plans docqueted as relative hereto in paper or identified as refused on the Public Access portal.

The reasons for the Council's decision are:-

- 1 The proposal is contrary to Policy DS1 of the Angus Local Development Plan 2016 because the development would undermine the landscape setting of Arbroath and no evidence has been submitted to demonstrate that there are any social, economic, environmental or operational considerations that confirm there is a need for the proposed development that cannot be met within a development boundary.
- 2 The proposal is contrary to Policy PV20 of the Angus Local Development Plan 2016 because the proposal would involve the development of prime agricultural land and does not comply with any of the circumstances which allow for the development of prime quality agricultural land.

Amendments:

- 1 The Site Location Plan Planning Drawing 001 Ref: 3055-REP-001 Date: 30/08/2018, amends and supersedes Site Location Plan Planning Drawing 001 Ref: 3055-REP-001 Date: 01/08/2018, in that it shows the proposed access track and junction that would merge with the C51 Road.
- 2 Planning Drawing 002 Site Layout Plan Drawing Number 3055-DR-P-0001 Rev 10 Date: 10/12/18 amends and supersedes Planning Drawing 002 Site Layout Plan Drawing Number 3055-DR-P-0001 Rev 8 Date: 28/08/18, in that it shows the proposed access track and junction that would merge with the C51 Road and provides an amended layout an noise attenuation measures to earlier site layout drawings.

Dated this **1 February 2019**

AC11

Kate Cowey - Service Manager
Angus Council
Place
Angus House
Orchardbank Business Park
Forfar DD8 1AN

Planning Decisions – Guidance Note

Please retain – this guidance forms part of your Decision Notice

You have now received your Decision Notice. This guidance note sets out important information regarding appealing or reviewing your decision. There are also new requirements in terms of notifications to the Planning Authority and display notices on-site for certain types of application. You will also find details on how to vary or renew your permission.

Please read the notes carefully to ensure effective compliance with the new regulations.

DURATION

This permission will lapse 3 years from the date of this decision, unless there is a specific condition relating to the duration of the permission or development has commenced by that date.

PLANNING DECISIONS

Decision Types and Appeal/Review Routes

The 'decision type' as specified in your decision letter determines the appeal or review route. The route to do this is dependent on the how the application was determined. Please check your decision letter and choose the appropriate appeal/review route in accordance with the table below. Details of how to do this are included in the guidance.

Determination Type	What does this mean?	Appeal/Review Route
Development Standards Committee/Full Council	National developments, major developments and local developments determined at a meeting of the Development Standards Committee or Full Council whereby relevant parties and the applicant were given the opportunity to present their cases before a decision was reached.	DPEA (appeal to Scottish Ministers) – See details on attached Form 1
Delegated Decision	Local developments determined by the Service Manager through delegated powers under the statutory scheme of delegation. These applications may have been subject to less than five representations, minor breaches of policy or may be refusals.	Local Review Body – See details on attached Form 2
Other Decision	All decisions other than planning permission or approval of matters specified in condition. These include decisions relating to Listed Building Consent, Advertisement Consent, Conservation Area Consent and Hazardous Substances Consent.	DPEA (appeal to Scottish Ministers) – See details on attached Form 1

Notification of initiation of development (NID)

Once planning permission has been granted and the applicant has decided the date they will commence that development they must inform the Planning Authority of that date. The notice must be submitted before development commences – failure to do so would be a breach of planning control. The relevant form is included with this guidance note.

Notification of completion of development (NCD)

Once a development for which planning permission has been given has been completed the applicant must, as soon as practicable, submit a notice of completion to the planning authority. Where development is carried out in phases there is a requirement for a notice to be submitted at the conclusion of each phase. The relevant form is included with this guidance note.

Display of Notice while development is carried out

For national, major or 'bad neighbour' developments (such as public houses, hot food shops or scrap yards), the developer must, for the duration of the development, display a sign or signs containing prescribed information.

The notice must be in the prescribed form and:-

- displayed in a prominent place at or in the vicinity of the site of the development;
- readily visible to the public; and
- printed on durable material.

A display notice is included with this guidance note.

Should you have any queries in relation to any of the above, please contact:

Angus Council
Place
Angus House
Orchardbank Business Park
Forfar
DD8 1AN

Telephone 01307 473212 / 473207 / 473335

E-mail: planning@angus.gov.uk

Website: www.angus.gov.uk



TOWN AND COUNTRY PLANNING (SCOTLAND) ACT 1997 (AS AMENDED)

The Town & Country Planning (Development Management Procedure) (Scotland) Regulations 2013 – Schedule to Form 1

*Notification to be sent to applicant on refusal of planning permission
or on the grant of permission subject to conditions decided by Angus Council*

1. If the applicant is aggrieved by the decision of the planning authority-
 - a) to refuse permission for the proposed development;
 - b) to refuse approval, consent or agreement required by condition imposed on a grant of planning permission;
 - c) to grant planning permission or any approval, consent or agreement subject to conditions,

the applicant may appeal to the Scottish Ministers to review the case under section 47 of the Town and Country Planning (Scotland) Act 1997 within three months beginning with the date of this notice. The notice of appeal should be addressed to Directorate for Planning & Environmental Appeals, 4 The Courtyard, Callendar Business Park, Falkirk, FK1 1XR. Alternatively you can submit your appeal directly to DPEA using the national e-planning web site <https://eplanning.scotland.gov.uk>.

2. If permission to develop land is refused or granted subject to conditions and the owner of the land claims that the land has become incapable of reasonably beneficial use in its existing state and cannot be rendered capable of reasonably beneficial use by the carrying out of any development which has been or would be permitted, the owner of the land may serve on the planning authority a purchase notice requiring the purchase of the owner of the land's interest in the land in accordance with Part 5 of the Town and Country Planning (Scotland) Act 1997.



TOWN AND COUNTRY PLANNING (SCOTLAND) ACT 1997 (AS AMENDED)

The Town & Country Planning (Development Management Procedure) (Scotland) Regulations 2013 – Schedule to Form 2

*Notification to be sent to applicant on refusal of planning permission
or on the grant of permission subject to conditions decided through
Angus Council's Scheme of Delegation*

1. If the applicant is aggrieved by the decision of the planning authority-
 - a) to refuse permission for the proposed development;
 - b) to refuse approval, consent or agreement required by condition imposed on a grant of planning permission;
 - c) to grant planning permission or any approval, consent or agreement subject to conditions,

the applicant may require the planning authority to review the case under section 43A of the Town and Country Planning (Scotland) Act 1997 within three months beginning with the date of this notice. The notice of review should be addressed to Committee Officer, Angus Council, Resources, Legal & Democratic Services, Angus House, Orchardbank Business Park, Forfar, DD8 1AN.

A Notice of Review Form and guidance can be found on the national e-planning website <https://eplanning.scotland.gov.uk>. Alternatively you can return your Notice of Review directly to the local planning authority online on the same web site.

2. If permission to develop land is refused or granted subject to conditions and the owner of the land claims that the land has become incapable of reasonably beneficial use in its existing state and cannot be rendered capable of reasonably beneficial use by the carrying out of any development which has been or would be permitted, the owner of the land may serve on the planning authority a purchase notice requiring the purchase of the owner of the land's interest in the land in accordance with Part 5 of the Town and Country Planning (Scotland) Act 1997.

PLANNING

Your experience with Planning

Please indicate whether you agree or disagree with the following statements about your most recent experience of the Council's handling of the planning application in which you had an interest.

Q.1 I was given the advice and help I needed to submit my application/representation:-

Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	It does not apply
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q.2 The Council kept me informed about the progress of the application that I had an interest in:-

Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	It does not apply
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q.3 The Council dealt promptly with my queries:-

Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	It does not apply
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q.4 The Council dealt helpfully with my queries:-

Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	It does not apply
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q.5 I understand the reasons for the decision made on the application that I had an interest in:-

Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	It does not apply
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q.6 I feel that I was treated fairly and that my view point was listened to:-

Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	It does not apply
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

OVERALL SATISFACTION: Overall satisfaction with the service:

Q.7 Setting aside whether your application was successful or not, and taking everything into account, how satisfied or dissatisfied are you with the service provided by the council in processing your application?

Very satisfied	Fairly satisfied	Neither Satisfied nor Dissatisfied	Fairly Dissatisfied	Very Dissatisfied
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

OUTCOME: Outcome of the application:

Q.8 Was the application that you had an interest in:-

Granted Permission/Consent	<input type="checkbox"/>	Refused Permission/Consent	<input type="checkbox"/>	Withdrawn	<input type="checkbox"/>
----------------------------	--------------------------	----------------------------	--------------------------	-----------	--------------------------

Q.9 Were you the:- Applicant Agent Third Party objector who made a representation

Please complete the form and return in the pre-paid envelope provided.
Thank you for taking the time to complete this form.



ARCUS

**PRELIMINARY ECOLOGICAL APPRAISAL REPORT
BATTERY ELECTRICITY STORAGE FACILITY
EAST OF CRUDIE ACRE COTTAGE,
ARBROATH**

**FOR
CORONATION POWER**

AUGUST 2018



Prepared By:

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Registered in England & Wales No. 5644976

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1 INTRODUCTION

1.1 Background

Arcus Consultancy Service Ltd ('Arcus') was commissioned by Coronation Power (the 'Applicant') to undertake a Preliminary Ecological Appraisal (PEA) of a parcel of land (hereafter referred to as the 'Site'), located off Arbirlot Road, east of Crudie Acre cottage in Arbroath, Angus.

The Applicant is seeking planning permission for the construction and operation of a battery electricity storage facility (hereafter referred to as the 'Development'). This report has been written in support of a planning application to be submitted to Angus Council.

1.2 Overview of the Development

The Development is designed to support the flexible operation of the National Grid and decarbonisation of electricity supply. The Development would import and export electricity however, it would not generate any additional electricity nor have any direct on-site emissions of carbon dioxide. The Development would consist of the following components:

- 15 containerised battery storage units;
- 15 inverters and transformers on skids;
- A Distribution Network Operator (DNO) substation;
- A client switchgear container;
- An electrical grid compound including circuit breakers and a transformer;
- A welfare container and parts storage container;
- Security columns; and
- Planting,

All electrical elements of the Development would be contained within a 2 metre (m) high perimeter security fence. Access to the Site will be from the east, which will require the construction of a new access road. An existing field access will be utilised, however this will need to be widened. The access road will be approximately 4.5 m, widening on corners and to 6 m within the Site. Further details on the Development are provided in Section 2 of the Planning Statement¹.

2 METHODS

2.1 Desk Study

A desk study, using publically available data resources², was undertaken with the aim of collating recent (within the last 20 years) ecological records of protected species, located within 1 kilometre (km) of the Site. A search for statutory designated sites located within 5 km of the Site was also undertaken using publically available data resources³.

2.2 Site Visit

An ecological walkover of the Site was conducted on 7th June 2018 by Laura Spence, ACIEEM, in accordance with standard methods^{4,5}. The aim of the survey was to identify

¹ Arcus (2018) Arbroath Battery Storage Facility Planning Statement

² National Biodiversity Network - Scotland Atlas. Available online at <https://scotland.nbnatlas.org/>. [Accessed August 2018]

³ SNH Site Link. Available at: using publically available data resources [Accessed August 2018]

⁴ Joint Nature Conservation Committee (2010) *Handbook for Phase 1 habitat survey – a technique for environmental audit*.

⁵ CIEEM (2012) Guidelines for Preliminary Ecological Appraisal. Available online at https://www.cieem.net/data/files/Resource_Library/Technical_Guidance_Series/GPEA/GPEA_April_2013.pdf. [Accessed August 2018]

potential Development related ecological constraints located within the Site to inform the planning process.

The PEA aimed to record all natural and semi-natural habitats within the Site and, where access allowed, within a Survey Area of 200m surrounding the Development Site that may be affected by the Development. The survey also aimed to record the habitat suitability of notable and protected species including, but not limited to; badger (*Meles meles*), otter (*Lutra lutra*), water vole (*Arvicola amphibius*), red squirrel (*Sciurus vulgaris*), bats (*Chiroptera sp.*), breeding birds, amphibians and reptiles, in accordance with relevant best practice survey guidance^{6,7}.

The survey also aimed to record invasive floral and faunal species including but not limited to, Japanese knotweed (*Fallopia japonica*), Himalayan balsam (*Impatiens glandulifera*), giant hogweed (*Heracleum mantegazzianum*) and American mink (*Mustela vison*).

3 RESULTS

3.1 Desk Study

The desk study provided a total of 7,424 biological records within 1 km of the Site, however no records were found within the Site. Of these records, the majority were of common, widespread or domestic species, however the following European⁸, or nationally⁹ protected species recorded were;

- Red squirrel: 4 records; 2005, 2010 and 2011;
- Barn owl (*Tyto alba*): 1 record; 2010;
- Mediterranean gull (*Larus melanocephalus*): 8 records; 2008, 2010, 2014; and
- Velvet scoter (*Melanitta fusca*): 1 record; 2014.

In addition to the above, a total of 112 common bird species were recorded within 1 km of the Site.

The desk study did not provide any records of invasive floral or faunal species located within 1 km of the Site.

Two statutory designated sites were recorded within 5 km of the Site, these were;

- Elliot Links Site of Special Scientific Interest (SSSI), located 2.3 km southwest of the Site and designated for its coastal and wetland habitats; and,
- Whiting Ness – Ethie Haven SSSI, located 3.8 km east of the Site and designated for its breeding seabird assemblages including, fulmar (*Fulmarus glacialis*), kittiwake (*Rissa tridactyla*), puffin (*Fratercula arctica*) and shag (*Phalacrocorax aristotelis*). As well as nationally important numbers of overwintering species such as purple sandpiper (*Calidris maritima*) and turnstone (*Arenaria interpres*). The site is also cited for its coastal and lowland grassland habitats.

Given the nature of the Development and the distances to the aforementioned designated sites, no significant impacts to these designated sites are anticipated. As a result, designated sites will not be considered further in this report.

⁶ SNH (2016) Planning and development: protected animals. Available at: <https://www.nature.scot/professional-advice/planning-and-development/natural-heritage-advice-planners-and-developers/planning-and-development-protected-animals> [accessed August 2018]

⁷ Collins, J. (2016) *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd ed.)*. The Bat Conservation Trust, London.

⁸ European Commission (1992) Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora.

⁹ UK Government (1981) Wildlife and Countryside Act 1981 – Chapter 69.

3.2 Site Visit

3.2.1 Overview

The Site was located within an agricultural field, where barley crops are currently being cultivated, and lies immediately north of the Arbroath substation. Similar agricultural fields surround the Site with the exception of the south, where new housing development had been established within the field adjacent to the east of the Arbroath substation. The Hercules Den Burn bounded the Site to the south and west, and Crudie Acres Farm is located approximately 250 m northwest of the Site. The settlement of Arbroath is located approximately 250 m southeast of the Site.

3.2.2 Site Survey

Below is a description of habitats recorded within the Survey Area and the Site.

3.2.2.1 Phase 1 Habitats within the Site

Cultivated Land (J1.1)

Cultivated land (Photo 1: Appendix A) was the single most dominant habitat recorded within the Site encompassing the entirety of the field in which the Site lies. Within this field, barley crop was being grown at the time of survey. The field in which the Site is located is partially separated from the field to the east by a degraded drystone wall (J2.5). The fields surrounding the Site to the north, east and west were also all arable or cultivated land.

3.2.2.2 Phase 1 Habitats outwith the Site (within the 200m Survey Area)

Built-up area (J3)

A new housing estate was established within the field immediately south of the Site. To the west of the new housing is the Arbroath substation. Habitats to the southeast were dominated by built-up areas associated with the settlement of Arbroath.

Scattered Broadleaved Trees/Scrub (A3.1.1/A.2.1.1)

Scattered mature broadleaved trees and scrub (Photo 2: Appendix A) habitats were recorded south of the Site, surrounding the substation. Species recorded included common ash (*Fraxinus excelsior*), alder (*Alnus glutinosa*), beech (*Fagus sylvatica*) and oak (*Quercus robur*). Understorey species included common nettle (*Urtica dioica*), bramble (*Rubus* sp), bracken (*Pteridium aquilinum*), creeping thistle, common hogweed (*Heracleum sphondylium*) and common gorse (*Ulex europaeus*). A row of broadleaved trees was also present along the southern boundary of the Crudie Acres Farm garden, positioned northwest of the Site.

Watercourses (G2)

The Hercules Den Burn (Photo 3: Appendix A) was located along the southern and western boundaries of the Site. The burn was approximately 1 m in width and had a slow flow rate. The banks on the southern stretch were rocky and heavily overgrown with vegetation. Stone walls formed the banks of the burn along the western edge of the Site.

Tall Ruderal/Ephemeral (C.3.1)

The riparian corridor of the Hercules Den Burn was dominated by ruderal species such as, creeping thistle (*Cirsium arvense*), rosebay willow herb (*Chamaenerion angustifolium*), dandelion (*Taraxacum officinale*), broadleaved dock and common nettle.

3.3 Protected Species

An assessment of the suitability for the Survey Area to support protected species is provided below. Species not discussed are considered unlikely to occur locally.

3.3.1 Otter

The Site offered no suitable habitats to support commuting or foraging otter, however some limited suitability was recorded within the Survey Area at the Hercules Den Burn. The burn had the potential to be utilised by commuting otter but was considered a low value resource in terms of foraging. No evidence of otter, or potential resting sites (holts or couches) were recorded, and no evidence of fish or amphibian prey were recorded at the time of survey. Due to the size of the burn, its limited potential to support prey species, and the fact that it primarily runs through managed agricultural and urban habitats, it is considered unlikely that otter are present¹⁰.

3.3.2 Water Vole.

No evidence of water vole or potential water vole burrows were recorded. The banks of the Hercules Den Burn, being partially bounded by walls or of a steep, rocky nature, were not suitable for burrow construction¹¹. Furthermore, although the banks were vegetated, they were dominated by nettles and thistles, with a lack of suitable water vole feeding plants, such as sedges and grasses¹¹. In light of the above it was assessed that water vole are unlikely to be present.

3.3.3 Bats

A ground level assessment of roost suitability did not record any structures suitable to support roosting bats within the Survey Area⁷. Scattered mature broadleaved trees to the south offered some potential to support roosting bats, as did the farm buildings due to their stone wall and tile roof compositions. Although these features had potential to support roosting bats, suitability of the potential roost features (PRFs) recorded meant all structures were assessed to have at best, low suitability (i.e. could support roosting bats, but likely in small number or only occasionally)⁷.

No suitable linear habitat features for commuting and foraging, such as woodland edge and watercourses were recorded within the Site. Although the Hercules Den Burn, as well as scattered broad-leaved trees and scrub habitats lying outwith the Site provided moderately suitable foraging and commuting resources. Overall the site was assessed to be of low value to the local bat populations.

3.3.4 Red squirrel

Although red squirrel was recorded in the desk study within 1km of the Site, no habitats suitable to support red squirrel, such as conifer or broadleaved woodland¹⁰, were recorded within the Site, and no evidence of the species was recorded. Although it is known that the species are present locally, they are likely to be restricted to woodland habitats outwith the Site.

3.3.5 Badger

No evidence of badger was recorded during the survey, however the agricultural fields and their margins may offer foraging and commuting resources. The potential for sett creation

¹⁰ Harris, S, Yalden, D,W abd Troughton, G. (2008) Mammals of the British Isles: Handbook (4th Edition). Mammal Society. ISBN-13: 9780906282656

¹¹ Dean, M., Strachan, R., Gow, D., and Andrew, R. (2016). The Water Vole Mitigation Handbook (The Mammal Society Mitigation Guidance Series). The Mammal Society, London.

was however considered low, largely due to the lack of suitable topography and the lack of woodland habitats¹².

Although it was assessed that badgers may use parts the Survey Area for foraging, as similar agricultural habitats were widespread in the wider landscape, it is considered unlikely that the Site is of any notable value to the local badger populations above any similar habitats in the wider area.

3.3.6 Reptiles.

Although no reptiles were recorded at the time of survey, a partially intact dry stone wall, as well as patches of rough grassland and scrub bordering the Site were assessed to offer suitable foraging, basking, refugia (shelter) and hibernation habitats for reptile species such as adder (*Vipera berus*) and common lizard (*Zootoca vivipara*)¹³.

3.3.7 Amphibians.

No amphibians were recorded during at the time of survey, and no ponds were recorded within the Site (or within 500 m), thus limiting the Site's potential to support breeding amphibians. However, the Hercules Den Burn, located outwith the Site, may offer some suitable foraging habitats for common amphibian species such as common toad (*Bufo bufo*) and common frog (*Rana temporaria*). Furthermore, dry stone walls (even where only partially intact) within the Survey Area were assessed to offer suitable refugia and hibernation habitats for common amphibian species¹³.

The lack of suitable broadleaved woodland and scrub habitat, as well as the lack of ponds within the Survey Area, meant that the Site was assessed to have negligible suitability to support great crested newt (*Triturus cristatus*).

3.3.8 Birds

Breeding bird activity was recorded during the survey however this activity was principally associated with the areas of scrub and broad-leaved trees outwith the Site. No protected bird species, recorded in the desk study, were recorded using the Site. There is the potential however, for ground nesting species such as skylark (*Alauda arvensis*) and meadow pipit (*Anthus pratensis*) to utilise these habitats however these species were not recorded during the survey.

Although no Schedule 1 species were recorded during the survey, the desk study highlighted the presence of barn owl within 1km of the Site. The arable habitats present within the Site, as well as farm buildings in the wider Survey Area, were considered to offer some suitable hunting, nesting and roosting resources for barn owl¹⁴. However as similar habitats are widely available in the local area, it is unlikely that the Site is of any notable value to the local barn owl population.

3.4 Non-native Invasive Species

No non-native invasive floral or fauna species were recorded within the Site at the time of survey.

¹² Harris, S., Cresswell, P. and Jefferies, D. (1991) *Surveying Badgers*. The Mammal Society, London

¹³ The Herpetological Conservation Trust (2007). National Amphibian and Reptile Recording Scheme, Habitat Recording Guide

¹⁴ Hardey, J., Crick, H., Wernham, C., Riley, H., Etheridge, B. & Thompson, D. (2013). *Raptors: a field guide to survey and monitoring* (3rd Edition). The Stationery Office, Edinburgh.

4 DISCUSSION AND RECOMMENDATIONS

The Site was assessed to be of low ecological value and no further surveys are required at this time. However, in order to ensure legal compliance and mitigate potential impacts from the Development, several measures are recommended, below.

4.1 Breeding Birds

Any ground works or vegetation clearance within the bird nesting season (March – August, inclusive¹⁵) may disturb or harm nesting birds. It is likely that some vegetation removal associated with the Development, particularly with the construction of the access road to the east, will be necessary. To ensure that works are legally compliant, it is recommended that vegetation clearance during the bird nesting season is avoided. If this is not possible vegetation clearance should be immediately preceded by a nesting bird survey, carried out by a suitably qualified ecologist. If a nest is identified, the associated scrub/tree will not be cleared until an experienced ecologist has confirmed that the nest is not in use.

4.2 Reptiles & Amphibians

Habitats bordering the Site were considered suitable to support common reptile and amphibian species. To reduce the likelihood of a legal offence, it is recommended that all vegetation clearance is undertaken in accordance with agreed Reasonable Avoidance Measures (RAM). These RAMs may include, but are not limited to, the following:

- Tool-box talks to all site workers;
- Pre-vegetation clearance check by an experienced ecologist;
- Strimming of tall ruderal/grassland vegetation; and,
- Hand-dismantling of potential refugia sites.

5 CONCLUSION

The Site is considered to be of limited ecological value with no evidence of protected species or invasive species recorded during the Survey. Habitats within the Site were generally of low ecological value.

Although no evidence of protected species was recorded within the Site, habitats may support species (such as breeding birds, amphibians and reptiles) and therefore mitigation recommendations have been included to ensure legal compliance.

¹⁵ Hardey, J., Crick, H., Wernham, C., Riley, H., Etheridge, B. & Thompson, D. (2013). Raptors: a field guide to survey and monitoring (3rd Edition). The Stationery Office, Edinburgh.

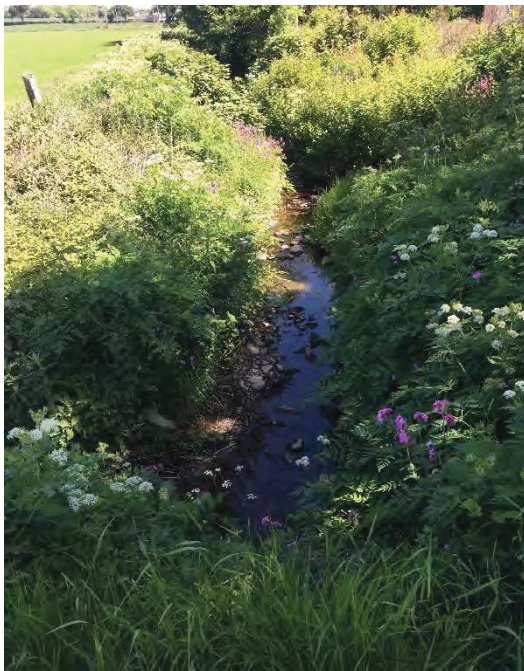
APPENDIX A: PHOTOLOG



Photograph 1: Cultivated land dominated habitats recorded within the Site.



Photograph 2: Scattered mature broadleaved trees and scrub located outside the south boundary of the Site.



Photograph 3: The Hercules Den Burn bounded the Site to the south and west.



ARCUS

**FLOOD RISK ASSESSMENT
BATTERY ELECTRICITY STORAGE FACILITY
ARBROATH**

**FOR
CORONATION POWER**

AUGUST 2018



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1 INTRODUCTION

1.1 Background

Coronation Power ("the Applicant") is proposing to develop a battery electricity storage facility to provide a backup supply to the National Grid ("the Development") on land immediately to the north of the 132kV Arbroath substation ('the Site'), Angus.

Arcus Consultancy Services Ltd ("Arcus") has been commissioned to undertake a Flood Risk Assessment (FRA) for the Development. The FRA is intended to meet the requirements of the following:

- The Scottish Environment Protection Agency (SEPA) 'Technical Flood Risk Guidance For Stakeholders'¹;
- Angus Local Development Plan - Strategic Flood Risk Assessment (2015)²;
- Scottish Water 'Sewers for Scotland 3rd Edition';
- SUDS for Roads (2015)³;
- CIRIA C753 - The SuDS Manual⁴;
- SEPA Regulatory Method (WAT-RM-08) Sustainable Urban Drainage Systems (SUDS or SUD Systems)⁵;
- Planning Advice Note 61 (PAN 61): Planning and Sustainable Urban Drainage Systems⁶; and
- Scottish Planning Policy (SPP)⁷.

SPP is a non-statutory document which sets out the Scottish Government's policy on how nationally important land use planning matters should be addressed.

In paragraphs 255 to 268, the SPP sets out guidance for development within areas of flood risk, including the responsibilities of planning authorities in regulating and controlling development in such areas, in order to prevent increased risk of flooding in the future. SPP emphasises the need to apply sustainability principles to the prevention of flooding and the control of future development.

The residual flood risk will be classed as negligible (where little or no risk is identified), low (where theoretical risk is identified but mitigating factors may influence flood levels) or moderate to high (where modelled levels or historical events show risk to the Site).

Several factors will be taken into account when attributing the residual risk of flooding to the Site, including:

- Depth of flooding;
- Flooding extent / ingress into site;
- Type of infrastructure affected; and
- Intervening structures / flood protection.

¹ SEPA 'Technical Flood Risk Guidance For Stakeholders' (July 2018) [online] Available at: <https://www.sepa.org.uk/media/162602/ss-nfr-p-002-technical-flood-risk-guidance-for-stakeholders.pdf> [Accessed 06/08/2018].

² <https://www.angus.gov.uk/sites/angus-cms/files/Strategic%20flood%20risk%20assessment.pdf>

³ Various. SUDS for Roads (2015) [online] Available at: <http://www.scottishwater.co.uk/assets/business/files/connections%20documents/june%202015%20uploads/20100805sudsforroadsfinal.pdf> [Accessed 01/06/2018].

⁴ http://www.ciria.org/Resources/Free_publications/SuDS_manual_C753.aspx

⁵ SEPA Regulatory Method (WAT-RM-08) Sustainable Urban Drainage Systems (SUDS or SUD Systems) (2017). [online] Available at: <https://www.sepa.org.uk/media/219048/wat-rm-08-regulation-of-sustainable-urban-drainage-systems-suds.pdf> [Accessed 01/06/2018].

⁶ Scottish Government Planning Advice Note PAN 61 [online] Available at: <http://www.gov.scot/Publications/2001/07/pan61> [Accessed 01/06/2018].

⁷ The Scottish Government, (2014), Scottish Planning Policy. Available online at: <http://www.gov.scot/Publications/2014/06/5823> [Accessed 22/06/2017].

A residual risk table is provided in the conclusion and will provide comment and justification for the risk category in the professional judgement and experience assessing similar types of scenarios. The conclusion will also provide recommendations for further surveys to validate the flood heights, where necessary.

The FRA is supported by the following appendices:

- Appendix A - Site Layout Plan;
- Appendix B – Topographical and Hydrographical Survey;
- Appendix C – Peak Flow Data;
- Appendix D – Flood Modeller Outputs;
- Appendix E – SEPA FRA Checklist.

1.2 Baseline Conditions

1.2.1 Site Characteristics

The approximate centre of the Site is located at National Grid Reference (NGR) E 362000 N 741600.

The Development is located on agricultural land immediately to the north of the 132kV Arbroath substation ('the Site'), and is bounded by Hercules Den Burn to the south and west and by agricultural land to the east and north, as shown in Plate 1. The Site is access via a new section of access track, from the east off the existing minor road. Throughout this report the term Site refers to the main battery storage compound and does not specifically include the access track unless explicitly stated.

Plate 1: Site Location



OS Terrain 5 data shows that the Site is essentially flat but gently slopes from north to south from approximately 34 metres (m) Above Ordnance Datum (AOD) to approximately 33 m AOD in proximity to the southernmost battery unit in the southern section of the Site, as shown in Plates 2 and 3.

Plate 2: Elevation at the Site (in metres AOD)

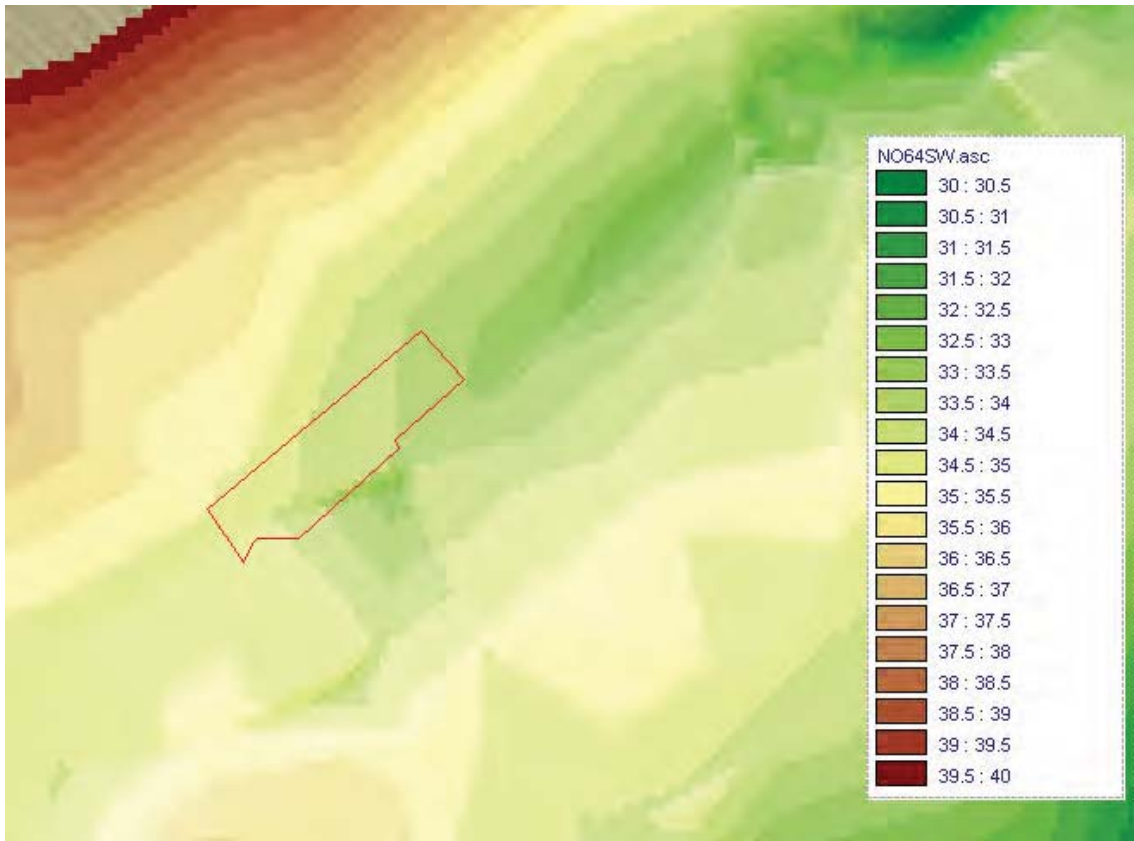
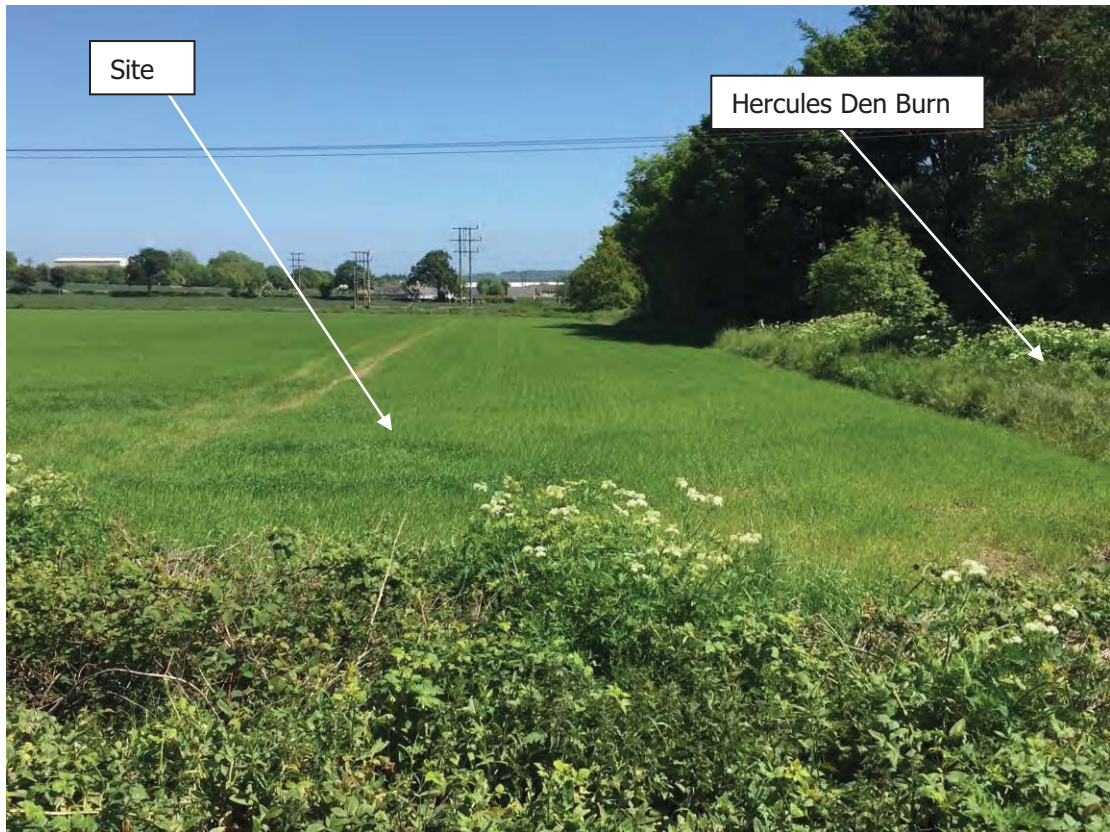


Plate 3: Gentle topography at Site, looking east



1.2.2 Watercourses

Hercules Den Burn is located immediately south and west of the Site. It drains from northwest to southeast before changing course to run southwest to northeast and is located immediately to the southeast and southwest of the Site, approximately 5 m from the main fenced compound shown in Appendix A.

The watercourse measures approximately 4 m in width (bank top to bank top) and 0.7-1 m in depth, with steeply incised banks, as shown in Plate 4.

Plate 4: Hercules Den Burn to south of Site at various locations





The watercourse bed has a shallow gradient at approximately 1:1,000 and consisted of stones and sediment, with occasional weeds.

Very low flow was observed across all sections of the watercourse during the site visit.

1.2.3 Geology

The British Geological Survey (BGS) Digital Mapping shows that the Site is underlain by sandstone of the Scone Sandstone Formation.

BGS Digital Mapping shows that superficial deposits consist of Till.

1.2.4 Drainage

Scottish Water utilities plans and the site walkover indicate that at present no drainage gullies, foul or surface water infrastructure exists within 200 m of the Site.

Planning permission has been granted for a residential development to the south east of the site and this will involve the installation of surface and foul drainage. This should be designed to Sewers for Scotland standards.

2 POTENTIAL SOURCES OF FLOODING

2.1 Fluvial

The SEPA flood map identifies that minor areas in the south of the Site and the access track are within the Medium likelihood of flooding from fluvial sources, corresponding to Medium to High risk in SPP, these areas relate to flood waters from Hercules Den Burn.

The SEPA Flood Maps are indicative, of a strategic nature and there is inherent uncertainty in all modelling techniques and therefore information from flood studies and visual observations from the site visit have been used to identify flood risk at the Site.

2.1.1 1D Flood Model

An existing 1D model of Hercules Den Burn was developed by Kaya Consulting on behalf of Persimmon Homes in 2016 in respect of a residential development on land to the south of the Site, beyond Hercules Den Burn. This model as not made available for use within this assessment and therefore a new 1D flood model has been developed to assess flows within Hercules Den Burn.

Hercules Den Burn is located approximately 5 m south of the Site at its nearest point.

10 No. Cross sections of the channel in which Hercules Den Burn flows have been generated using the topographical / hydrographical survey data and Flood Modeller, as shown in Plate 5.

Plate 5: Cross section locations on Hercules Den Burn





Modelling is based on topographical and hydrographical survey from Gavia Environmental (provided in Appendix B).

A concrete bridge with a 0.5 m thrust block in the centre of the orifice exists approximately 200 m to the northeast of the fenced compound, as shown in Plate 6.

Plate 6: Concrete bridge downstream of the Site



Downstream



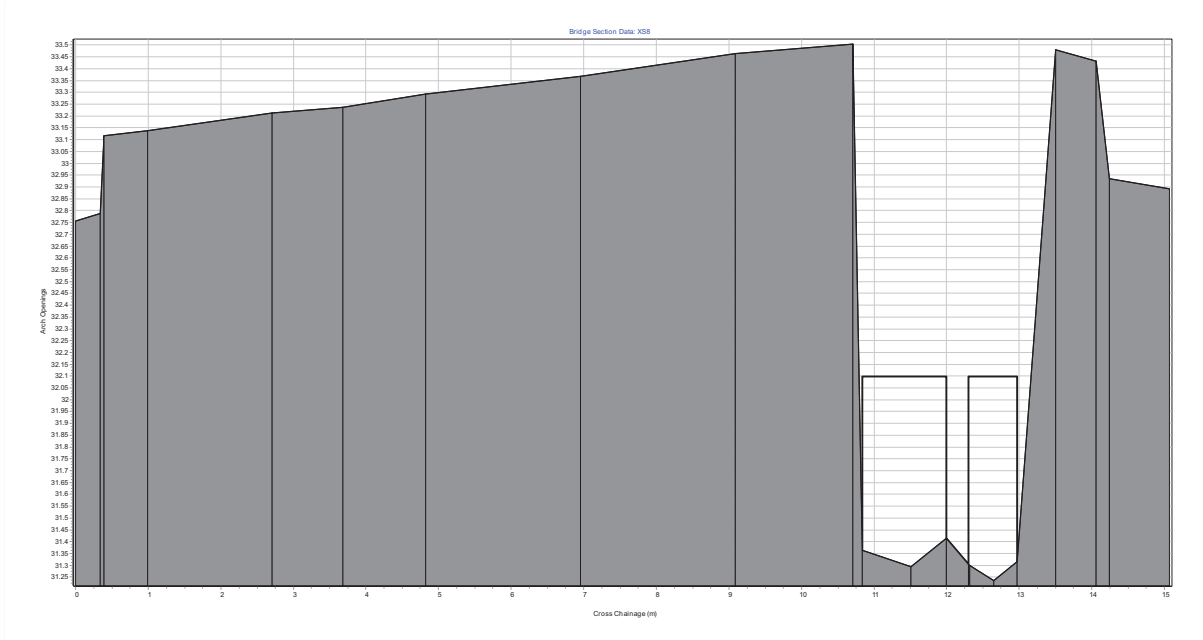
Upstream



A US Bureau of Public Roads (US BPR) Bridge was used to simulate the double opening bridge under an unnamed single track road, and has the following dimensions taken from the hydrographical survey, shown in Plate 7:


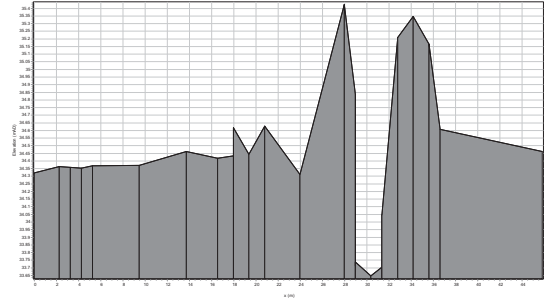

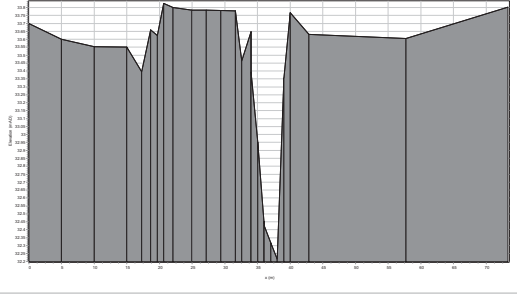

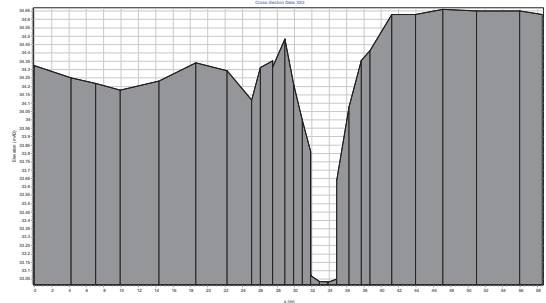

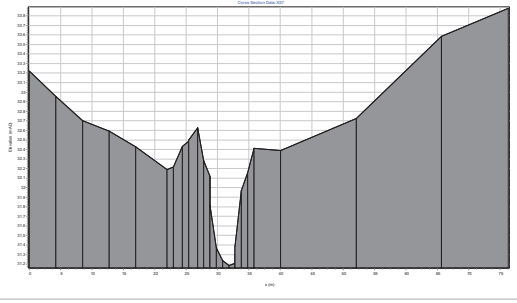

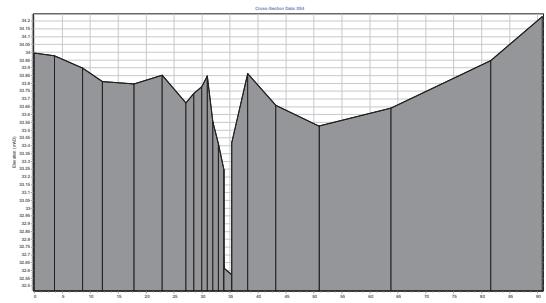

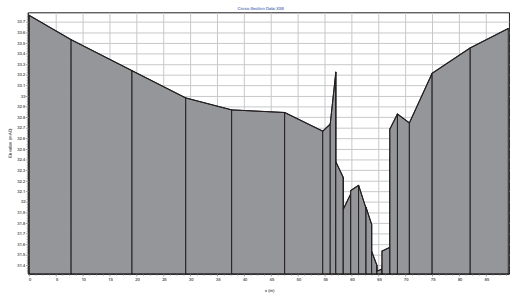
- Soffit: 32.098 m AOD; and
- Invert: 31.295 m AOD to 31.414 m AOD.

Plate 7: Modelled Bridge Cross Section



Cross sections of the burn show a relatively uniform channel depth of approximately 1 to 1.5 m as outlined in Table 1 for the areas adjacent to the Development.

Table 1: Cross sections of Hercules Den Burn adjacent to the Site

Cross Section Location (in yellow)	Hercules Den Burn Cross section (south bank to left, north to right)	Cross Section Location (in yellow)	Hercules Den Burn Cross section (south bank to left, north to right)
<p>Section – XS2</p> 		<p>Section – XS5</p> 	
<p>Section – XS3</p> 		<p>Section – XS7</p> 	
<p>Section – XS4</p> 		<p>Section – XS8</p> 	

To validate the SEPA flood map, a steady 1D Hydrological model was created using Flood Modeller software to simulate flow conditions within Hercules Den Burn during the 1:200 year return period, plus 20 % climate change allowance.

The Flood Estimation Handbook (FEH) web service identifies that Hercules Den Burn drains a catchment area of 5.17 km², as shown in Plate 8.

Plate 8: FEH catchment boundary (in grey)



In the absence of gauged data within the catchment a number of methods have been used to develop peak flow for Hercules Den Burn, with catchment descriptors imported from the FEH web service for a number of return periods (as a 100 % rural model), with a summer rainfall profile, as shown in Table 2 and Appendix C.

Table 2: Peak flow derived from various methods

Method	1:200 peak flow (m ³ /s)
ReFH2	1.73
IH 124	2.89
FEH Rainfall-Runoff	4.079

To represent a worst-case scenario, the peak flow has been derived from the FEH method.

A 20% uplift has been applied to the 1:200 year return period to account for climate change, giving a peak flow of 4.89 cumecs.

Calculations are provided in Appendix C of this FRA.

A Flow Time boundary (QTBDY) has been used for each model run, using the hydrographs generated in ReFH2, and attached to the first model node (XS1).

A Normal depth boundary (NCDBDY) with the bed slope used and attached the end node (XS10) of the 1D river model.

Interpolate sections were not added to aid stability in the model, as a 1D health check indicated model stability.

A Manning’s n value of 0.04⁸ was selected to represent the roughness of the watercourse bed.

⁸ Taken as mid-way point for MINOR STREAMS (top width at flood stage < 30 m), scenario 2 [online] Available at: http://xpsolutions.com/webhelp/Manning_s_N_Roughness_Coefficients_Open_Channel.htm [Accessed 25/06/2018].

The flow conveyance of each model node has been plotted against stage which shows no major turbulence within the channel cross sections, as shown in Appendix D.

The maximum stage for the 1:200 year return period, plus a 20% uplift for climate change, for selected cross sections of Hercules Den Burn are shown in Table 3, while a long section of the model with various return periods is appended to the table.

As shown in Table 3 and Plate 9, the maximum stage for the 1:200 year return period, plus a 20 % uplift for climate change, is contained within the channel of Hercules Den Burn closest to the Site (sections XS2 to XS5) and is not at risk of overtopping.

As shown in Table 3, the 1:1,000 year event is also contained within the channel of Hercules Den Burn closest to the Site (sections XS2 to XS5) and is not at risk of overtopping.

As such a 1D model is considered suitable for this FRA and a 1D-2D linked model has not been created to simulate floodplain conditions.

2.1.2 Blockage Scenario

As brash build up was observed during the site walkover on the downstream section of the bridge, a 50 % blockage scenario at the bridge has been modelled by reducing the distance between the soffit of the bridge and the watercourse bed by half.

Whilst the blockage scenario causes flow to back up in cross sections XS4 to XS8, it has virtually no effect on stage in cross sections XS1 to XS3.

2.1.3 Model Calibration / Validation

To test the stability of the model, the Manning's n value was varied by +/- 20% to 0.048 and 0.032.

Flood depth was almost identical under the varied conditions, demonstrating low sensitivity to modelled assumptions (+0.1 and -0.06 m respectively), as shown in Plate 10.

The maximum stage for the 1:200 year event plus 20 % for climate change was also compared to the results from similar model sections of the Kaya Consulting steady 1D model⁹, which gives little difference in stage levels for at cross sections comparable to XS3 and XS4. As such, there is confidence that the model is producing credible results.

⁹ See Table 3 of the Proposed Development at East Muirlands Road, Arbroath, Flood Risk Assessment, Kaya Consulting Limited (April 2016).

Table 3: Maximum stage 1:200 year return period (+20 % climate change) at Cross sections of Hercules Den Burn adjacent to the Site


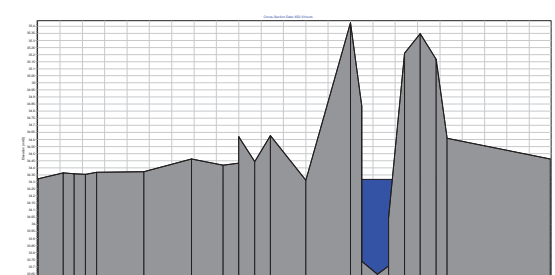

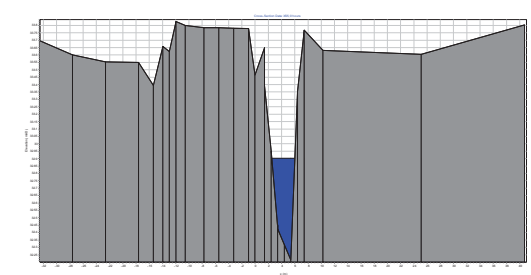

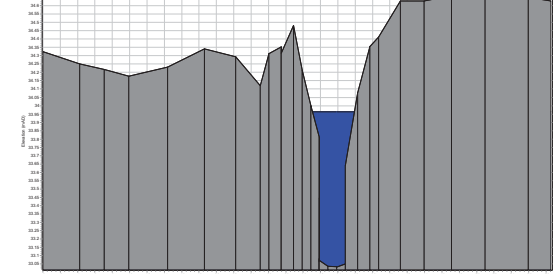

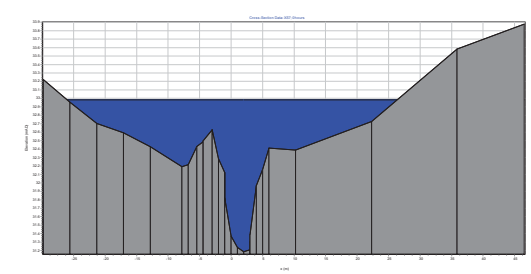

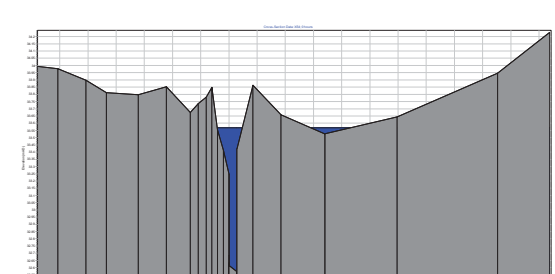

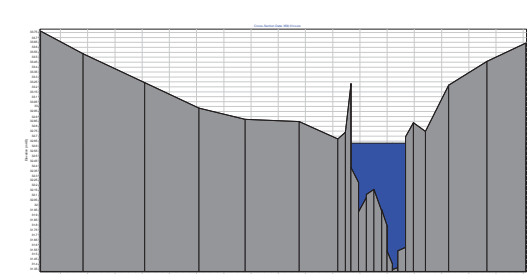
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<p>Section – XS3</p> 		<p>Section – XS7</p> 	
<p>Section – XS4</p> 		<p>Section – XS8</p> 	

Plate 9: 1:200 year event plus 20% climate change allowance

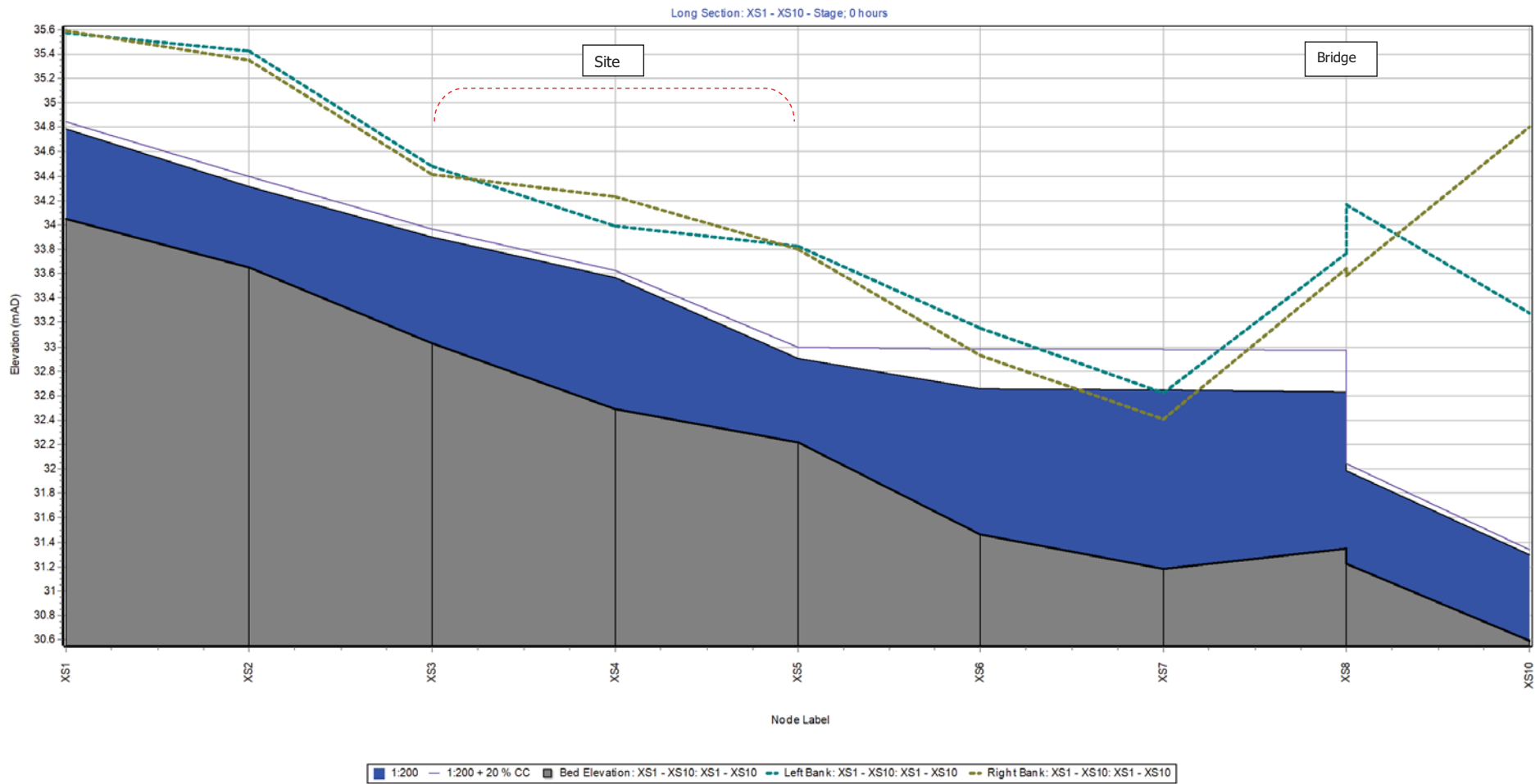
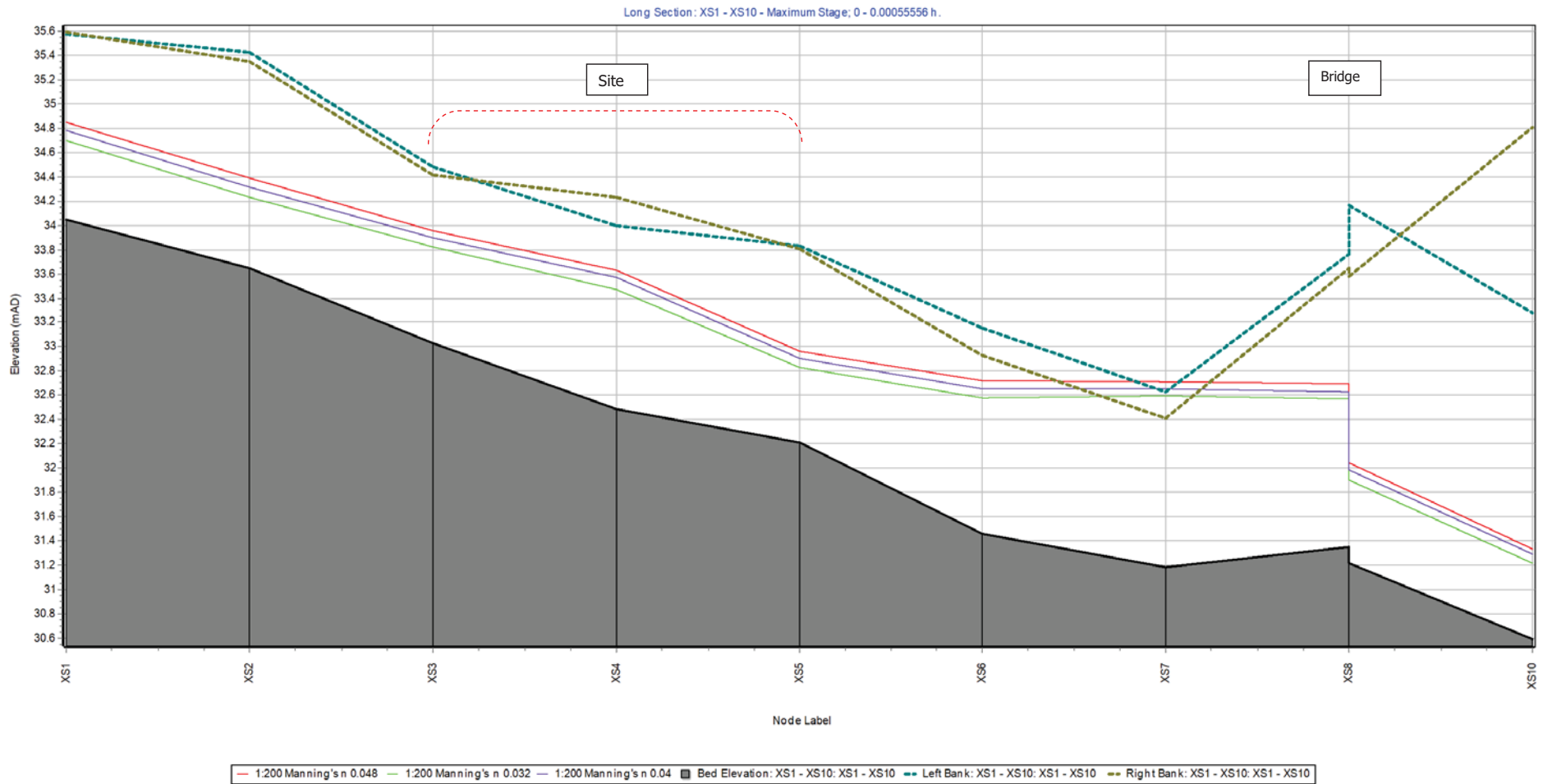


Plate 10: Manning's n roughness sensitivity check – 1:200 year event



As per SEPA's *Technical Flood Risk Guidance for Stakeholders*, a 600 mm freeboard allowance should be considered above any climate change allowance applied.

The addition of an arbitrary 600 mm to the maximum stage within cross sections XS3 to XS4 adds approximately 50 % to the 1:200 year (plus 20 % climate change) flood depth, which is considered to be a highly conservative approach.

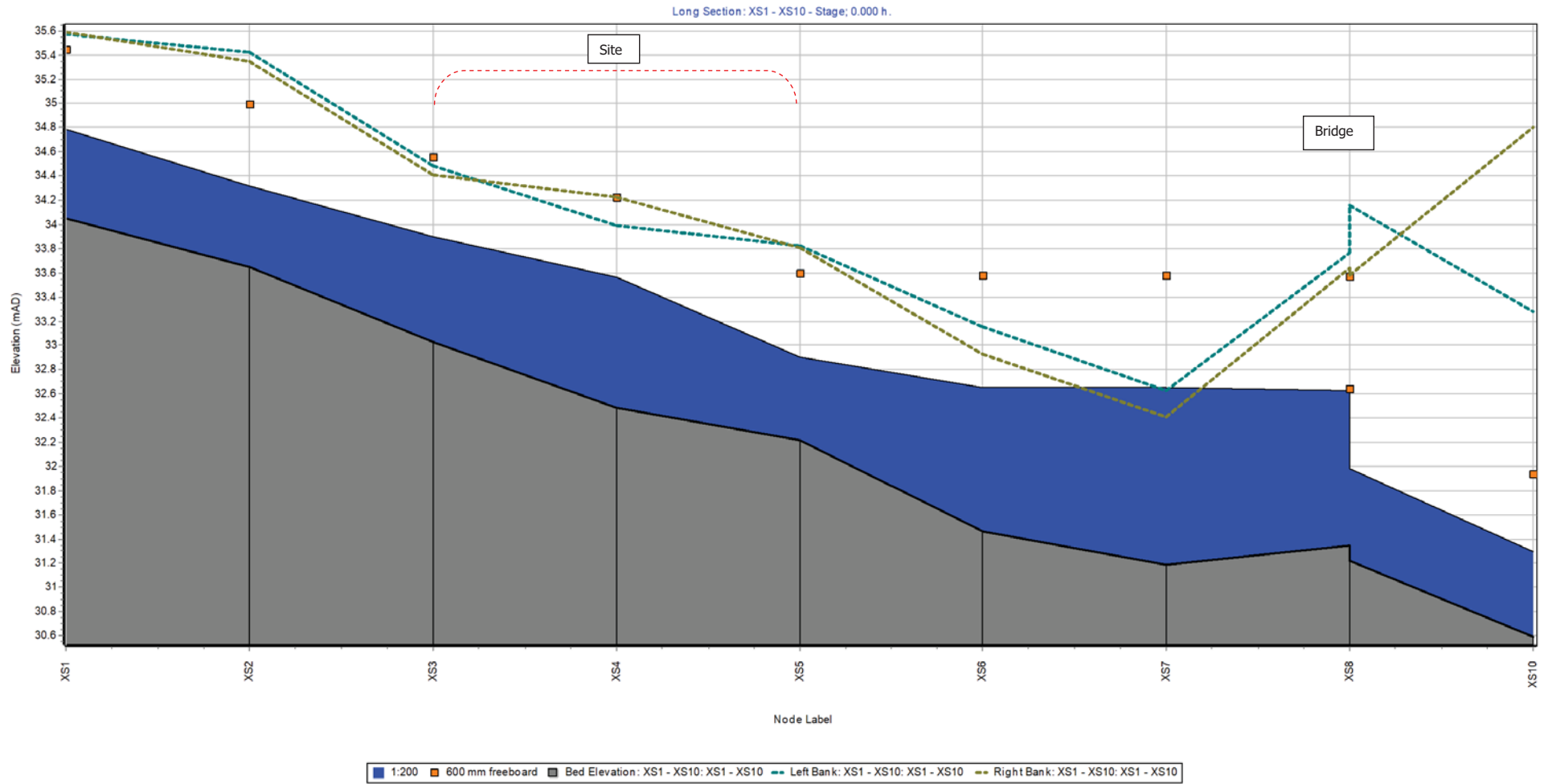
Regardless, the addition of freeboard to the stage for the 1:200 year event plus climate change is shown in Table 4 and in Plate 11.

Table 4: Stage for various conditions*

Stage (m)	Cross section									
	XS1	XS2	XS3	XS4	XS5	XS6	XS7	XS8	XS9	XS10
1:200	34.783	34.317	33.9	33.568	32.902	32.655	32.651	32.629	31.982	31.295
1:200 + 20% Climate Change	34.847	34.394	33.962	33.629	32.994	32.983	32.981	32.974	32.044	31.338
1:200 + 20% Climate Change + 600 mm freeboard	35.447	34.994	34.562	34.229	33.594	33.583	33.581	33.574	32.644	31.938
1:200 with 50 % Blockage	34.784	34.337	34.005	34.024	34.022	34.023	34.023	34.023	31.982	31.295
Manning's n + 20%	34.847	34.391	33.954	33.629	32.963	32.722	32.713	32.692	32.045	31.338
1:1,000	34.895	34.448	34.03	33.693	33.374	33.486	33.485	33.484	32.113	31.375

* shaded cells denote model nodes closest to Site

Plate 11: 600 mm Freeboard allowance - 1:200 year event



Based on this assessment the risk of flooding from Hercules Den Burn is considered to be Moderate.

To ensure that the battery storage containers are not at risk from inundation during extreme flood events (*i.e.* beyond the 1:1,000 year event) they will be raised from the ground level by approximately 600 mm. This will be achieved using 300 mm high steel supports resting on 300 mm concrete plinths at each corner of the container. An example of the steel support system is displayed in Plate 12.

Plate 12: Typical electrical storage container on steel supports



As such the minimum FFL would be 34.56 m AOD and therefore above the 1:200 year plus climate change and 600 mm freeboard level and will be designed and constructed to remain operational during a 1 in 200 year flood event plus climate change and freeboard.

The use of supports instead of a concrete base slab will ensure that the loss of floodplain would be negligible.

Flood proof doors should be implemented on buildings and sealed ducting and chambers should be used for cables and infrastructure within the area of risk.

As part of the Development an acoustic fence is proposed principally along the southern boundary. The fence will have a 100 mm gap between ground level and the bottom of the fence to allow flood water to pass underneath unimpeded. This scenario would only occur during the 1:200 year plus climate change and freeboard scenario and is therefore considered to be acceptable.

The access track leading to the main compound area will be flush to the existing ground level to ensure no loss of conveyance on the floodplain. During flood events this access track, near the bridge, would be under water. However, the Developed would be remotely operated and unmanned, visited only as part of routine and unscheduled maintenance. A SCADA system would be used to ensure remote controlled operation of the Development.

To ensure that the risk of flooding at the Development due to bridge blockage is minimised, the Developer will commit to checking the bridge downstream is clear from debris at the same time as the maintenance visits for the Development.

The Development should be classed as 'essential infrastructure' under SEPA's Flood Risk and Land Use Vulnerability Guidance as it has to be located near the existing substation for operational reasons, which itself is located close to Hercules Den Burn.

It is therefore acceptable as an exception to the risk framework outlined in Scottish Planning Policy.

2.2 Pluvial

The SEPA Surface Water Map indicates that all proposed infrastructure at the Development is located in areas mapped to flood from pluvial sources, including the 1:200 year, Medium Likelihood category.

In reality, topography at the Site is gently sloping and land use consists of crops. As such, it is unlikely that the baseline ground cover will generate significant overland flow and that the flat topography would prevent ponding of surface water during extreme rainfall events. As such, the risk identified on SEPA flood maps is more likely to be associated with flows within Hercules Den Burn than actual pluvial flooding.

To ensure that the battery storage containers are not at risk from surface water inundation during extreme rainfall events they will be raised from the ground level by approximately 600 mm on supports similar to the arrangement shown in in Plate 12.

Similarly the ancillary infrastructure will also be raised from ground level by approximately 600 mm.

To ensure that the Development does not increase surface water run-off rates, access tracks to the Development and the area surrounding the storage containers will be formed of crushed aggregate which will be permeable.

As such, flooding from pluvial sources is unlikely and the residual risk of flooding from pluvial sources is considered Negligible at the Site.

2.3 Reservoirs / Lochs

There are no reservoirs within 2 km of the Site.

The SEPA Reservoirs Map¹⁰ shows that the Site is located outwith the flood outline in the event of a reservoir breach scenario.

Flooding from reservoirs or lochs sources is considered unlikely and the residual risk of flooding from reservoirs or lochs is considered Negligible at the Site.

2.4 Groundwater

The Site is underlain by Till (Diamicton) which is generally not noted in supporting groundwater resources.

Flooding from groundwater is unlikely and the residual risk is Negligible.

2.5 Sewers / Storm Drains

Scottish Water asset plans shows no foul or surface water infrastructure is currently located within 200 m of the Site.

Planning permission has been granted for a residential development to the south east of the site and this will involve the installation of surface and foul drainage. This should be designed to Sewers for Scotland standards, which would ensure the 1:200 year event is contained within the residential site.

As such, flooding from sewers and storm drains is considered highly unlikely and the residual risk is Negligible.

¹⁰ <http://map.sepa.org.uk/reservoirsfloodmap/map.htm>

2.6 Tidal

As the Site lies at between 33.7 m and 35 m AOD, the Site is not influenced by coastal flooding.

As such, the risk of flooding from tidal resources is considered highly unlikely and the residual risk is Negligible.

3 CONCLUSION

The Site is located adjacent to Hercules Den Burn which is classed as Medium likelihood of flooding (Moderate to High Risk).

A steady 1D Hydraulic model has confirmed that flows during the 1:200 year return period, plus a 20 % allowance for climate change, would be contained within the channel of Hercules Den Burn.

Finished floor levels should be set to no lower than the 1:200 year flood event, plus climate change and freeboard, which equates to 34.56 m AOD.

The access track leading to the main compound area will be flush to the ground to ensure no loss of conveyance on the floodplain downstream of the Site.

Flood resistant doors will be fitted to all buildings.

The operator of the Development will sign up to SEPA's Floodline warning service to ensure the Site is protected during extreme weather events.

To ensure that the risk of flooding at the Development due to bridge blockage is minimised, the operator of the Development will commit to checking the bridge downstream is clear from debris at the same time as the maintenance visits for the Development.

The Development should be classed as 'essential infrastructure' under SEPA's Flood Risk and Land Use Vulnerability Guidance as it has to be located near the existing substation for operational reasons, which itself is located close to Hercules Den Burn.

It is therefore acceptable as an exception to the risk framework outlined in Scottish Planning Policy.

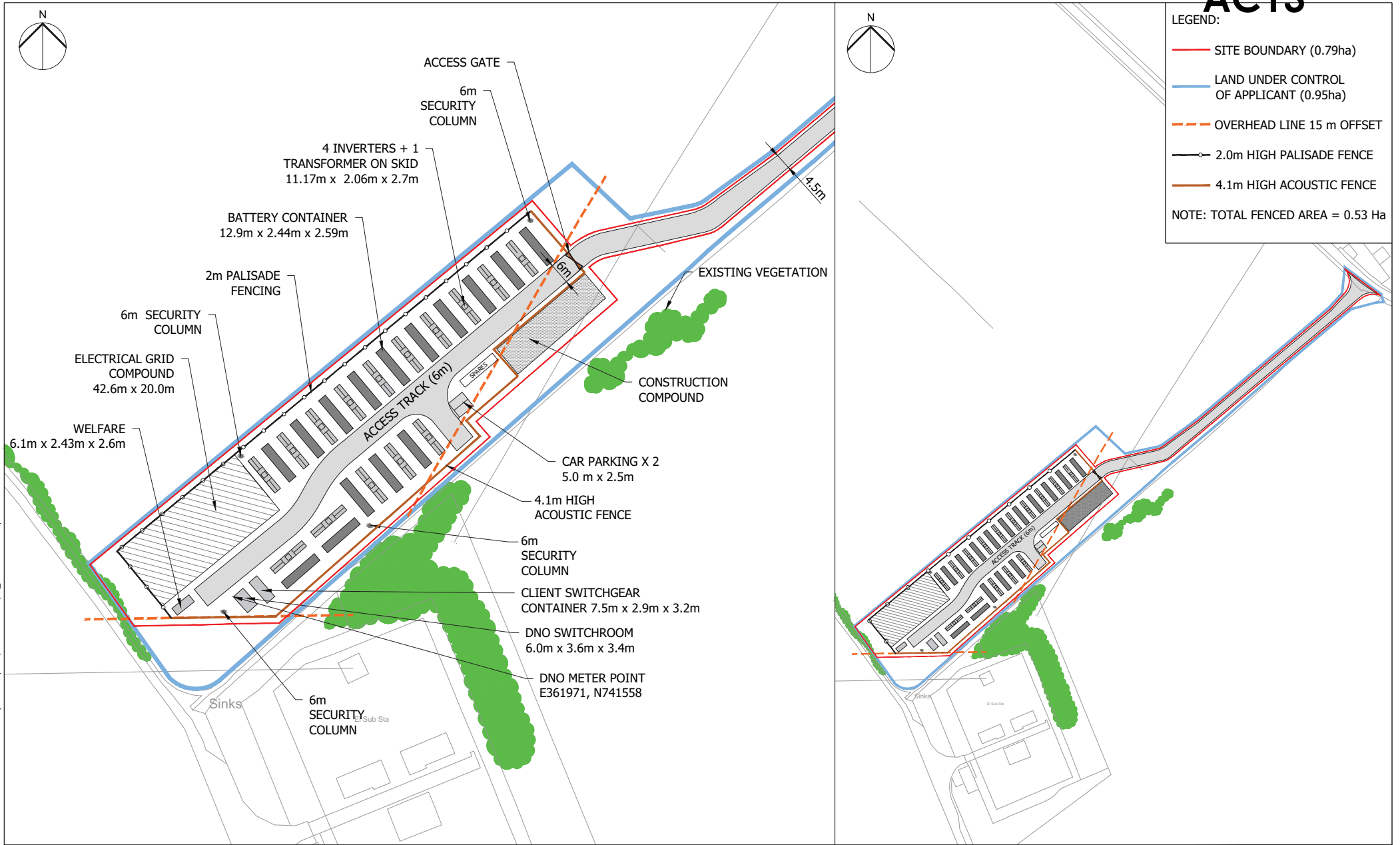
Table 5 shows that the residual risk of flooding at the Site from all sources is assessed as Negligible, with the exception of fluvial flooding, which is classed as Low.

Table 5: Risk of Flooding at the Site

Flooding Source	Potential Risk				Comment	Residual Risk
	Neg	Low	Mod	High		
Fluvial			✓		1D steady model shows that flow within Hercules Den Burn would be contained within the channel and would not overtop at the sections closest to development infrastructure during the 1:200 year event, plus climate change. Freeboard allowance would cause out of channel flows. Design will ensure infrastructure is above this level plus a 600 mm allowance for freeboard. The residual risk based on existing ground levels and design measures is considered Low.	Low
Pluvial	✓				Ground cover unlikely to generate significant overland flow and that the flat topography would prevent ponding of surface water.	Negligible
Groundwater	✓				Site underlain by geology unlikely to permit upward movement of groundwater resources.	Negligible
Sewer / Surface water drains	✓				No sewer or drainage infrastructure at or within 200 m of the Site.	Negligible
Reservoirs / Lochs	✓				Site not mapped to flood during failure of reservoirs / lochs.	Negligible
Tidal	✓				Site is not in area affected by coastal flooding.	Negligible

This report has been written to meet the requirements of SPP, Angus Council and SEPA.

APPENDIX A: SITE LAYOUT PLAN

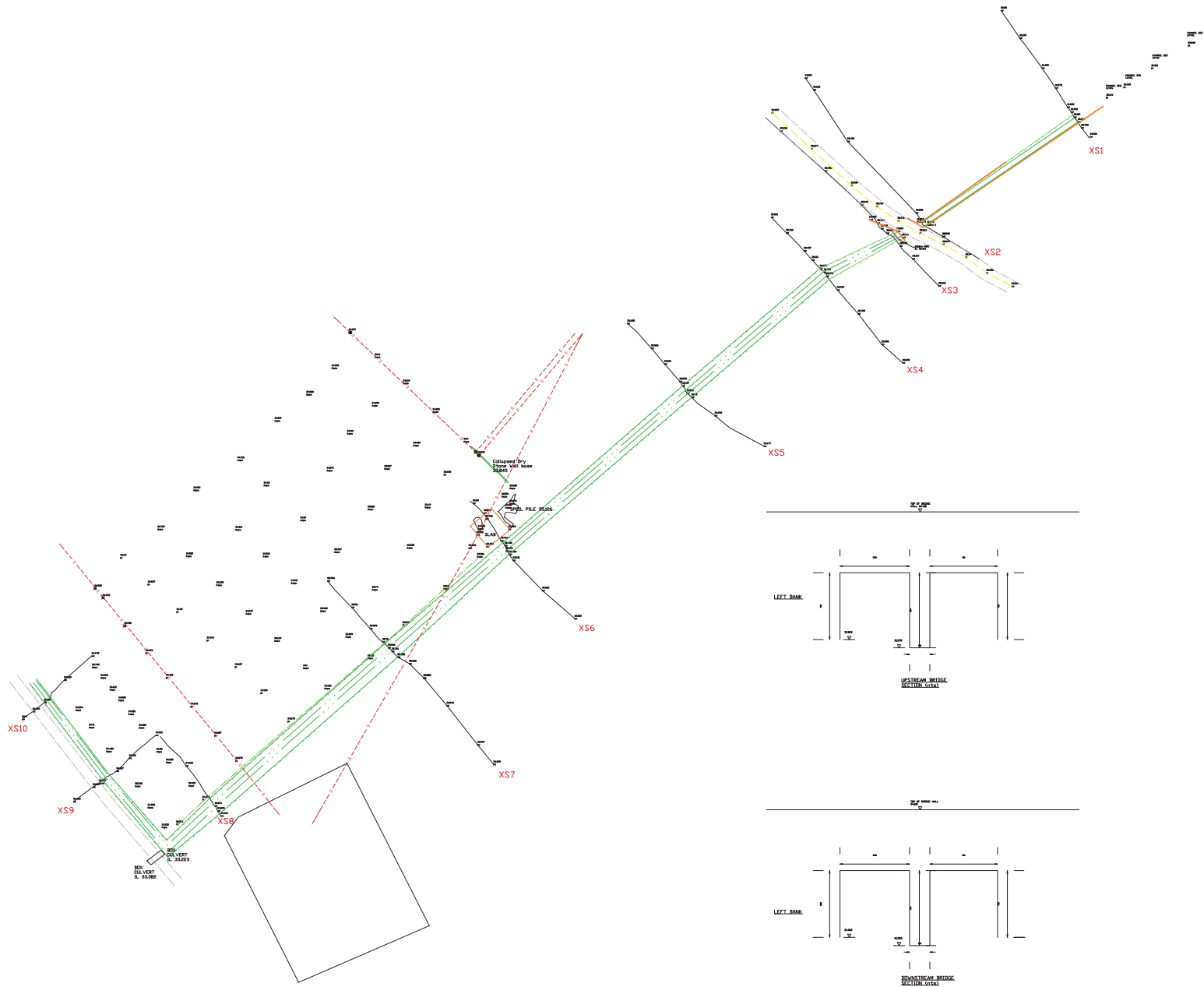


Plot Date : 28 August 2018 13:48:05
 File Name P:\PROJECTS\3055 ARBROATH BATTERY STORAGE\ANGUS\CAD\01-WORKING\01_01-DRAWINGS\3055-DR-P-0001-P8 - PLANNING DRAWING 02

Project Title ARBROATH BATTERY STORAGE ANGUS		Drawing Title PLANNING DRAWING 002 SITE LAYOUT PLAN		Purpose of issue PRELIMINARY		THIS DOCUMENT HAS BEEN PREPARED IN ACCORDANCE WITH THE SCOPE OF ARCUS' APPOINTMENT WITH ITS CLIENT AND IS SUBJECT TO THE TERMS OF THAT APPOINTMENT. ARCUS ACCEPTS NO LIABILITY FOR ANY USE OF THIS DOCUMENT OTHER THAN BY ITS CLIENT AND ONLY FOR THE PURPOSES FOR WHICH IT WAS PREPARED AND PROVIDED		Arcus Consultancy Services 7th Floor 144 West George Street Glasgow, G2 2HG Tel: +44 (0)141 221 9997 Fax: +44 (0)141 221 5610 www.arcusconsulting.co.uk	
Client CORONATION POWER		Designed KB Drawn KB Checked DB Approved AM Arcus Internal Project No. 3055 Scale @ A3 1:1000		Date 28/08/18		Drawing Number 3055-DR-P-0001		Rev 8	



APPENDIX B: TOPOGRAPHICAL & HYDROGRAPHICAL SURVEY



Notes:

1. ALL LEVELS RELATE TO O.S.E.M. DATUM. THE POSITION OF ALL SERVICE COVERS (eg. manholes) IT SHOULD BE NOTED THAT THIS MAY NOT HAVE BEEN POSSIBLE AT THE TIME OF SURVEY DUE TO GROUND COVER OR LOCAL OBSTRUCTIONS.
2. LEVELS FOR ROAD ARE TAKEN ALONG CHANNEL LINE
3. WHILE EVERY EFFORT HAS BEEN MADE TO LOCATE THE POSITION OF ALL SERVICE COVERS (eg. manholes) IT SHOULD BE NOTED THAT THIS MAY NOT HAVE BEEN POSSIBLE AT THE TIME OF SURVEY DUE TO GROUND COVER OR LOCAL OBSTRUCTIONS.
4. ALL CONTROL STATION COORDINATES SHOULD BE CHECKED AND VERIFIED ON SITE PRIOR TO USE.
5. OWNERSHIP OF SURVEY DATA REMAINS WITH GAVIA ENVIRONMENTAL, UNTIL INVOICE RELATING TO SUCH DATA HAS BEEN PAID IN FULL.

AC13

LEGEND

SYMBOLS	
POWERPOLE	⊕
CONTROL STATION	△
GATE	⊗
SERVICE COVER	□
STUMP	○
TRIAL PIT	⊗
TREE	⊗

LINE STYLES	
BOTTOM OF BANK	— · — · — · — · —
BUILDING FOOTPRINT	— · — · — · — · —
BUSH CANOPY	— · — · — · — · —
CHANGE OF SURFACE	— · — · — · — · —
CHANNEL LINE	— · — · — · — · —
FENCE	— · — · — · — · —
HEDGE	— · — · — · — · —
OVERHEAD WIRES	— · — · — · — · —
ELECTRIC TELECOM	— · — · — · — · —
PATH EDGE	— · — · — · — · —
ROAD CENTRE LINE	— · — · — · — · —
STRIP GULLY	— · — · — · — · —
TOP OF BANK	— · — · — · — · —
TOP OF KERB	— · — · — · — · —
TREE CANOPY	— · — · — · — · —
WALL	— · — · — · — · —

ABBREVIATIONS

AV = AIR VALVE	LP = LAMPOST
BH = BOREHOLE	MH = MANHOLE
BOL = BOLLARD	MKR = MARKER
BOX = ELEC. BT BOX	PIT = TRIAL PIT
BT = BRITISH TELECOM	PEG = MARKER PEG
EA = EAVES LEVEL	RD = ROAD LEVEL
EC = ELECTRICITY COVER	RS = ROAD SIGN
EP = ELECTRICITY POLE	SB = SIGN BOARD
FEL = FINISHED FLOOR LEVEL	SC = STOP COCK
FP = FLAG POLE	SV = STOP VALVE
G = GULLY	TCB = TELEPHONE CALL BOX
GAS = BRITISH GAS	TL = TRAFFIC LIGHT
HY = FIRE HYDRANT	TOW = TOP OF WALL
IC = INSPECTION COVER	TP = TELEGRAPH POLE
IL = INVERT LEVEL	TV = TELEVISION
SG = STRIP GULLY	WM = WATER METER

Project:
HERCULES DEN BURN

Client:
ARCUS


Title:
TOPOGRAPHICAL SURVEY

Status: FINAL	Revision: V1	Page size: A3
Drawn by: J COUSINS	Reviewed by: D BARRATT	Date: 29/08/2018



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APPENDIX C: PEAK FLOW DATA

Arcus Consulting		Page 1												
1C Swinegate Ct East 3 Swinegate York YO1 8AJ														
Date 09/08/2018 16:18 File	Designed by liamn Checked by													
XP Solutions		Source Control 2015.1												
<p><u>IH 124 Mean Annual Flood</u></p> <p>Input</p> <table> <tr> <td>Return Period (years)</td> <td>200</td> <td>Soil</td> <td>0.400</td> </tr> <tr> <td>Area (ha)</td> <td>333.000</td> <td>Urban</td> <td>0.000</td> </tr> <tr> <td>SAAR (mm)</td> <td>771</td> <td>Region Number</td> <td>Region 1</td> </tr> </table> <p>Results l/s</p> <p>QBAR Rural 1029.7 QBAR Urban 1029.7</p> <p>Q200 years 2893.5</p> <p>Q1 year 875.3 Q2 years 935.8 Q5 years 1235.7 Q10 years 1488.0 Q20 years 1759.4 Q25 years 1861.7 Q30 years 1945.5 Q50 years 2187.1 Q100 years 2553.7 Q200 years 2893.5 Q250 years 3006.8 Q1000 years 3737.9</p>			Return Period (years)	200	Soil	0.400	Area (ha)	333.000	Urban	0.000	SAAR (mm)	771	Region Number	Region 1
Return Period (years)	200	Soil	0.400											
Area (ha)	333.000	Urban	0.000											
SAAR (mm)	771	Region Number	Region 1											
©1982-2015 XP Solutions														

FEH_Comparison

FILE=B693.dat Flood Modeller VER= 4.4.0.5162

Flood Modeller

HYDROLOGICAL DATA

Catchment: XS1

Catchment Characteristics

Easting	:	362250	Northing	:	741750
Area	:	3.335	km2		
DPLBAR	:	2.460	km		
DPSBAR	:	31.600	m/km		
PROPWET	:	0.360			
SAAR	:	702.000	mm		
Urban Extent	:	0.000			
c	:	-0.015			
d1	:	0.475			
d2	:	0.412			
d3	:	0.238			
e	:	0.247			
f	:	2.179			
SPR	:	45.760	%		

Summary of estimate using Flood Estimation Handbook rainfall-runoff method

Estimation of T-year flood

=====

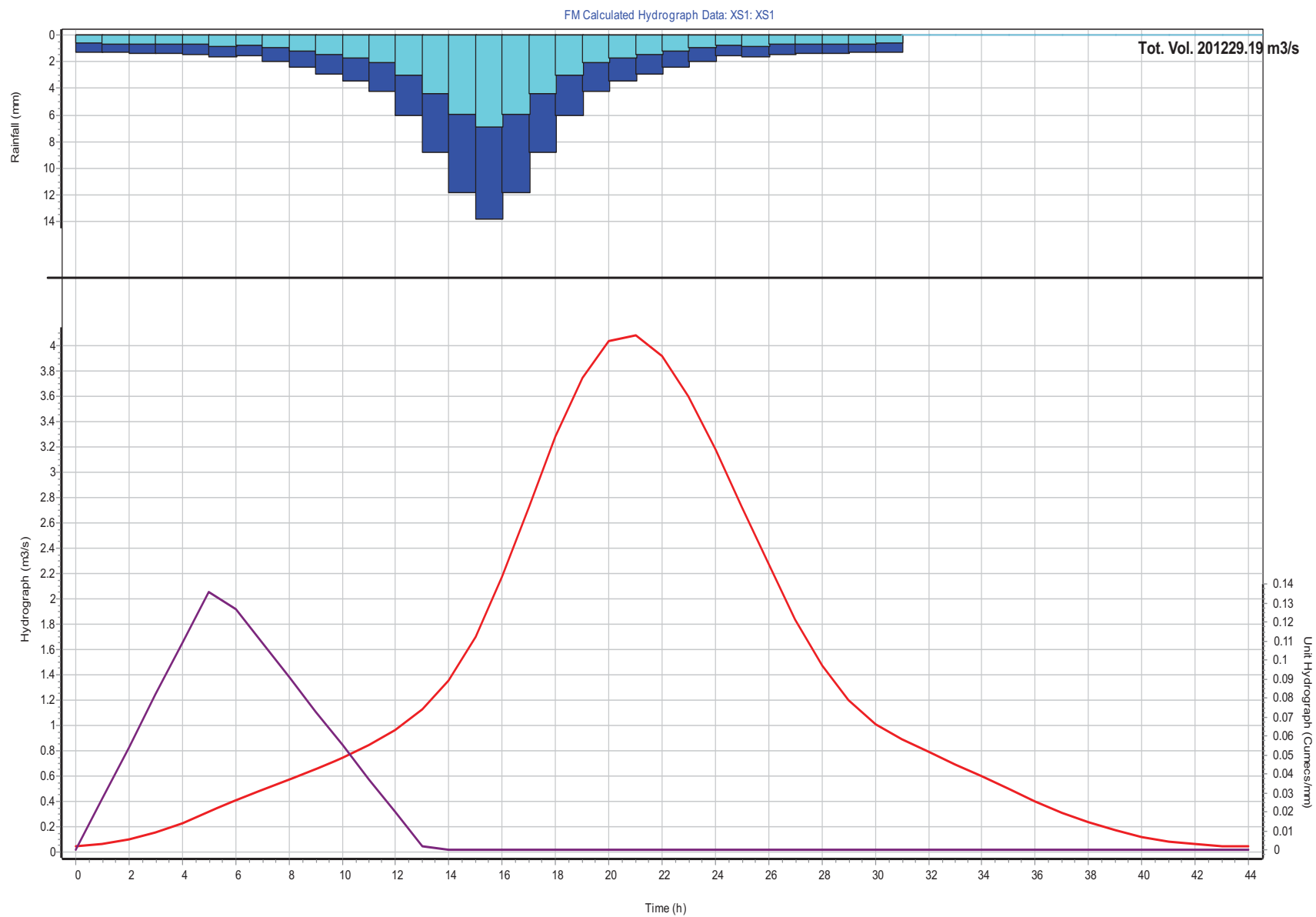
Unit hydrograph time to peak	:	5.195	hours
Instantaneous UH time to peak	:	4.695	hours
Data interval	:	1.000	hours
Design storm duration	:	31.000	hours
Critical storm duration	:	8.841	hours
Flood return period (not used)	:	200.000	years
Rainfall return period	:	200.000	years
ARF	:	0.983	
Design storm depth	:	116.829	mm
CWI	:	104.240	
Standard Percentage Runoff	:	45.760	%
Percentage runoff	:	49.969	%
Snowmelt rate	:	0.000	mm/day
Unit hydrograph peak	:	0.141	(m3/s/mm)
Quick response hydrograph peak	:	4.032	m3/s
Baseflow	:	0.048	m3/s
Baseflow adjustment	:	0.000	m3/s
Hydrograph peak	:	4.079	m3/s
Hydrograph adjustment factor	:	1.000	

Flags

FEH_Comparison

=====

Unit hydrograph flag	: FSRUH
Tp flag	: FEHTP
Event rainfall flag	: FEHER
Rainfall profile flag	: SUMRP
Percentage Runoff flag	: FEHPR
Baseflow flag	: F16BF
CWI flag	: FSRCW



UK Design Flood Estimation

Generated on 08 August 2018 10:40:49 by liamn
 Printed from the ReFH Flood Modelling software package, version 2.2.6589.25305

Summary of estimate using the Flood Estimation Handbook revitalised flood hydrograph method (ReFH)

Site details

Checksum: 87BA-D114

Site name: 3055 Arbroath

Easting: 362250

Northing: 741750

Country: Scotland

Catchment Area (km²): 3.34

Using plot scale calculations: Yes

Site description: None

Model run: 200 year

Summary of results

Rainfall - FEH 2013 (mm):	78.69	Total runoff (ML):	78.33
Total Rainfall (mm):	75.53	Total flow (ML):	151.05
Peak Rainfall (mm):	20.79	Peak flow (m ³ /s):	1.73

Parameters

Where the user has overridden a system-generated value, this original value is shown in square brackets after the value used.

** Indicates that the user locked the duration/timestep*

Rainfall parameters (Rainfall - FEH 2013 model)

Name	Value	User-defined?
Duration (hh:mm:ss)	13:00:00	No
Timestep (hh:mm:ss)	01:00:00	No
SCF (Seasonal correction factor)	0.98	No
ARF (Areal reduction factor)	0.98	No
Seasonality	Summer	n/a

Loss model parameters

Name	Value	User-defined?
Cini (mm)	105.72	No
Cmax (mm)	461.4	No
Use alpha correction factor	No	No
Alpha correction factor	n/a	No

Routing model parameters

Name	Value	User-defined?
Tp (hr)	7.58	No
Up	0.65	No
Uk	0.8	No

Baseflow model parameters

Name	Value	User-defined?
BF0 (m ³ /s)	0.08	No
BL (hr)	48.64	No
BR	0.93	No

Urbanisation parameters

Name	Value	User-defined?
Urban area (km ²)	0	No
Urbext 2000	0	No
Impervious runoff factor	0.7	No
Imperviousness factor	0.3	No
Tp scaling factor	0.5	No
Sewered area (km ²)	0.00	Yes
Sewer capacity (m ³ /s)	0.00	Yes

Time series data

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m ³ /s)	Baseflow (m ³ /s)	Total Flow (m ³ /s)
00:00:00	1.4290	0.0000	0.3296	0.0000	0.0808	0.0808
01:00:00	1.9921	0.0000	0.4669	0.0017	0.0792	0.0809
02:00:00	2.8309	0.0000	0.6783	0.0076	0.0777	0.0853
03:00:00	4.1350	0.0000	1.0220	0.0195	0.0764	0.0959
04:00:00	6.3169	0.0000	1.6329	0.0404	0.0754	0.116
05:00:00	10.6643	0.0000	2.9528	0.0751	0.0749	0.15
06:00:00	20.7902	0.0000	6.4652	0.1339	0.0754	0.209
07:00:00	10.6643	0.0000	3.6798	0.2421	0.0774	0.32
08:00:00	6.3169	0.0000	2.2960	0.4031	0.0819	0.485
09:00:00	4.1350	0.0000	1.5498	0.5905	0.0896	0.68
10:00:00	2.8309	0.0000	1.0824	0.7905	0.101	0.891
11:00:00	1.9921	0.0000	0.7721	0.9931	0.116	1.11
12:00:00	1.4290	0.0000	0.5591	1.1884	0.134	1.32
13:00:00	0.0000	0.0000	0.0000	1.3633	0.155	1.52
14:00:00	0.0000	0.0000	0.0000	1.4904	0.179	1.67
15:00:00	0.0000	0.0000	0.0000	1.5239	0.204	1.73
16:00:00	0.0000	0.0000	0.0000	1.4909	0.228	1.72
17:00:00	0.0000	0.0000	0.0000	1.4184	0.251	1.67
18:00:00	0.0000	0.0000	0.0000	1.3206	0.272	1.59
19:00:00	0.0000	0.0000	0.0000	1.2066	0.29	1.5
20:00:00	0.0000	0.0000	0.0000	1.0835	0.306	1.39
21:00:00	0.0000	0.0000	0.0000	0.9585	0.319	1.28
22:00:00	0.0000	0.0000	0.0000	0.8463	0.329	1.18
23:00:00	0.0000	0.0000	0.0000	0.7526	0.338	1.09
24:00:00	0.0000	0.0000	0.0000	0.6699	0.344	1.01
25:00:00	0.0000	0.0000	0.0000	0.5941	0.349	0.943
26:00:00	0.0000	0.0000	0.0000	0.5231	0.352	0.876
27:00:00	0.0000	0.0000	0.0000	0.4555	0.355	0.81
28:00:00	0.0000	0.0000	0.0000	0.3905	0.355	0.746
29:00:00	0.0000	0.0000	0.0000	0.3276	0.355	0.682
30:00:00	0.0000	0.0000	0.0000	0.2663	0.353	0.619
31:00:00	0.0000	0.0000	0.0000	0.2070	0.35	0.557
32:00:00	0.0000	0.0000	0.0000	0.1510	0.347	0.498
33:00:00	0.0000	0.0000	0.0000	0.1003	0.342	0.442
34:00:00	0.0000	0.0000	0.0000	0.0604	0.337	0.397

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m ³ /s)	Baseflow (m ³ /s)	Total Flow (m ³ /s)
35:00:00	0.0000	0.0000	0.0000	0.0356	0.331	0.366
36:00:00	0.0000	0.0000	0.0000	0.0200	0.324	0.344
37:00:00	0.0000	0.0000	0.0000	0.0102	0.318	0.328
38:00:00	0.0000	0.0000	0.0000	0.0043	0.312	0.316
39:00:00	0.0000	0.0000	0.0000	0.0012	0.306	0.307
40:00:00	0.0000	0.0000	0.0000	0.0000	0.299	0.299
41:00:00	0.0000	0.0000	0.0000	0.0000	0.293	0.293
42:00:00	0.0000	0.0000	0.0000	0.0000	0.287	0.287
43:00:00	0.0000	0.0000	0.0000	0.0000	0.281	0.281
44:00:00	0.0000	0.0000	0.0000	0.0000	0.276	0.276
45:00:00	0.0000	0.0000	0.0000	0.0000	0.27	0.27
46:00:00	0.0000	0.0000	0.0000	0.0000	0.265	0.265
47:00:00	0.0000	0.0000	0.0000	0.0000	0.259	0.259
48:00:00	0.0000	0.0000	0.0000	0.0000	0.254	0.254
49:00:00	0.0000	0.0000	0.0000	0.0000	0.249	0.249
50:00:00	0.0000	0.0000	0.0000	0.0000	0.244	0.244
51:00:00	0.0000	0.0000	0.0000	0.0000	0.239	0.239
52:00:00	0.0000	0.0000	0.0000	0.0000	0.234	0.234
53:00:00	0.0000	0.0000	0.0000	0.0000	0.229	0.229
54:00:00	0.0000	0.0000	0.0000	0.0000	0.224	0.224
55:00:00	0.0000	0.0000	0.0000	0.0000	0.22	0.22
56:00:00	0.0000	0.0000	0.0000	0.0000	0.215	0.215
57:00:00	0.0000	0.0000	0.0000	0.0000	0.211	0.211
58:00:00	0.0000	0.0000	0.0000	0.0000	0.207	0.207
59:00:00	0.0000	0.0000	0.0000	0.0000	0.203	0.203
60:00:00	0.0000	0.0000	0.0000	0.0000	0.198	0.198
61:00:00	0.0000	0.0000	0.0000	0.0000	0.194	0.194
62:00:00	0.0000	0.0000	0.0000	0.0000	0.19	0.19
63:00:00	0.0000	0.0000	0.0000	0.0000	0.187	0.187
64:00:00	0.0000	0.0000	0.0000	0.0000	0.183	0.183
65:00:00	0.0000	0.0000	0.0000	0.0000	0.179	0.179
66:00:00	0.0000	0.0000	0.0000	0.0000	0.175	0.175
67:00:00	0.0000	0.0000	0.0000	0.0000	0.172	0.172
68:00:00	0.0000	0.0000	0.0000	0.0000	0.168	0.168
69:00:00	0.0000	0.0000	0.0000	0.0000	0.165	0.165
70:00:00	0.0000	0.0000	0.0000	0.0000	0.162	0.162

Time (hh:mm:ss)	Rain (mm)	Sewer Loss (mm)	Net Rain (mm)	Runoff (m ³ /s)	Baseflow (m ³ /s)	Total Flow (m ³ /s)
71:00:00	0.0000	0.0000	0.0000	0.0000	0.158	0.158
72:00:00	0.0000	0.0000	0.0000	0.0000	0.155	0.155
73:00:00	0.0000	0.0000	0.0000	0.0000	0.152	0.152
74:00:00	0.0000	0.0000	0.0000	0.0000	0.149	0.149
75:00:00	0.0000	0.0000	0.0000	0.0000	0.146	0.146
76:00:00	0.0000	0.0000	0.0000	0.0000	0.143	0.143
77:00:00	0.0000	0.0000	0.0000	0.0000	0.14	0.14
78:00:00	0.0000	0.0000	0.0000	0.0000	0.137	0.137
79:00:00	0.0000	0.0000	0.0000	0.0000	0.134	0.134
80:00:00	0.0000	0.0000	0.0000	0.0000	0.132	0.132
81:00:00	0.0000	0.0000	0.0000	0.0000	0.129	0.129
82:00:00	0.0000	0.0000	0.0000	0.0000	0.126	0.126
83:00:00	0.0000	0.0000	0.0000	0.0000	0.124	0.124
84:00:00	0.0000	0.0000	0.0000	0.0000	0.121	0.121
85:00:00	0.0000	0.0000	0.0000	0.0000	0.119	0.119
86:00:00	0.0000	0.0000	0.0000	0.0000	0.116	0.116
87:00:00	0.0000	0.0000	0.0000	0.0000	0.114	0.114
88:00:00	0.0000	0.0000	0.0000	0.0000	0.112	0.112
89:00:00	0.0000	0.0000	0.0000	0.0000	0.109	0.109
90:00:00	0.0000	0.0000	0.0000	0.0000	0.107	0.107
91:00:00	0.0000	0.0000	0.0000	0.0000	0.105	0.105
92:00:00	0.0000	0.0000	0.0000	0.0000	0.103	0.103
93:00:00	0.0000	0.0000	0.0000	0.0000	0.101	0.101
94:00:00	0.0000	0.0000	0.0000	0.0000	0.0986	0.0986
95:00:00	0.0000	0.0000	0.0000	0.0000	0.0966	0.0966
96:00:00	0.0000	0.0000	0.0000	0.0000	0.0946	0.0946
97:00:00	0.0000	0.0000	0.0000	0.0000	0.0927	0.0927
98:00:00	0.0000	0.0000	0.0000	0.0000	0.0908	0.0908
99:00:00	0.0000	0.0000	0.0000	0.0000	0.089	0.089
100:00:00	0.0000	0.0000	0.0000	0.0000	0.0872	0.0872
101:00:00	0.0000	0.0000	0.0000	0.0000	0.0854	0.0854
102:00:00	0.0000	0.0000	0.0000	0.0000	0.0837	0.0837
103:00:00	0.0000	0.0000	0.0000	0.0000	0.082	0.082

Rainfall - FEH 2013

200 year

Timestep (hh:mm:ss): 01:00:00
 Duration (hh:mm:ss): 13:00:00
 Peak rainfall (mm): 20.79
 Total rainfall (mm): 75.53

Lock rainfall parameters

Results (as rural)

Direct runoff vol. (ML): 78.3
 Total flow vol. (ML): 151
 Peak flow (m³/s): 1.73

Results (urbanised)

Direct runoff vol. (ML): 78.3
 Total flow vol. (ML): 151
 Peak flow (m³/s): 1.73

Graph series

- Input rainfall
- Net rainfall
- Direct runoff
- Baseflow
- Total flow

Project checksum

87BA-D114

Report

Generate report for Word, Excel or PDF for the current return period

Report

All return periods

Export peak flows and direct runoff volumes for all return periods.

Copy

Export

Key facts

This catchment is in Scotland.
 The alpha correction factor is not used with FEH 2013 rainfall.
 Plot scale calculations are being used.

Catchment Descriptors Model Parameters Urbanisation

Key descriptors

BFIHOST: 0.539
 DPLBAR: 2.46
 DPSBAR: 31.6
 SAAR: 702
 PROPWET: 0.36
 Area (km²): 3.335
 (ha): 333.5

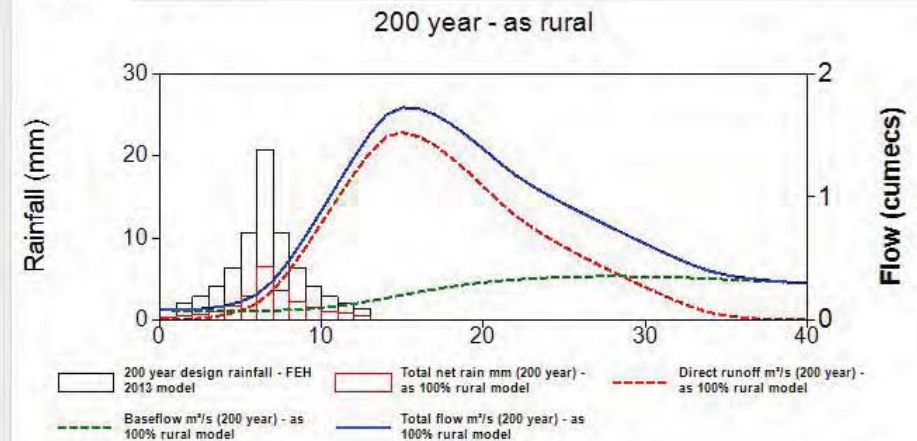
Reset all

Apply

200 year design rainfall - FEH 2013 model

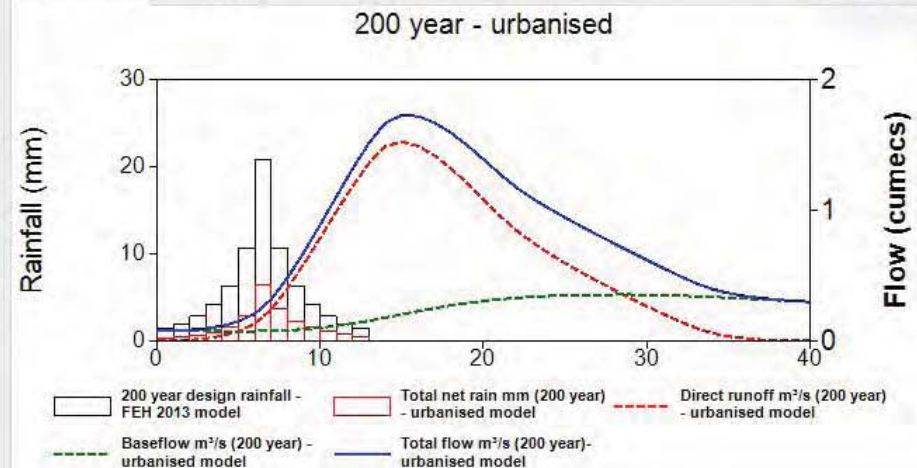
Graph (as rural) Grid (as rural)

Export grid



Graph (urbanised) Grid (urbanised)

Export grid



Event Modelling

The ReFH2 model parameters and results are shown on this screen. Use the dropdown list (top left) to generate design hydrographs for different return period floods / development runoff rates.

The upper right "as rural" graph, and the grid that lies behind it, is for information purposes and represents the flows predicted for the catchment assuming it was 100% rural. The lower "urbanised" graph takes urbanisation into account, if any is currently being modelled. Only these results for the "urbanised" catchment are presented in the project report.

The [Catchment Descriptors](#) tab presents the key catchment descriptors which are used to estimate ReFH2 model parameters. [More details >>](#)

The [Model Parameters](#) tab displays the model parameters used to generate results. You can edit these parameters to simulate different model scenarios and to conduct sensitivity analysis. There is no option to select Alpha if the FEH13 rainfall model is being used as it is not required to ensure correspondence of the return periods for the rainfall and peak flow estimates. [More details >>](#)

The [Urbanisation](#) tab allows you to estimate the impact of urbanisation for catchments as well as greenfield and post development peak runoff rate and volumes for development sites. For catchment application, the model is divided by default into rural and urban areas using URBEXT2000.

For development (plot scale) application you will normally set the **area** equal to the development site area and the **urban area** to equal the post-development impervious surface area. You would then set the **imperviousness factor** to 1 so the entire **urban area** is regarded as impervious. The "rural" simulation results (upper hydrograph/grid) will then provide the greenfield runoff rates and volumes, while the post-development rates and volumes by the "urbanised" results appear beneath. The **Tp scaling factor** allows you to set the urban Tp to be a fraction of the as-rural Tp to reflect faster routing of runoff through urban areas. [More details >>](#)

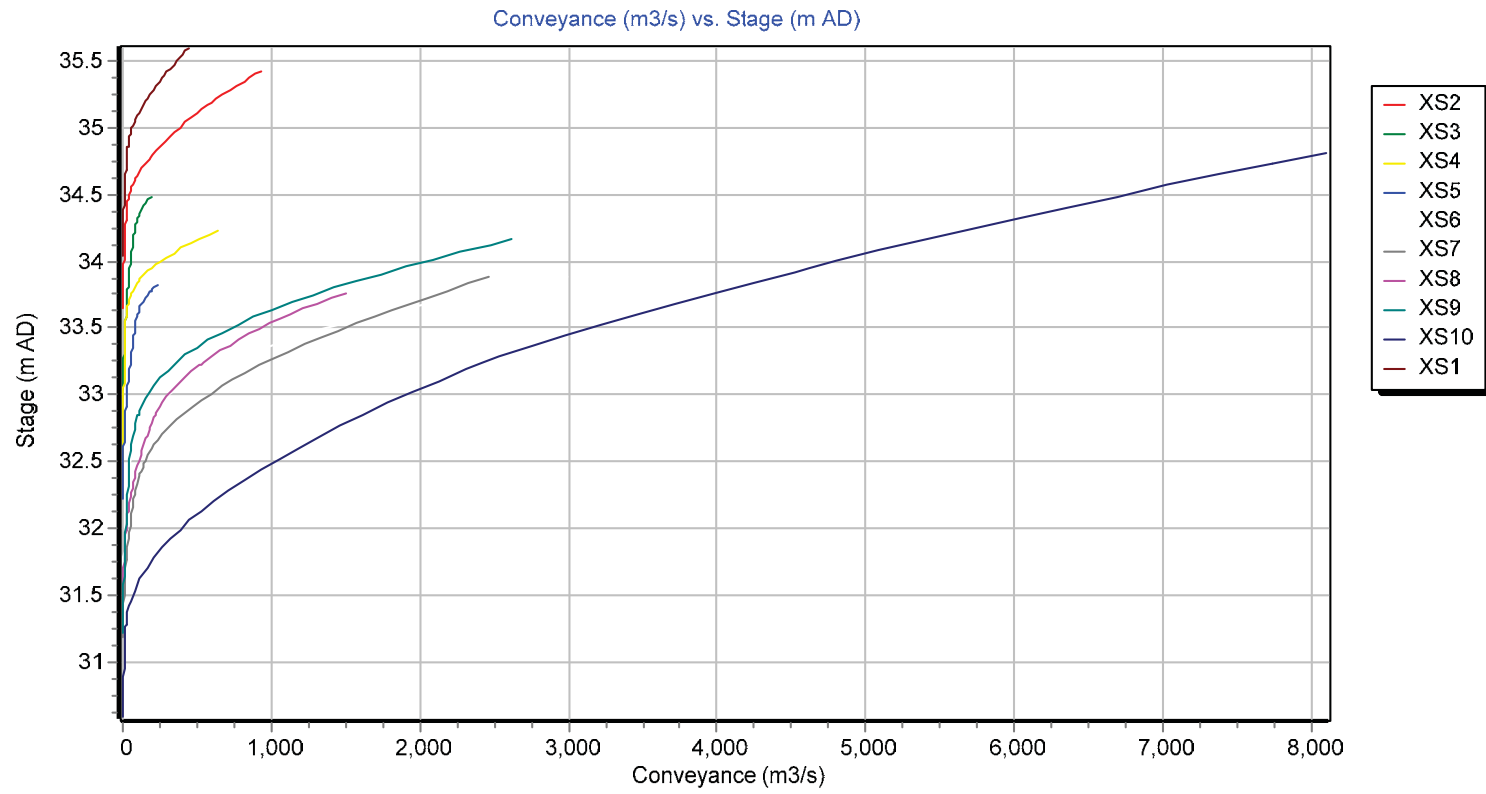
Sensitivity analysis

Appendix

Catchment descriptors

Name	Value	User-defined value used?
Area (km ²)	3.34	No
ALTBAR	64	No
ASPBAR	117	No
ASPVAR	0.65	No
BFIHOST	0.54	No
DPLBAR (km)	2.46	No
DPSBAR (mkm ⁻¹)	31.6	No
FARL	1	No
LDP	5.21	No
PROPWET (mm)	0.36	No
RMED1H	8.1	No
RMED1D	36	No
RMED2D	45.8	No
SAAR (mm)	702	No
SAAR4170 (mm)	743	No
SPRHOST	45.76	No
Urbext2000	0	No
Urbext1990	0	No
URBCONC	0	No
URBLOC	0	No
Urban Area (km ²)	0	No
DDF parameter C	-0.02	No
DDF parameter D1	0.47	No
DDF parameter D2	0.41	No
DDF parameter D3	0.24	No
DDF parameter E	0.25	No
DDF parameter F	2.18	No
DDF parameter C (1km grid value)	-0.02	No
DDF parameter D1 (1km grid value)	0.47	No
DDF parameter D2 (1km grid value)	0.41	No
DDF parameter D3 (1km grid value)	0.24	No
DDF parameter E (1km grid value)	0.25	No
DDF parameter F (1km grid value)	2.17	No

APPENDIX D: FLOOD MODELLER OUTPUTS



APPENDIX E: SEPA FRA CHECKLIST



Flood Risk Assessment (FRA) Checklist

(SS-NFR-F-001 - Version 13 - Last updated 15/04/2015)

This document should be attached within the front cover of any flood risk assessments issued to Local Planning Authorities (LPA) in support of a development proposal which may be at risk of flooding. The document will take only a few minutes to complete and will assist SEPA in reviewing FRAs, when consulted by LPAs. This document should not be a substitute for a FRA.

Development Proposal	
Site Name	Battery Electricity Storage Facility, Arbroath
Grid Reference	Easting: 36200 Northing: 741660
Local Authority	Angus Council
Planning Reference number (if known)	
Nature of the development	Utility Infrastructure If residential, state type:
Size of the development site	0.6 Ha
Identified Flood Risk	Source: Fluvial Source name: Hercules Den Burn
Supporting Information	
Have clear maps / plans been provided within the FRA (including topographic and flood inundation plans)	Yes
Has a historic flood search been undertaken?	Yes
Is a formal flood prevention scheme present?	No
Current / historical site use	If known, state the standard of protection offered
Hydrology	
Area of catchment	5.17 km ²
Qmed estimate	na m ³ /s Method: Catchment Descriptors
Estimate of 200 year design flood flow	4.079 m ³ /s
Estimation method(s) used *	Other If other (please specify methodology used): FEH, ReFH2, IH124 If Pooled analysis have group details been included Select from List
Hydraulics	
Hydraulic modelling method	1D steady Software used: ISIS
If other please specify	
Modelled reach length	490 m
Any structures within the modelled length?	Bridges Specify, if combination
Brief summary of sensitivity tests, and range:	
variation on flow (%)	20 %
variation on channel roughness	VARIED BY 20%
blockage of structure (range of % blocked)	50 % Reference CIRIA culvert design guide R168, section 8.4
boundary conditions:	
(1) type	Upstream Downstream
	Flow Normal depth
	Specify if other Specify if other
	No Select from List
(2) does it influence water levels at the site?	No
Has model been calibrated (gauge data / flood records)?	No
Is the hydraulic model available to SEPA?	No
Design flood levels	200 year 33.9 m AOD 200 year plus climate change 33.962 m AOD



Flood Risk Assessment (FRA) Checklist

(SS-NFR-F-001 - Version 13 - Last updated 15/04/2015)

Coastal			
Estimate of 200 year design flood level			m AOD
Estimation method(s) used	Select from List	If other (please specify methodology used):	<input type="text"/>
Allowance for climate change (m)			m
Allowance for wave action etc (m)			m
Overall design flood level			m AOD
Development			
Is any of the site within the functional floodplain? (refer to SPP para 255)	Yes	If yes, what is the net loss of storage	<input type="text" value="0"/> m ³
Is the site brownfield or greenfield	Greenfield		
Freeboard on design water level (m)	0.6		m
Is the development for essential civil infrastructure or vulnerable groups?	Yes	If yes, has consideration been given to 1000 year design flood?	<input type="text" value="Yes"/>
Is safe / dry access and egress available?	Neither	Min access/egress level	<input type="text"/> m AOD
If there is no dry access, what return period is dry access available?	1 in 200		years
If there is no dry access, what is the impact on the access routes?	Max Flood Depth @ 200 year event: 0.1		m
Design levels	Ground level varies	Max Flood Velocity:	<input type="text"/> m/s
		Min FFL:	34.562 mAOD
Mitigation			
Can development be designed to avoid all areas at risk of flooding?	No		
Is mitigation proposed?	Yes		
If yes, is compensatory storage necessary?	No		
Demonstration of compensatory storage on a "like for like" basis?	Select from List		
Should water resistant materials and forms of construction be used?	Yes		
Comments			
Any additional comments:	<input type="text"/>		
Approved by: Liam Nevins Organisation: Arcus Consultancy Service Ltd Date: 29th August 2018			

Note: Further details and guidance is provided in 'Technical Flood Risk Guidance for Stakeholders' which can be accessed here:- [CLICK HERE](#)

* ReFH2 is now accepted by SEPA for flow estimates in Scotland. Any use of this method should be compared with other accepted methods.



ARCUS

**BATTERY ELECTRICITY STORAGE FACILITY,
EAST OF CRUDIE ACRE COTTAGE,
ARBROATH**

PLANNING SUPPORTING STATEMENT

AUGUST 2018



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APPENDIX 5: FLOOD RISK ASSESSMENT

APPENDIX 6: UTILITY REPORT

EXECUTIVE SUMMARY

Coronation Power Limited ('the Applicant') is proposing to develop a battery electricity storage facility ('the Development') to help regulate the supply of electricity to the National Grid. The Development is located on agricultural land immediately to the north of the 132kV Arbroath substation ('the Site'), and is bounded by Hercules Den Burn to the south and west and by agricultural land to the east and north. An application for planning permission ('the Application') has been submitted under the Town and Country Planning (Scotland) Act 1997 (as amended) to Angus Council ('the Council').

The Development is for the construction and operation of a battery electricity storage facility that will provide grid balancing services to the National Grid. There is a national requirement to balance the peaks and troughs associated with electricity supply and demand to avoid strains on transmission and distribution networks and to keep the electricity system stable. The Development is designed to support the flexible operation of the National Grid and decarbonisation of electricity supply. Although the Development would import and export electricity, it would not generate any electricity in its own right nor have any on-site emissions including carbon dioxide (CO₂).

A detailed site selection process was undertaken in order to identify appropriate development sites as detailed in section 1.5 and this provides some context and justification for the selection of the Site. The Development is strategically sited adjacent to the Arbroath substation which lies to the south of the Site.

An area enclosed within a 2 m high security fence to the north and west and a 4.1 m high acoustic fence to the south and east, would be used to house battery storage containers (15 No.), inverters and transformers on skids and in an acoustic enclosure (15 No.), a DNO switchroom, a client switchgear container, an electrical grid compound, welfare and storage facilities. The Development would also consist of a new site access track from the unnamed minor road to the east, approximately 180 m in length. This track would have a width of 4.5 m extending on curves and up to 6 m wide through the main compound. There would also be supporting infrastructure including a temporary construction compound, and security columns.

The total footprint of the fenced compound is 0.53 ha. The wider Site area of the planning application boundary is 0.79 ha which includes the site access track and temporary construction compound. Planting is proposed which extends outside this area but within land under the control of the Applicant.

This Statement is intended to provide the Council with sufficient information to allow determination of the planning application. Each of the subject areas is assessed in light of the planning policy context, including the Angus Local Development Plan (ALDP) (2016). Other relevant material considerations are also summarised and assessed.

Following the above assessments, it has been determined that there are no unacceptable effects on the environment predicted as result of the Development. A review of planning policy found the Development to be both in compliance with and supported by the Development Plan and relevant material considerations.

It is therefore respectfully requested that the Council approve the planning application.

1 INTRODUCTION

1.1 Background

This Planning Supporting Statement ('the Statement') has been prepared to accompany a planning application ('the Application') submitted to The Angus Council ('the Council') by Arcus Consultancy Services Ltd ('Arcus'), on behalf of Coronation Power Limited ('the Applicant') for the development of a battery electricity storage facility ('the Development') to support the flexible operation of National Grid and decarbonisation of electricity supply by balancing electricity supply and demand.

The Development is located adjacent to the existing 132kV substation to the northwest of the town of Arbroath, Angus ('the Site') and will be accessed via a new track off the unnamed minor road to the east of the Site. The location of the Site and layout of the Development are shown on Planning Drawings 1 and 2 respectively.

The Application for the Development is made under the Town and Country Planning (Scotland) Act 1997¹, as amended by the Planning etc. (Scotland) Act 2006² ('the Planning Act'). As defined by the Town and Country Planning (Hierarchy of Developments) (Scotland) Regulations 2009³, the Development is under the 2 hectares (ha) threshold for a 'major' planning application as set out in the Regulations. The wider Site area of the planning application boundary is 0.79 ha and as such, the Development should be processed as a 'local' planning application.

The aim of this Statement is to present the findings of an environmental appraisal of the Development within the context of the Development Plan and set out the reasons why the Development is acceptable in planning terms. It comprises of the following sections:

- Introduction;
- The Development;
- Planning History;
- Development Plan;
- Relevant Material Considerations; and
- Conclusions.

1.2 The Applicant

Coronation Power Limited was formed in 2004 and is a renewable energy developer that has successfully achieved planning consent for projects capable of generating a total of more than 65 MW of electricity. In line with the changing emphasis of Government energy policy the Applicant's core objective is now to identify and develop energy storage projects across the UK.

With professional experience across key disciplines and through careful attention to design, planning and development, and consultation with local communities, the Applicant has the ability to plan, build and operate developments successfully in the UK.

The Applicant's investment in renewable energy generation across the UK will contribute to the Government's renewable energy targets as well as to the country's reduction of carbon dioxide (CO₂) emissions and fuel self-sufficiency.

¹ Scottish Government (1997) Town and Country Planning (Scotland) Act 1997 [Online] Available at: <https://www.legislation.gov.uk/ukpga/1997/8/contents> (Accessed 27/02/18)

² Scottish Government (2006) The Planning etc. (Scotland) Act 2006 [Online] Available at: <https://www.legislation.gov.uk/asp/2006/17/contents> (Accessed 27/02/18)

³ Scottish Government (2009) Town and Country Planning (Hierarchy of Developments) (Scotland) Regulations 2009 [Online] Available at: <https://www.legislation.gov.uk/sdsi/2009/9780111001714/contents> (Accessed 27/02/18)

1.3 Development Overview

The Applicant is seeking planning permission for the construction and operation of a battery electricity storage facility.

The Development is designed to support the flexible operation of the National Grid and decarbonisation of electricity supply. The Development would import and export electricity however, it would not generate any additional electricity nor have any direct on-site emissions of CO₂.

The Development would consist of containerised battery storage units (15 No.), inverters and transformers on skids (15 No.), DNO substation, client switchgear container, electrical grid compound, welfare and parts storage container and security columns, which would all be contained within a fenced compound (palisade fence to the north and west and acoustic fence to the south and east). In addition a new access is proposed off the unnamed minor road to the east of the site and landscape planting is proposed.

Further detail on the Development is provided in Section 2 of this Statement.

1.4 Site Selection

The Development has been strategically sited adjacent to the Arbroath substation which borders the south of the Site at points. Given the close proximity to the substation, lengthy transmission cables would not be required, ensuring efficient connection to the National Grid, minimising disturbance and costs. The substation is capable of accommodating the transfer of electricity to and from the Development at an acceptable cost which would provide valuable support to the grid, protecting local customers at times when high demand places stress on the local and wider electricity network. As a result of the close proximity to the substation, underground cables would avoid any major infrastructure, minimising connection costs and transmission losses. The reduction in length of underground grid connection required would also significantly minimise disruption to the local community during construction.

The need to minimise construction and operation costs is a key consideration in the selection of the site because the Development would be entered into a Capacity Market auction. The purpose of the Capacity Market is to ensure security of electricity supply by bringing forward new investment at least cost to the consumer (see Section 1.6.2).

The Applicant has considered a range of potential development sites across Scotland, targeting developments on land in close proximity to grid supply points with adequate import and export capacities, that could accommodate battery storage developments.

A site search exercise was undertaken for potential development sites adjacent to 147 substations in Scotland. A range of designations (e.g. landscape designations, heritage assets etc.) and environmental constraints (e.g. separation from residential properties, watercourses etc.), were applied to the search to filter those with potential for development. This resulted in a total of 46 potential development sites across Scotland.

Within Angus a total of 3 substation locations were reviewed for potential at Arborath, Lunanhead and Bridge of Dun and potential developable sites were identified at all three.

Landowners were then contacted to determine if they would be interested in having the developments on their land, and when an interested landowner was confirmed, then preliminary grid connection enquiries were submitted. Arbroath is one of the few places where there is capacity to connect to the grid and a formal grid connection offer was submitted. Once the connection offer was received this confirmed that the project could be viably connected to the network.

The potential site at Lunanhead was discounted because it was found to be part of a recently deceased estate which limited the possibility of getting reasonable dialogue for

lease negotiations. The potential site at Bridge of Dun was discounted as the land is on an agricultural tenancy and the tenant refused to agree to terms. This has left the development site close to the Arbroath substation as the only viable development site identified by the Applicant in Angus.

Following this site identification and selection exercise the developer has been able to progress three development sites in Scotland (the site in question at Angus, one in Perth and Kinross and one in Aberdeenshire) where:

- There was an affordable and import/export grid connection;
- An interested land owner;
- Land outwith key designations.

1.5 Site Description

The Site is currently used for arable agriculture and is located outwith but contiguous to the development boundary for Arbroath. There are anthropogenic developments in close proximity which include the existing SSE substation and associated overhead transmission lines and pylons. The substation is enclosed by a palisade fence approximately 3 m in height and is surrounded by mature trees to the west, south and east and by a mature hedgerow which borders Hercules Den Burn to the north.

The nearest residential properties to the site are located to the south between Hercules Den Burn and the East Muirlands Road on the under construction Crudie Acres development.

Access would be from a new access track constructed off the existing unnamed minor road to the east of the Site, approx. 180 m in length.

Given the above, the Site provides the optimum location for the Development, helping to improve the security of electricity supply while conforming to the local surroundings.

1.6 Need for the Development

The UK's electricity grid has historically relied on large centralised power plants. However, old coal power plants are in the process of reducing capacity and closing as they no longer meet the required environmental performance standards. Existing nuclear power plants are reaching the end of their design lives with no new nuclear plants being planned for Scotland.

As detailed further in Section 5.1, there is a requirement to deliver a greater amount of clean energy through renewable technologies. Scotland is legally bound through the Climate Change (Scotland) Act (2009)⁴ to reduce carbon emissions and through Renewable Energy Directive 2009/28/EC⁵ to increase electricity consumption from renewable resources. Renewable technologies are intermittent, generating when natural resources are available. As a result, demand and supply are more challenging to balance.

As such, there is a growing demand by network operators for a broad range of services such as storage and management. The Development is designed to support the flexible operation of the National Grid and decarbonisation of electricity supply. This is required for a number of reasons:

- Electricity Market Reform;
- The Capacity Market; and
- Balancing the Network.

⁴ Scottish Government (2009) Climate Change (Scotland) Act 2009 [Online] Available at: <https://www.legislation.gov.uk/asp/2009/12/contents> (Accessed 27/02/18)

⁵ European Commission (2009) DIRECTIVE 2009/28/EC [Online] Available at: <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32009L0028&from=EN> (Accessed 27/02/18)

1.6.1 Electricity Market Reform

Given the cessation of centralised coal-fired power, increasingly cheap but intermittent renewable energy supply and suggestions of an electric vehicle revolution, it is increasingly likely there will be significant peaks and troughs in the UK energy supply and demand.

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 blackouts⁶. 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) 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.

1.6.2 The Capacity Market

Through the Energy Act 2013⁷, 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 investment in new generation projects, innovative technologies and to maximise the benefits of the 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 bring forward investment in new generation projects and innovative technologies in parallel to maximising the utilisation of the existing generation capacity. The Capacity Market operates alongside the electricity market, which is where most participants will continue to earn the majority of their revenues. The Development is an innovative technology which will assist in balancing the difference between demand and supply.

1.6.3 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 power – becomes a bigger proportion of the overall energy mix.

The National Grid has a constant reserve of 'extra power' available for use when the power required by customers is not equal to the power generated. 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 or supply is put on the network, such as when a large power station suddenly goes offline or with high renewable generation, then the National Grid control room requires an alternative source or use of power. This is achieved from rapid response facilities such as the Development which can absorb energy from/release energy to the grid as determined by the rise or fall in system frequency.

New technology, from smart meters to innovative forms of electricity storage and consumption offer new opportunities for large and small consumers to help National Grid

⁶ Electricity Market Reform (2018) Energy Market Reform [Online] Available at: <https://www.ofgem.gov.uk/electricity/wholesale-market/market-efficiency-review-and-reform/electricity-market-reform-emr> (Accessed 27/02/18)

⁷ UK Government (2013) Energy Act 2013 [Online] Available at: <http://www.legislation.gov.uk/ukpga/2013/32/contents/enacted> (Accessed 27/02/18)

balance the system. As an innovative technology, the Development would provide a flexible and rapid release of electricity to allow National Grid to regulate electricity supply and demand without any on-site greenhouse gas emissions. Conversely, the Development would also have the capacity to consume electricity quickly which would allow for an oversupply to the grid to be managed.

1.7 Benefits of the Development

The Development would have economic and employment benefits in the form contract opportunities for local and regional contractors both for construction activities themselves and throughout the supply chain. The investment in the Development has the potential to generate a range of economic opportunities for local businesses, most notably employment opportunities and local spending. In addition, the Development would provide the landowner with a more diverse income, providing further economic benefits.

Potential social and economic benefits can be divided into:

- Direct effects: for example, employment opportunities during construction and decommissioning of the Development.
- Indirect effects: such as employment opportunities created down the supply chain by those companies providing services to the Development during construction and decommissioning; and
- Induced effects: for instance employment created by the additional spend of wages into the local economy.

These effects are considered below for construction of the Development. Effects during decommissioning would be broadly similar. During the operational phase much of the management of the facility would be undertaken remotely, although specialist jobs would be retained for the maintenance of this and other similar plants.

Construction contracts would be placed for services and materials and local sourcing would be encouraged, however this is subject to competitive tendering and constrained by the specialist nature of the equipment. Examples of direct opportunities for local contractors would include: accommodation; surveying and environmental enabling works; excavation and ground works; concrete and aggregates supply; plant hire; security; landscape and site reinstatement; and mechanical, electrical and supervisory services.

2 THE DEVELOPMENT

An overview of the Development was provided in Section 1.3; further detail is provided below with descriptions of each components of the Development.

2.1 Development Components

All permanent elements of the Development are located within a secure perimeter fence with an area of 0.53 ha. Outside of this, within the red line planning boundary of 0.79 ha is the remainder of the access road and a temporary construction compound. Some landscape planting is also proposed and this is shown in Appendix 2. This is all within land under the control of the Applicant and as such the planting can be secured by a planning condition.

The Applicant seeks planning permission for the construction and operation of the aforementioned Development, which is anticipated to include a number of components. Each component of the Development is described in turn.

2.1.1 Battery Storage Containers

Up to 15 battery storage containers would be sited on concrete plinths within the secure enclosure. Each container would be approximately 12.19 x 2.44 x 2.6 m. The elevation drawing is provided as Planning Drawing 3. There would be a separation distance of approximately 3 m between each container and the inverter/ transformer skid (described below) which would be arranged in rows alongside the access road.

The final details (i.e. colour and layout) of the containers would be confirmed with the Council through appropriately worded conditions attached to any planning consent.

2.1.2 Inverter/ Transformers

Adjacent to each battery storage container will be a concrete skid housing 4 inverters and 1 transformer. There will be a total of up to 15 of these (i.e. one for each battery storage container), which will have a footprint of 11.17 x 2.06 x 2.7 m. There would be a separation distance of approximately 3 m between each inverter/ transformer skid and battery storage container (described above). An elevation drawing is provided in Planning Drawing 4

2.1.3 DNO Switchroom

The DNO switchroom has dimensions of 6.1 x 3.6 x 3.4 m; shown in Planning Drawing 5. The container has an allowance for satellite communication equipment and would be of Glass Reinforced Plastic (GRP) construction. This would be mounted on concrete slabs which would be informed by civil design.

2.1.4 Client Switchgear Container

The client switchroom container has dimensions of 7.5 x 2.9 x 3.4 m; shown in Planning Drawing 6. This would be mounted on concrete slabs which would be informed by civil design.

2.1.5 Electrical Grid Compound

The electrical grid compound has dimensions of 40.6 x 29 m in plan and will contain circuit breakers and a transformer. The height of equipment in this compound would be between 4.1 m and 6 m. The plan and elevation of the electrical grid compound are shown in Planning Drawing 7.

2.1.6 Welfare Container and Spares Container

There would be a welfare container associated with the Development which would have the following dimensions: 6.1 x 2.43 x 2.6 m as shown in Planning Drawing 8. This would be serviced by a septic tank which would be dealt with in isolation and not require mains access. There would also be an extra spares storage container, of similar size and appearance to the battery storage containers.

2.1.7 Perimeter Fencing

A perimeter fence would enclose all permanent and electrical elements of the Development. This would be a 2 m high palisade fence to the north and west, the colour of which would be agreed with the Council through appropriately worded conditions attached to any planning consent. The elevation of the typical palisade fence is shown in Planning Drawing 9a. To the south and east, and to ensure the amenity of residents of the new housing offsite to the south an acoustic fence is proposed. This would be of timber construction and would be 4 m in height. This would be raised 10 cm above ground level, to allow the ingress of potential flood waters, and thus would site at a height of 4.1 m above ground level. The elevation of the typical acoustic fence is shown in Planning Drawing 9b. The locations of these two sections of fencing are illustrated on Planning Drawing 2.

2.1.8 Security Columns

Approximately four poles would be mounted with directional static CCTV cameras and security lighting. These have been located at each corner of the fenced compound. It would be ensured that the cameras and lighting are inward facing and do not result in amenity issues through light pollution. The indicative security column would be approximately 6.0 m in height and 0.1 m in width. Given that the site is unmanned and remotely operated there would only be a requirement for lighting to be triggered in very occasional circumstances.

An indicative security / lighting column is shown on Planning Drawing 10.

2.1.9 Site Access & On-Site Tracks

A new site entrance would be constructed from the unnamed minor road to the east of the Site, and a section of track approx. 180 m in length would provide access to the main compound. A visibility splay of this new junction is provided in Planning Drawing 11.

The track would be of compacted stone construction and would have a width of 4.5 m extending on corners and up to a maximum of 6 m within the main compound. The battery containers and inverter/ transformer skids would be located off the internal access road.

During the operational phase of the Development, a parking area would be provided within the main fenced compound for maintenance personnel. In total, the Site would include two dedicated parking spaces.

2.1.10 Cabling

Underground cables would connect the Development to the substation immediately to the west of the Development. The grid connection point where the cables enter the substation would be confirmed on receipt of a grid offer however, it is likely this would be taken from the west of the Site, which borders the substation. The cables would be buried in trenches up to 1 m deep and reinstated during construction.

2.1.11 Temporary Construction Compound

A temporary construction compound would be situated to the east of the Site allowing access for construction vehicles. This is shown on Planning Drawing 2. The compound

would be decommissioned following construction, and the remaining hardstanding would be reseeded/ landscaped as per the drawing in Appendix 2.

2.1.12 Planting

The Site currently consists of arable land with no existing planting or trees on-site. No hedges or trees would be removed or altered as part of the Development. Perennial vegetation would be removed to allow for improved planting.

Landscape planting is proposed to provide amenity improvements, particularly for the residential properties to the south and east of the Development. It is designed to supplement the existing offsite vegetation. As shown in Appendix 2, native shrub planting is proposed to the southwest, southeast and east of the Development, between the Development and the new housing to the south of the Site and wrapping around the east of the Site. No trees are proposed in this location given the overhead transmission line. In addition, a new hedgeline with hedgerow trees is proposed along the Site's northern boundary. Planting would occur on the outside of the perimeter fencing to ensure maximum benefit.

It is considered that a detailed planting plan would be secured via planning condition and agreed with the Council prior to the commencement of construction. All planting is within land under the control of the Applicant.

2.2 Design Evolution of the Development

The final design has been achieved following a number of key layout iterations. The design evolution has considered specific on-site constraints, key points raised during pre-application consultation and technology specifications. Principally this involved:

- Ensuring design is in-keeping with the surroundings;
- Consideration of all known services, buried or otherwise, in the design of the Development. This was undertaken utilising information obtained from a utility search, as provided in Appendix 6;
- Consideration of potential noise impacts by locating inverters and transformers in an enclosure and locating air conditioning units on the sides of the battery containers away from the residential receptors to the south. In addition, a 4.1 m high acoustic fence is proposed along the southern and eastern boundaries of the Site;
- Consideration of potential flood risk by siting infrastructure outside of areas at risk of flooding. In addition, whilst the Site is not modelled to flood, when the 600 mm freeboard is applied to modelled flood levels there may be some ingress of water on to the Site. To ensure this is not prohibited by the acoustic fence it is proposed that the fence would be raised off the ground by 10 cm, be of a height of 4 m to a total of 4.1 m above ground level;
- Providing necessary separation from overhead transmission lines which cross the site;
- Consideration of existing and/or proposed vegetation as screening;
- Minimising the footprint of the Development as far as possible;
- The height of the infrastructure has been minimised and the electrical grid compound, which has the tallest elements of the Development has been sited to minimise effects on the new housing under construction to the southeast of the site;
- Use of existing agricultural access point to the east, to link onto the public highway via the unnamed minor road to the East of the site. Access was not possible via the private road to the west and so the next shortest option was considered. In order to minimise land take this new section of track follows the southern field boundary and has a reduced width of 4.5 m.

Refinements to the design were undertaken throughout the pre-application process as new information and feedback became available.

3 PLANNING HISTORY

3.1 Pre-Application Consultation

On 21st May 2018, Arcus submitted a Pre-Application Advice Form to the Council for preliminary advice on the Development. A formal written response was issued by the Council on 15th June 2018, the key points raised in this response are summarised below:

- The Council considers the Development would be contrary to the Policy DS1 of the Angus Local Development Plan as it would be located outwith but contiguous to with the development boundary for Arbroath;
- The Council recommended that the Development should be directed to a suitable alternative site within the development boundary;
- The Development has the potential to adversely impact on the appearance and amenity of the surrounding area and landscape; and
- Planning permission has been granted for housing on land to the south of the Development and there is the potential for impacts on residential amenity.

As stated in Section 2.2, the design evolution has considered key points raised by the Council during pre-application consultation including:

- Site selection (see section 1.4);
- Scheme design and layout (see section 2.2); and
- Landscape design and planting (see section 2.1.12 and Appendix 2).

Refinements to the design were undertaken throughout the pre-application process as new information and feedback became available.

3.2 EIA Criteria and Screening

Regulation 2 (1) of the Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations (2017)⁸ ('the EIA Regulations') defines EIA development as either:

- Schedule 1 Development - development of a type listed in Schedule 1 always requires EIA; or
- Schedule 2 Development - development of a type listed in Schedule 2 requires EIA if it is likely to have significant effects on the environment by virtue of factors such as its nature, size or location.

Battery storage development is not listed within Schedule 1 of the EIA Regulations.

In determining whether a particular development is of a type listed in Schedule 1 or 2, planning authorities should have regard to the ruling of the European Court that the EIA Directive has a "*wide scope and broad purpose*". The fact that a particular type of development is not specifically identified in one of the Schedules does not necessarily mean that it falls outside the scope of the Regulations. The wide scope of the EIA Directive should also be noted in connection with the paragraph headings in Schedule 2 to the Regulations. For example, paragraph 10, which amongst other things includes industrial estate development, is headed "Infrastructure projects".

As such, the Development is considered in EIA Regulations Schedule 2 paragraph 10 (a): "*Industrial estate development projects where the area of development exceeds 0.5 ha.*" As the Site is 0.79 ha, the requirement for an EIA is determined by considering the selection criteria detailed within Schedule 3 of the EIA Regulations. The Selection Criteria in Schedule 3 includes an assessment of the following:

- Characteristics of the Development;
- Location of the Development; and

⁸ Scottish Government (2017) the Town and Country Planning (EIA) (Scotland) Regulations 2017 [Online] Available at: <http://www.legislation.gov.uk/ssi/2017/102/contents/made> (Accessed 27/02/18)

- Characteristics of the Potential Impacts.

Whilst utility scale battery storage developments have only recently been put forward, given their straightforward nature, relatively small footprint, low vertical extent and limited noise effects they have not generally triggered EIA.

The anticipated effects arising from the Development, as detailed in this Supporting Statement, are not sufficient to trigger the requirement for an EIA and hence the planning application is not accompanied by an Environmental Statement (ES).

3.3 Scheme of Delegation

The Angus Council Scheme of Delegation⁹ and the Town and Country Planning (Hierarchy of Development) (Scotland) Regulations 2009¹⁰ categories the Development as a 'local' application as the area of the Site at 0.79 ha does not exceed 2 ha.

Local applications submitted to the Council will normally be determined by an appointed officer. If the appointed officer considers, following the consultation process, that the application raises matters of wider community interest and/or planning significance, it might be referred to Planning Committee. Although the decision to refer to Committee rests with the appointed officer, this Statement aims to provide sufficient environmental information and demonstrate that the Development will not raise matters of wider community interest or planning significance.

3.4 Planning Application Submission

As agreed with the Council, technical surveys have informed the Development evolution. The following technical reports, planning figures and elevation drawings will accompany the Planning Statement as technical appendices.

- Appendix 1 - Planning Drawings;
 - Planning Drawing 01 – Site Location
 - Planning Drawing 02 – Site Layout
 - Planning Drawing 03 – Indicative Battery Storage Container Elevation
 - Planning Drawing 04 – Typical Inverter and Transformer Elevation
 - Planning Drawing 05 – Indicative DNO Switchroom Elevation
 - Planning Drawing 06 – Indicative Client Switchgear Elevation
 - Planning Drawing 07 – Indicative Transformer and HV Compound Elevation
 - Planning Drawing 08 – Indicative Welfare Unit Elevation
 - Planning Drawing 09a – Typical Palisade Fence Elevation
 - Planning Drawing 09b – Typical Acoustic Fence Elevation
 - Planning Drawing 10 – Typical Security Column Elevation
 - Planning Drawing 11 – Visibility Splay Drawing
- Appendix 2 - Landscape Planting Plan;
- Appendix 3 - Noise Impact Assessment ;
- Appendix 4 – Ecology Appraisal;
- Appendix 5 – Flood Risk Assessment; and
- Appendix 6 – Utility Report

⁹ Angus Council (2017) Scheme of Delegation [Online] Available at: [http://www.angus.gov.uk/sites/angus-cms/files/Scheme of Delegation.pdf](http://www.angus.gov.uk/sites/angus-cms/files/Scheme_of_Delegation.pdf) (Accessed 13/07/18)

¹⁰ Scottish Government (2009) The Town and Country Planning (Hierarchy of Developments) (Scotland) Regulations 2009 [Online] Available at: <https://www.legislation.gov.uk/sdsi/2009/9780111001714/contents> (Accessed 27/02/18)

4 DEVELOPMENT PLAN

4.1 Introduction

The Planning Acts state that decisions on planning applications must be made in accordance with the Development Plan, unless material considerations indicate otherwise. The Development Plan which covers the Development consists of the TAYplan Strategic Development Plan¹¹ (TAYplan), the ALDP and Supplementary Guidance (SG).

The process for determining a planning application can be defined as:

- Identification and consideration of the key provisions within the Development Plan;
- Clarification of whether the Development is in accordance with the Development Plan;
- Identification and consideration of relevant material considerations; and
- Conclusions on whether planning permission is justified.

This section of the Statement reviews the key policies in the Development Plan which are applicable to the Site. The aim of this section is to establish the key land use implications of the Development and consider its compliances with the ALDP in order to aid the Council during the determination process.

4.2 TAYplan (2017)

The most recent TAYplan Strategic Development Plan (the Plan) was approved by Scottish Ministers in October 2017 and sets out the Council's view on the Strategic Planning context over the next 20 years. The Plan sets out the spatial strategy to deliver a sustainable pattern of development, including delivering a low carbon and zero waste economy. The Plan confirms that new networks and systems for storing and distributing surplus heat and power will play a major role in more efficient consumption and in reducing costs and emissions.

Policy 1 sets out a spatial strategy to deliver a sustainable pattern of development and directs that most development will be built in principal settlements. Local Development Plans are expected to identify appropriate land within the boundaries of principal settlements that is capable of delivering this sustainable pattern of development. Development outside principal settlements is considered by Policy 1C. This seeks to balance supporting the needs of rural areas with avoiding suburbanization of the countryside and unsustainable patterns of travel and development.

To ensure that new energy infrastructure is delivered in the most appropriate locations, Policy 7 states that development proposals should ensure that all sites and routes for energy infrastructure have been justified, at a minimum, on the basis of the following considerations:

- The specific land take requirements, including associated statutory safety exclusion zones or buffer areas;
- Proximity of resources; and to users, grid connections and distribution networks;
- Anticipated effects of construction and operation on air quality, carbon emissions, noise and vibration, odour water pollution, drainage, waste disposal, leakage of hazardous substances and aviation interests;
- Sensitivity of landscapes, the water environment, biodiversity, geodiversity, habitats ,tourism, recreational interests and heritage resources;
- Impacts of infrastructure required for associated new grid connections and distribution or access infrastructure;
- Appropriate safety regimes and post operational restoration of land;

¹¹ TAYplan Strategic Development Planning Authority (2017). TAYplan Strategic Development Plan 2016-2036 [Online] Available at: http://www.tayplan-sdpa.gov.uk/strategic_development_plan (Accessed 13/07/18)

- Strategic cross boundary impacts of energy proposals that may be strategically significant; and
- Consistency with the National Planning Framework and its Action Programme.

Criteria are set out in the Plan for determining whether an energy proposal may be considered strategically significant and may have significant implications for the strategic capacity of the TAYplan area to accommodate energy development. The Development does not meet any of the criteria listed and is therefore not of strategic significance. The considerations listed above have therefore been assessed through comparison with relevant Local Development Plan policies.

4.3 Angus Local Development Plan (2016)

4.3.1 Introduction

Formally adopted in September 2016, the ALDP aims to represent a vision and spatial strategy for directing growth in Angus over a 10 year period. The ALDP reflects the Scottish Government's core principles and objectives as expressed in the National Planning Framework 3 (NPF3) and Scottish Planning Policy (SPP) including:

- Building a low carbon economy;
- An increased emphasis on place making;
- Respecting and maximising environmental assets;
- A sustainable approach to growth and development; and
- Well connected places.

The following individual policies are identified as relevant to the Development. Full policy wording is available in the ALDP as in an effort to be concise; the full text is not set out in this Statement. The compliance of the Development will be assessed in relation to individual policies.

4.3.2 Policy DS1: Development Boundaries and Priorities

The ALDP has adopted the strategy established in previous local plans of guiding the majority of new development, including employment opportunities, to the Angus Towns. To implement this strategy the Council has defined development boundaries to protect the setting of towns and villages and prevent uncontrolled spread of development. In addition, sites have been allocated for development within the ALDP which are safeguarded for the use set out. The Development is not allocated or safeguarded for any particular use in the ALDP and is located outside, but adjacent to, the development boundary for Arbroath. Policy DS1 states that '*Proposals for sites outwith but contiguous with a development boundary will only be acceptable where it is in the public interest and social, economic or operational considerations confirm there is a need for the proposed development that cannot be met within a development boundary*'. The Policy also sets out that, with some exceptions, development of greenfield sites will only be supported where there are no suitable and available brownfield sites capable of accommodating the proposed development.

The Development, as outlined in Section 5.3 below, is required to provide greater capacity and flexibility in the electricity network and supports the move towards low carbon energy, supplied increasingly by intermittent renewable energy developments. As an integral component of the energy infrastructure being developed to meet the UK's obligations under the EU Renewable Energy Directive, the Development would be in the public interest.

As set out in Section 1.4, the Development has been strategically located adjacent to Arbroath substation, ensuring efficient connection to the National Grid, avoiding any major infrastructure thereby minimising connection costs and transmission losses. The reduction

in length of underground grid connection required would also significantly minimise disruption to the local community during construction.

4.3.3 Policy DS2: Accessible Development

Policy DS2 sets out that new development should seek to maintain and improve transport linkages in order to support an integrated sustainable transport network and offer opportunities for active travel. Development proposals will be required to demonstrate that they are located where there is adequate road network capacity or where capacity can be made available.

Access to the Development would be from a new track leading off the unnamed minor road to the east of the Site, which connects to the highway network beyond.

The main impacts arising from transport and traffic would occur during the construction period. The Application Site is readily accessible from the highway network by way of the East Muirlands Road and the unnamed minor road to the east of the Site. A visibility splay drawing of the new junction is provided as Planning Drawing 11.

It is anticipated that most electrical equipment would be delivered to site in the form of containerised packages using standard HGVs. Concrete and aggregate deliveries would also be made using standard construction lorries. No abnormal loads movements would be required although a crane, with a handling capacity of up to 60 tonnes, would be required.

It is anticipated that the road network capacity would be adequate for traffic required to construct the Development.

The operational phase of the Development would not involve significant travel generation as only a very low number of vehicle movements associated with periodic maintenance visits would be required. These movements would typically be light commercial vehicles with an occasional HGV. The local road network can readily accept this level of traffic without highways safety or capacity issues.

The Development would not adversely affect the existing transport network or access routes, with any noticeable increase in traffic volumes associated with the Development being restricted to limited periods during the construction phase. The Development is therefore considered accessible in a safe and sustainable manner and to fully comply with Policy DS2.

4.3.4 Policy DS3: Design Quality and Placemaking

Policy DS3 requires all development proposals to be designed to a high standard that responds to the environment and is distinct in character and identity, safe and pleasant, well connected and adaptable. Development proposals should also be resource efficient making good use of existing resources and sited and designed to minimise environmental impacts and maximise the use of landform.

As demonstrated throughout this Statement, the Development design has evolved following feedback from the Council and the findings of technical assessments. This design led approach has ensured the Development is the optimum design for the location and is complementary to the context of the Site.

The Development would fully comply with national safety standards for electrical infrastructure and would, by necessity, be utilitarian and functional. It is anticipated that details of the layout, design and finish of the structures would be regulated by condition.

The purpose of the Development is to contribute to the efficient management of the infrastructure of the National Grid, making good use of existing resources (see Section 1.6.3). In addition, the location of the Development, adjacent to an existing substation, minimises environmental impact by removing the requirement for a lengthy grid

connection. The location also has the benefit of the visual screening provided by the mature woodland surrounding the substation. The Development therefore accords with the requirements of Policy DS3.

4.3.5 Policy DS4: Amenity

Policy DS4 states that development will not be permitted where there is an unacceptable adverse impact on the surrounding area or the environment or amenity of nearby properties.

The Development would not produce any atmospheric emissions and therefore, no air pollution is anticipated. Likewise there would be no emissions of odours, fumes and dust during the operational phase of the Development. Dust emissions during the construction of the Development would be controlled by implementation of recognised pollution prevention and control measures.

In accordance with the requirements of Policy DS4, a detailed noise assessment is included with this Statement (see Appendix 3). It has been demonstrated that the final design of the Development would meet the requirements of BS4142: Methods for Rating and Assessing Industrial and Commercial Sounds with regards to operating within acceptable noise limits. Measures to minimise noise emissions are set out in Appendix 3.

The Development would include approximately four security lights mounted on CCTV poles. The lighting would face inwards to avoid emissions to nearby receptors. The orientation and specifications of the lighting would provide appropriate mitigation to avoid light pollution associated with the Development.

The Development would not generate a significant increase in the number of vehicle trips during construction or operation and would therefore not cause unacceptable change to the amenity of nearby residents or compromise road safety.

Minor visual impacts associated with the residential properties may be anticipated as a result of the Development. Careful design of the Development and the incorporation of planting provisions ensures visual amenity is protected. Viewed in the context of the existing substation, the Development would not generate significant additional visual impacts.

Detailed assessments have been undertaken and appropriate mitigation measures incorporated into the Development as part of the evolutionary design process. No unacceptable adverse impact on the surrounding environment of amenity of nearby properties would occur and as a result the Development complies with Policy DS4.

4.3.6 Policy PV1: Green Networks and Green Infrastructure

Policy PV1 states that development proposals that are likely to erode or have a damaging effect on the connectivity and functionality of the Green Network will not be permitted unless appropriate mitigation or replacement can be secured. In addition, green infrastructure will be required as part new development.

Development is located on land currently used for agriculture and therefore would not result in any significant adverse impact on the connectivity and functionality of the Green Network. A scheme of landscape planting is proposed which would link with and enhance existing Green Infrastructure. The Development is therefore considered to comply with Policy PV1.

4.3.7 Policy PV3: Access and Informal Recreation

Policy PV3 states that new development should not compromise the integrity or amenity of existing recreational access opportunities, including access rights, core paths and rights of way.

There is no footpath located within the site and the Development would have no direct impact on core paths and recreational networks within Angus. The nearest core path to the Development is Path 149, Millfield, located approximately 500 m to the north. At this distance and given the low vertical scale of the Development and provision of landscape screening, there would be no impact on amenity for recreational users of the path. In addition, there would be no need to provide an additional footpath to improve connectivity. It is considered the Development fully complies with Policy PV3.

4.3.8 Policy PV4: Sites Designated for Natural Heritage and Biodiversity Value

Policy PV4 states that development proposals which are likely to affect sites subject to International and/or National designations for natural heritage and biodiversity would be assessed to ensure compatibility with the appropriate regulatory regime.

A review of the Scottish Natural Heritage Sitelink website has identified no European designated sites within 10 km of the Development. In addition, there are no sites of national or local nature conservation interest within 2 km of the Development.

The Development will not impact upon any European, national or locally designated sites for conservation. The Development is considered to fully comply with Policy PV4.

4.3.9 Policy PV5: Protected Species

Policy PV5 states that development proposals which are likely to affect protected species will be assessed to ensure compatibility with the appropriate International and/or National regulatory regime.

A Preliminary Ecological Appraisal has been undertaken, which confirmed that there are no protected species on-site. Appendix 4 provides further detail, but ultimately concludes that:

"The Site is considered to be of limited ecological value with no evidence of protected species or invasive species recorded during the Survey. Habitats within the Site were generally of low ecological value.

Although no evidence of protected species was recorded within the Site, habitats may support species (such as breeding birds, amphibians and reptiles) and therefore mitigation recommendations have been included to ensure legal compliance."

The Development is considered to comply with Policy PV5.

4.3.10 Policy PV6: Development in the Landscape

Policy PV6 states that the Council will seek to protect and enhance the quality of the landscape of Angus including its diversity, distinctive characteristics and its important views and landmarks. The capacity of the landscape to accept new development will be informed by the Tayside Landscape Character Assessment, relevant landscape capacity studies and formal designations and special landscape areas identified within Angus. Development which has an adverse effect on landscape will only be permitted where:

- *The site selected is capable of accommodating the proposed development;*
- *The siting and design integrate with the landscape context and minimise adverse impacts on local landscape;*
- *Potential cumulative effects with any other relevant proposal are considered to be acceptable; and*
- *Mitigation measures and/or reinstatement are proposed where appropriate.*

The location of the Development within a large agricultural field in close proximity to the existing Arbroath substation and adjacent to high voltage overhead lines is judged to be

appropriate. Proposed mitigation in keeping with the area would reduce effects of the Development after 3 – 5 years such that adverse effects on landscape character would be limited to a small geographical area.

Effects on the quality of visual amenity experienced by residents would be limited such that the Development would not become a dominant focal point in views. Mitigation planting would soften the outline of the Development and screen the taller components after 3 – 5 years.

Effects on recreational receptors would be limited due the effect of distance, existing screening elements and additional screening provided by the proposed landscape planting.

The Development is anticipated to offer a limited visual impact on overall landscape character and visual amenity, and would create no significant effects on designated areas, special landscape areas, important views and landmarks. Appropriate mitigation measures, in the form of a scheme of landscape planting, are proposed. The landscaping scheme would pay due regard to the Council's Planning Advice Notes 21 '*The Siting and Landscaping of Built Development in the Countryside*' and 23 '*The Specification of Landscaping Proposals for Development Sites*'.

The site selected is therefore capable of accommodating the Development in accordance with the requirements of Policy PV6.

4.3.11 Policy PV7: Woodland, Trees and Hedges

Policy PV7 seeks to protect existing woodland, trees and hedgerows from removal and potential adverse impacts. It states that existing trees and hedgerows should be integrated within developments and fragmentation should be avoided. New planting should enhance biodiversity and landscape value by improving the connectivity of existing green infrastructure and use of appropriate species.

The Development has been designed to ensure that existing trees and hedgerow to the west and south of the site remain in-situ with only a limited amount of vegetation removal required to allow access to the site. New planting using appropriate species would be provided through the landscape mitigation scheme and would link with existing mature woodland surrounding the adjacent substation.

The Development is considered to comply with Policy PV7.

4.3.12 Policy PV8: Built and Cultural Heritage

Policy PV8 states that the Council will seek to protect and enhance areas designated for their built and cultural heritage value. Development proposals which are likely to affect protected sites, their setting or the integrity of their designation will be assessed within the context of the appropriate regulatory regime.

A review of the Historic Scotland arcgis website identified no archaeological or heritage assets within the Site. The potential for archaeological remains to exist on the Site is therefore considered to be low. However, as the Site has not been previously developed the potential for undiscovered archaeological remains to be present cannot be discounted. Investigation of such potential could be adequately secured by the imposition of an appropriately worded planning condition.

There is one Scheduled Monument located within 2 km of the Development: Peasiehall, souterrains 200 m to the south southeast of Bank (SM6648) located approximately 1.6 km to the southwest of the Site.

There are Listed Buildings located within 2 km of the Development three of which are listed as Category A:

- Mortuary Chapel, Western Cemetery (LB21252) located approximately 480 m to the east of the Development;
- The Elms, (LB21250) located approximately 1.2 km to the east of the Development; and
- Hospital Field (LB 21253) and located approximately 1.2 m to the south east.

Due to the low vertical scale of the Development, intervening distance and screening from buildings and vegetation, the potential for significant effects on the setting of the Scheduled Monument and listed buildings identified above is considered unlikely.

The Development is unlikely to affect protected sites, their setting or the integrity of their designation and therefore is considered to comply with Policy PV8.

4.3.13 Policy PV9: Renewable and Low Carbon Development

Policy PV9 states that proposals for renewable and low carbon energy development, which includes infrastructure required for the storage of energy, will be supported where they meet certain criteria. In summary:

- The impact on amenity, landscape and environment should be minimised by site selection and careful design, while *'respecting operational efficiency'*;
- Access for construction and operation should avoid compromising road safety or cause unacceptable change to the environment of landscape;
- The site has been designed to make links to the national grid;
- Adverse impacts on aviation, defence, seismological or telecommunications facilities are avoided;
- No adverse impacts on landscape, designated sites, protected species or the amenity of communities or individual dwellings, including noise and visual impact; and
- No adverse impacts on groundwater, surface water resources, carbon rich soils, peatland habitats or geodiversity.

Consideration may be given to additional factors such as contribution to energy targets and emissions and local socio-economic impact. Angus Council's Renewable and Low Carbon Energy Development Supplementary Guidance provides more detail of the policy tests set out by Policy PV9.

As set out in Sections 4.3.5 and 4.3.10 above, the Development would not result in adverse impact individually or cumulatively on amenity, landscape character, sensitive viewpoints or public access routes. No adverse impacts on sites designated for nature conservation importance or on protected species are anticipated (see section 4.3.8 and 4.3.9 above).

Access for construction and operation would be taken via a new track, approx. 180 m in length, from the unnamed minor road to the east of the Site. This connects to the East Muirlands Road and the wider network. Construction and operational traffic would not have a significant adverse impact on the safe operation of the highway network or cause unacceptable environmental effects (see Section 4.3.3 above).

Due to the nature of the Development it would not have adverse impacts on aviation, defence, seismological or telecommunications facilities. The Site has been selected for its close proximity to the existing substation and the Development thus avoids disturbance caused by the need for a lengthy grid connection.

The Development would not give rise to adverse impacts on groundwater or surface water resources. Carbon rich soils or peatland habitats are not present on the Site.

The Development would provide a sustainable means of energy storage and would not give rise to any significant issues in respect of development plan policy and the Renewable and Low Carbon Energy Development Supplementary Guidance and therefore is considered to comply with Policy PV9.

4.3.14 Policy PV12: Managing Flood Risk

Policy PV12 seeks to direct development away from area that would be of significant risk of flooding from any source or would materially increase the possibility of flooding elsewhere.

The closest watercourse to the Site is Hercules Den Burn which runs along the western and southern boundaries. Along its southern boundary the Site is located in a High Risk Zone for river flooding and along its western boundary the site falls within a High Risk Zone for surface water flooding (SEPA flood map).

A Flood Risk Assessment has been undertaken for the Development to determine the degree of flood risk, taking account of future climate change, and to identify appropriate mitigation measures (see Appendix 5). Appropriate flood risk mitigation measure would be incorporated into the design of the scheme (see Appendix 5). It is anticipated that details of the mitigation measures, such as finished ground levels for buildings and structures, would be regulated by condition.

The Flood Risk Assessment concludes that any fluvial flooding from Hercules Den Burn (1:200 year return period plus 20% allowance for climate change) would be contained within the channel of Hercules Den Burn. The topography and use of the land surrounding the Site means that there is negligible risk of pluvial flooding, and the underlying geology also means that groundwater flooding is highly unlikely. The site is otherwise not at risk of flooding from other sources. As such, the risk of the site flooding or causing flooding offsite is considered to be negligible, accept for river flooding, which is considered to be low risk.

The Development is unlikely to have any flood risk impacts and therefore is considered to comply with Policy PV12.

4.3.15 Policy PV13: Resilience and Adaption

Policy PV13 states that development should not require an increase in the provision and/or maintenance of flood defences. In addition, the Council may require that measures to increase resilience to the effects of climate change, such as extreme weather events and increased flood and drought risk, are incorporated into development proposals.

A Flood Risk Assessment has been undertaken for the Development and appropriate flood risk mitigation measures have been identified which take into account the potential effects of future climate change (see Appendix 5).

The Development is considered to comply with Policy PV13.

4.3.16 PV14: Water Quality

Policy PV14 seeks to ensure that new developments do not pollute surface or underground water. Development proposals which do not maintain or enhance the water environment will not be supported.

No foul drainage arrangements are required to support the operation of the Development. The Site is currently used for agriculture and has no previous history of use that might give rise to contamination. The Development would therefore not pollute surface or underground water due to discharge, leachates or disturbance of contaminated land. As such the Development would comply with Policy PV14.

4.3.17 PV15: Drainage Infrastructure

Policy PV15 states that all new development, except single dwellings and those that discharge directly to coastal waters, will be required to provide SUDs and long term maintenance must be agreed with the Council.

Given the nature of the Development SUDS is not considered necessary. Any surfacing on site will comprise permeable stone aggregate with the exception of the small concrete plinths required to support the battery containers and the concrete bases required for the inverter/ transformer skids and the DNO switchroom and client switchgear container. Any surface water run-off from the Development would drain freely. As such the Development would comply with Policy PV15.

4.3.18 PV18: Waste Management in New Development

PVPV18 seeks to minimise the generation of demolition and construction waste. The Policy states that, where appropriate, the Council will require the submission of a Site Waste Management Plan to demonstrate how the generation of waste would be minimised during the construction and operational phases of the development. In addition, appropriate facilities for the segregation, storage and collection of waste during the operational phase should be incorporated in development proposals.

During construction, appropriate waste management procedures would be followed. In the event that soil cannot be reused on-site, additional licenses would be sought from SEPA to ensure it is transported and relocated in line with guidance. It is the Applicant's preference to reuse all soil on-site. Once operational, the Development would not produce waste, including CO₂.

The Development is considered to comply with Policy PV18.

4.3.19 PV19: Minerals

Policy PV19 states that the Council will protect existing mineral resources within Angus which are of economic and/or conservation value from other forms of development.

The Site is not located in or close to an existing mineral resource and therefore the Development accords with Policy PV19.

4.3.20 PV20: Soils and Geodiversity

Policy PV20 states that development proposal on prime agricultural land will only be supported where they:

- Support delivery of the development strategy and policies in this local plan;
- Are small scale and directly related to a rural business or mineral extraction; or
- Constitute renewable energy development and are supported by a commitment to a bond commensurate with site restoration requirements.

Furthermore, design and layout should minimise the loss of agricultural land and should not make any farm unit unviable. Development proposals should incorporate measures to manage, protect and reinstate valuable soils, groundwater and soil biodiversity during construction.

Following a review of the Land Capability for Agriculture (LCA) classification, the Site is located within Class 3.1 land which is considered land capable of producing consistently high yields of a narrow range of crops and/or moderate yields of a wider range. Peat and carbon rich soils are not present on the site.

The design evolution of the layout has minimized the land required for the Development. No significant impacts on agricultural land are anticipated and no farm unit would be rendered unviable by the Development. Measures to manage, protect and reinstate soils would be incorporated into the Development (see also Section 4.3.18. above).

The Development is considered to comply with Policy PV20.

4.3.21 Summary

As demonstrated above, the Development is compliant with ALDP Policies DS1, DS2, DS3, DS4, PV1, PV3, PV4, PV5, PV6, PV7, PV8, PV9, PV12, PV13, PV14, PV15, PV18, PV19 and PV20.

Given the decrease in large centralised power plants and the intermittence of electricity supply from renewable sources, there is a growing demand by network operators for a broad range of services including storage and management. The Development is designed to support the flexible operation of the National Grid and decarbonisation of electricity supply. As such, there is an identified need for the Development which is supported by the Development Plan.

4.4 Supplementary Guidance

SG forms part of the ALDP and provides additional details to policy contained in the ALDP. The following SG is relevant to the Development:

- SG: Renewable and Low Carbon Energy Development (2017)¹²; and
- SG: Developer Contributions and Affordable Housing (2016)¹³.

The compliance of the Development with each SG is assessed below.

4.4.1 SG: Renewable and Low Carbon Energy Development

SPP identifies the important role planning has in supporting the achievement of sustainable development through its influence on location, layout and design of new development.

The SG should be read in conjunction with ALDP Policy PV9: Renewable and Low Carbon Energy Development and sets out the spatial framework for onshore wind energy and detailed criteria for the assessment of renewable energy and low carbon energy proposals.

The compliance of the Development to this SG is set out in Section 4.3.4. To summarise, the Development would provide a flexible and rapid release of electricity to allow the National Grid to regulate electricity supply and demand without any greenhouse gas emissions, it would help regulate energy supply and support the move to a low carbon economy. As such, the Development accords with Policy PV9 and the accompanying SG.

4.4.2 SG: Developer Contributions and Affordable Housing

The sustainable economic growth of Angus requires the provision of infrastructure and facilities to deliver new development. Developers are required to contribute to infrastructure and facilities to mitigate the impact of their development on the existing network. The aim of the SG is to set out a transparent and consistent approach to the likely infrastructure and facility requirements that will be sought for different types of development.

The location, scale and nature of the Development would not result in the need for new, extended or improved public services, community facilities and infrastructure. As the Development would not put a strain on other public resource or infrastructure, developer obligations are considered unnecessary.

¹² Angus Council (2015) SG: Renewable and Low Carbon Energy Development [Online] Available at: [http://www.angus.gov.uk/sites/angus-cms/files/2017-10/ALDP Renewable and Low Carbon Energy Development Supplementary Guidance.pdf](http://www.angus.gov.uk/sites/angus-cms/files/2017-10/ALDP%20Renewable%20and%20Low%20Carbon%20Energy%20Development%20Supplementary%20Guidance.pdf) (Accessed 13/07/18)

¹³ Angus Council (2016) SG: Developer Contributions and Affordable Housing [Online] Available at: [http://www.angus.gov.uk/sites/angus-cms/files/ Developer Contributions and Affordable Housing Supplementary Guidance December 2016.pdf](http://www.angus.gov.uk/sites/angus-cms/files/Developer%20Contributions%20and%20Affordable%20Housing%20Supplementary%20Guidance%20December%202016.pdf) (Accessed 13/07/18)

4.4.3 Summary

Although the SG does not relate specifically to the nature of the Development, the principles should be applied to developments of all sizes and types. The nature of the Development supports the move to a low carbon economy while the design ensures the highest standards are achieved. Given the size, nature and impact of the Development, further developer contributions are not considered justifiable. The Development is therefore compliant with the SG discussed above which forms part of the ALDP.

The Development complies with the ALDP in its entirety and as the primary consideration in determination, it is respectfully requested that the Application is approved.

5 RELEVANT MATERIAL CONSIDERATIONS

The Planning Act states that a decision on a planning application must be made in accordance with the Development Plan unless material considerations indicate otherwise. This Section assesses the Development against material considerations.

5.1 Energy Storage and Management Drivers

There is a focus at International, European and national level on how the UK can deliver secure, clean and affordable electricity to consumers. The UK is legally bound through the Climate Change (Scotland) Act (2009) to reduce carbon emissions and through Renewable Energy Directive 2009/28/EC to increase electricity consumption from renewable resources.

Energy management facilities will play an important role in achieving this. A report by the National Infrastructure Commission (2016)¹⁴ estimates that smart power systems in the UK, which include energy storage and management *"could save consumers up to £8 billion a year by 2030, help the UK meet its 2050 carbon targets and secure the UK's energy supply for generations."*

The Development is designed to support the flexible operation of the National Grid and decarbonisation of electricity supply. The Development would import and export electricity however, would not generate any additional electricity nor have any on-site emissions of CO₂. As such, the Development would contribute to the legal obligations of the Climate Change (Scotland) Act 2009.

5.2 National Planning Framework 3

NPF3 (2014)¹⁵ recognises that the purpose of the planning system is to contribute to achieving a sustainable, low-carbon Scotland. Although NPF3 does not specifically address energy management facilities, the Scottish Government released a publication ('A Nation with Ambition') stating that they will prioritise the transition to a resource efficient, low carbon and circular economy.

Energy management facilities support the flexible operation of decarbonisation through balancing electricity supply and demand disparities currently experienced by the National Grid. These are due to the existing and likely increased levels of renewable energy generation already approved within Scotland. This will build on the momentum generated by the European supported Low Carbon Infrastructure Transition Programme and will benefit consumers, communities and businesses throughout the country.

5.3 Scottish Planning Policy

SPP (2014)¹⁶ is a non-statutory statement of Scottish Government policy on how nationally important land use planning matters should be addressed across the country. Outcome 2: a low carbon place states its aim as *"reducing our carbon emissions and adapting to climate change"*. As stated previously, the Development is designed to support the flexible operation of the National Grid and decarbonisation of electricity supply.

SPP states in paragraph 93 that the planning system should:

- Promote business and industrial development that increases economic activity while safeguarding and enhancing the natural and built environments as national assets;

¹⁴ UK Government (2016) Smart Power: A National Infrastructure Commission Report [Online] Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/505218/IC_Energy_Report_web.pdf (Accessed 27/02/18)

¹⁵ Scottish Government (2014) National Planning Framework [Online] Available at: <http://www.gov.scot/Resource/0045/00453683.pdf> (Accessed 27/02/18)

¹⁶ Scottish Government (2014) Scottish Planning Policy [Online] Available at: <http://www.gov.scot/Resource/0045/00453827.pdf> (Accessed 27/02/18)

- Allocate sites that meet the diverse needs of the different sectors and sizes of business which are important to the plan area in a way which is flexible enough to accommodate changing circumstances and allow the realisation of new opportunities; and
- Give due weight to net economic benefit of proposed development.

The Development would diversify the local economy and safeguard the natural and built environment.

5.4 Summary

The material considerations are considered to provide weight in favour of the Development. The effects from the Development are modest and are outweighed by the benefits of the Development, particularly the Development's contribution to providing energy management services in Angus. The Development would support the flexible operation of the National Grid and decarbonisation of electricity supply.

6 CONCLUSION

In accordance with the Planning Act, the Development should be determined in accordance with the Development Plan unless material considerations indicate otherwise. The Statement demonstrates that the Development complies with the relevant policies of the ALDP. The Development would result in economic opportunities for local and regional contractors both for construction activities themselves and throughout the supply chain.

A detailed site selection process was undertaken in order to identify appropriate development sites as detailed in section 1.4 and this provides some context and justification for the selection of the Site, adjacent to the existing substation and with the Development resulting in no significant environmental effects, including on residential amenity.

The Development would contribute to the ALDP's overarching aims of respecting environmental assets; developing a sustainable approach to growth and development; and sustainable economic growth. The Development complies with the ALDP in its entirety.

The Development also draws support from wider material considerations including Energy Storage and Management Drivers, National Energy Policy, NPF3 and SPP.

The key benefits of the Development are as follows:

- The Development complies with Development Plan and can draw support from material considerations;
- The Development is designed to support the flexible operation of the National Grid and decarbonisation of electricity supply in support of EU targets and national planning policy. The Development would not generate any additional electricity nor have any on-site emissions of CO₂;
- The Development is located in close proximity to Arbroath substation which would avoid the need for lengthy transmission cables, ensure efficient connection to the National Grid and minimising disturbance to the community;
- The design of the Development has evolved following pre-application consultation and technical assessments;
- Landscaping/planting has been incorporated into the design to protect visual amenity of the existing residential properties, especially those to the south;
- The majority of above ground infrastructure has been located to the west of the Site, taking advantage of the existing screening and minimising visual impacts for the aforementioned residential properties;
- As a new, innovative technology, the Development would diversify the economic mix in Angus;
- A new access track is proposed to provide access from the minor road to the east of the Site. It is anticipated that the Development construction traffic would not create any significant effects nor require major upgrades;
- The Site is not sensitive in terms of ecology, ornithology, cultural heritage or carbon rich soils; and
- Appropriate environmental surveys (including noise, ecology and flood risk) have been undertaken. These have been used to inform the design of the Development which does not give rise to any significant environmental effects, including on residential amenity.

It is considered that the Development accords with the Development Plan and the associated benefits outweigh the minimal visual and other environmental impacts of the Development.

Given the above, it is respectfully requested that planning permission is granted for the Application.

APPENDIX 1: PLANNING DRAWINGS

APPENDIX 2: LANDSCAPE PLANTING PLAN

APPENDIX 3: NOISE IMPACT ASSESSMENT

APPENDIX 4: ECOLOGY APPRAISAL

APPENDIX 5: FLOOD RISK ASSESSMENT

APPENDIX 6: UTILITY REPORT



ARBROATH BATTERY STORAGE

UTILITIES REPORT

JULY 2018



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1 INTRODUCTION

1.1 General

This Utilities Report provides details on the presence of underground and overhead utilities, and will be used to assist in communicating health and safety related information as part of the pre-construction information to project stakeholders. In particular, this information should be considered by any Designers and Principal Contractor in preparing their Construction Phase Plan.

This report includes:

- Outcome of the 'Line Search Before U Dig' (LSBUG) inquiry;
- A summary of the utility enquiries to date;
- Maps received to date;
- Email correspondence with asset owners not included in the LSBUG inquiry.

2 UTILITY ENQUIRIES

2.1 General

A full utilities search for assets in the vicinity of the site was requested in May 2018. Details of the search is included in Appendix A including a full list of utility asset owners contacted and asset owners unaffected by the development. The details of the utilities identified as present either within the site or surrounding area are included in Appendix B while email correspondence from unaffected asset owners is included in Appendix C.

APPENDIX A – LINE SEARCH BEFORE U DIG INQUIRY RECORD

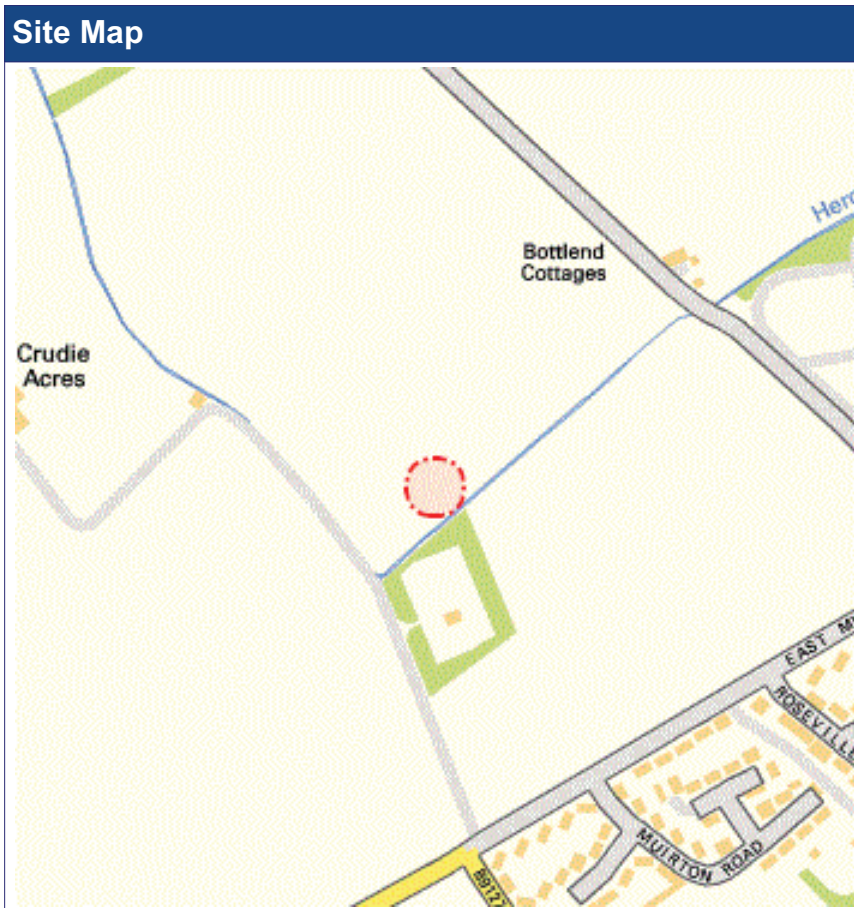
Enquirer

Name	Miss kirsty bowman	Phone	0141 221 9997
Company	Arcus Consulting Ltd	Mobile	Not Supplied
		Fax	Not Supplied
Address	144 West George Street glasgow Lanarkshire G2 2HG		
Email	kirstyb@arcusconsulting.co.uk		
Notes	Please ensure your contact details are correct and up to date on the system in case the LSBUD Members need to contact you.		

Enquiry Details

Scheme/Reference	3055		
Enquiry type	Initial Enquiry	Work category	Planning Applications
Start date	19/05/2018	Work type	Commercial/industrial
End date	24/05/2019	Site size	50 metres diameter
Searched location	XY= 362009, 741606	Work type buffer*	75 metres
Confirmed location	362009 741606		

* The WORK TYPE BUFFER is a distance added to your search area based on the Work type you have chosen.



Asset Owners

Terms and Conditions. Please note that this enquiry is subject always to our standard terms and conditions available at www.linesearchbeforeudig.co.uk ("Terms of Use") and the disclaimer at the end of this document. Please note that in the event of any conflict or ambiguity between the terms of this Enquiry Confirmation and the Terms of Use, the Terms of Use shall take precedence.

Validity and search criteria. The results of this enquiry are based on the confirmed information you entered and are valid only as at the date of the enquiry. It is your responsibility to ensure that the Enquiry Details are correct, and LineSearchbeforeUdig accepts no responsibility for any errors or omissions in the Enquiry Details or any consequences thereof. LSBUD Members update their asset information on a regular basis so you are advised to consider this when undertaking any works. It is your responsibility to choose the period of time after which you need to resubmit any enquiry but the maximum time (after which your enquiry will no longer be dealt with by the LSBUD Helpdesk and LSBUD Members) is 28 days. If any details of the enquiry change, particularly including, but not limited to, the location of the work, then a further enquiry must be made.

Asset Owners & Responses. Please note the enquiry results include the following:

1. "LSBUD Members" who are asset owners who have registered their assets on the LSBUD service.
2. "Non LSBUD Members" are asset owners who have not registered their assets on the LSBUD service but LSBUD is aware of their existence. Please note that there could be other asset owners within your search area.

Below are three lists of asset owners:

1. **LSBUD Members who have assets registered within your search area. ("Affected")**
 - a. These LSBUD Members will either:
 - i. Ask for further information ("Email Additional Info" noted in status). The additional information includes: Site contact name and number, Location plan, Detailed plan (minimum scale 1:2500), Cross sectional drawings (if available), Work Specification.
 - ii. Respond directly to you ("Await Response"). In this response they may either send plans directly to you or ask for further information before being able to do so, particularly if any payments or authorisations are required.
2. **LSBUD Members who do not have assets registered within your search area. ("Not Affected")**
3. **Non LSBUD Members who may have assets within your search area.** Please note that this list is not exhaustive and all details are provided as a guide only. It is your responsibility to identify and consult with all asset owners before proceeding.

National Grid. Please note that the LSBUD service only contains information on National Grid's Gas above 7 bar asset, all National Grid Electricity Transmission assets and National Grid's Gas Distribution Limited above 2 bar asset.

For National Grid Gas Distribution Ltd below 2 bar asset information please go to www.beforeyoudig.nationalgrid.com

LSBUD Members who have assets registered on the LSBUD service within the vicinity of your search area.

List of affected LSBUD members

Asset Owner	Phone/Email	Emergency Only	Status
SGN	08009121722	0800111999	Await response

LSBUD Members who do not have assets registered on the LSBUD service within the vicinity of your search area. Please be aware that LSBUD Members make regular changes to their assets and this list may vary for new enquiries in the same area.

List of not affected LSBUD members

AWE Pipeline	Gateshead Energy Company	Prysmian Cables & Systems Ltd (c/o Western Link)
BOC Limited (A Member of the Linde Group)	Gigaclear PLC	Redundant Pipelines - LPDA
BP Exploration Operating Company Limited	Gtt	RWEnpower (Little Barford and South Haven)
BPA	Humbly Grove Energy	SABIC UK Petrochemicals
Carrington Gas Pipeline	IGas Energy	Scottish Power Generation
CATS Pipeline c/o Wood Group PSN	INEOS FPS Pipelines	Seabank Power Ltd
Cemex	INEOS Manufacturing (Scotland and TSEP)	Shell (St Fergus to Mossmorran)
Centrica Storage Ltd	NOVYN Enterprises Limited	Shell Pipelines
CLH Pipeline System Ltd	Intergen (Coryton Energy or Spalding Energy)	SSE (Peterhead Power Station)
Concept Solutions People Ltd	Mainline Pipelines Limited	Tata Communications (c/o JSM Construction Ltd)
ConocoPhillips (UK) Ltd	Manchester Jetline Limited	Total (Colnbrook & Colwick Pipelines)
DIO (MOD Abandoned Pipelines)	Manx Cable Company	Total Finaline Pipelines
E.ON UK CHP Limited	Marchwood Power Ltd (Gas Pipeline)	Transmission Capital
EirGrid	Melbourn Solar Limited	UK Power Networks
Electricity North West Limited	National Grid Gas (Above 7 bar), National Grid Gas Distribution Limited (Above 2 bar) and National Grid Electricity Transmission	Uniper UK Ltd
ENI & Himor c/o Penspen Ltd	Northumbrian Water Group	Vattenfall
EnQuest NNS Limited	NPower CHP Pipelines	Veolia ES SELCHP Limited
EP Langage Limited	Oikos Storage Limited	Western Power Distribution
ESP Utilities Group	Ørsted	Westminster City Council
ESSAR	Perenco UK Limited (Purbeck Southampton Pipeline)	Wingas Storage UK Ltd
Esso Petroleum Company Limited	Petroineos	Zayo Group UK Ltd c/o JSM Group Ltd
Fulcrum Pipelines Limited	Phillips 66	
Gamma	Premier Transmission Ltd (SNIP)	

The following Non-LSBUD Members may have assets in your search area. It is **YOUR RESPONSIBILITY** to contact them before proceeding. Please be aware this list is not exhaustive and it is your responsibility to identify and contact all asset owners within your search area.

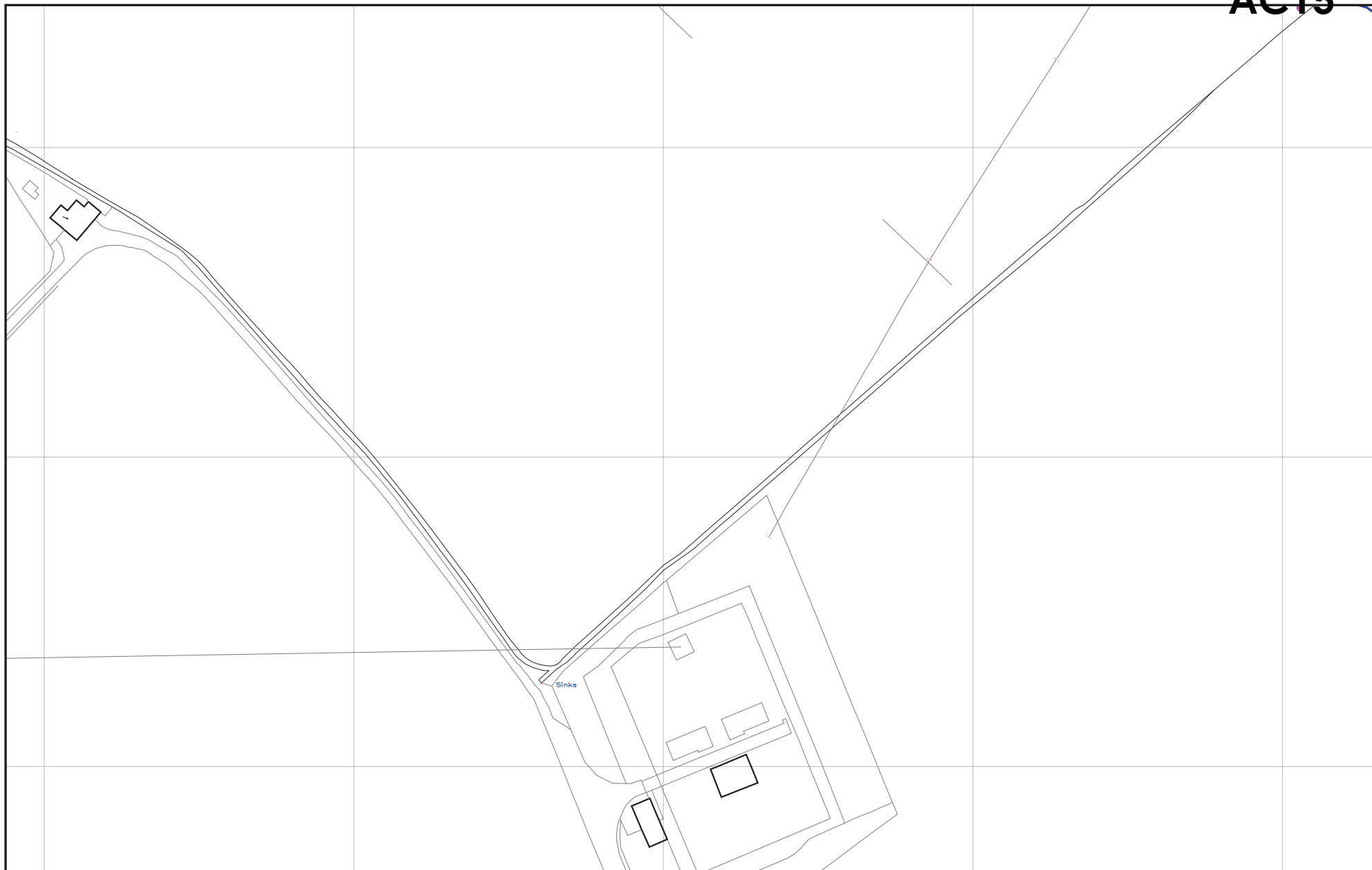
Non-LSBUD members (Asset owners not registered on LSBUD)			
Asset Owner	Preferred contact method	Phone	Status
BT	https://www.swns.bt.com/pls/mbe/welcome.home	08009173993	Not Notified
CenturyLink Communications UK Limited	plantenquiries@instalcom.co.uk	02087314613	Not Notified
CityFibre	asset.team@cityfibre.com	033 3150 7282	Not Notified
Colt	plantenquiries@catelecomuk.com	01227768427	Not Notified
Energetics Electricity	plantenquiries@energetics-uk.com	01698404646	Not Notified
ENGIE	nrswa@cofely-gdfsuez.com	01293 549944	Not Notified
GTC	https://pe.gtc-uk.co.uk/PlantEnqMembership	01359240363	Not Notified
Interoute	interoute.enquiries@plancast.co.uk	02070259000	Not Notified
KPN (c/-Instalcom)	kpn.plantenquiries@instalcom.co.uk	n/a	Not Notified
Mobile Broadband Network Limited	mbnl.plant.enquiries@turntown.com	01212 621 100	Not Notified
Scottish and Southern Energy	asset.data@sse.com	01256337294	Not Notified
Scottish Water	searches@scottishwater.co.uk	01382563666	Not Notified
Sky UK Limited	nrswa@sky.uk	02070323234	Not Notified
Utility assets Ltd	assetrecords@utilityassets.co.uk		Not Notified
Verizon Business	osp-team@uk.verizonbusiness.com	01293611736	Not Notified
Virgin Media	http://www.digdat.co.uk	08708883116	Not Notified
Vodafone	osm.enquiries@atkinsglobal.com	01454662881	Not Notified
Vtesse Networks	https://plant.interoute.com/plant-enquiries/	01992532100	Not Notified

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APPENDIX B – UTILITY/SERVICE PLANS (TO DATE)



The representation of physical assets and the boundaries of areas in which Scottish Water and others have an interest does not necessarily imply their true positions. For further details contact the appropriate District Office.

Date Plotted: 11/07/2018

Arbroath
Fresh Water



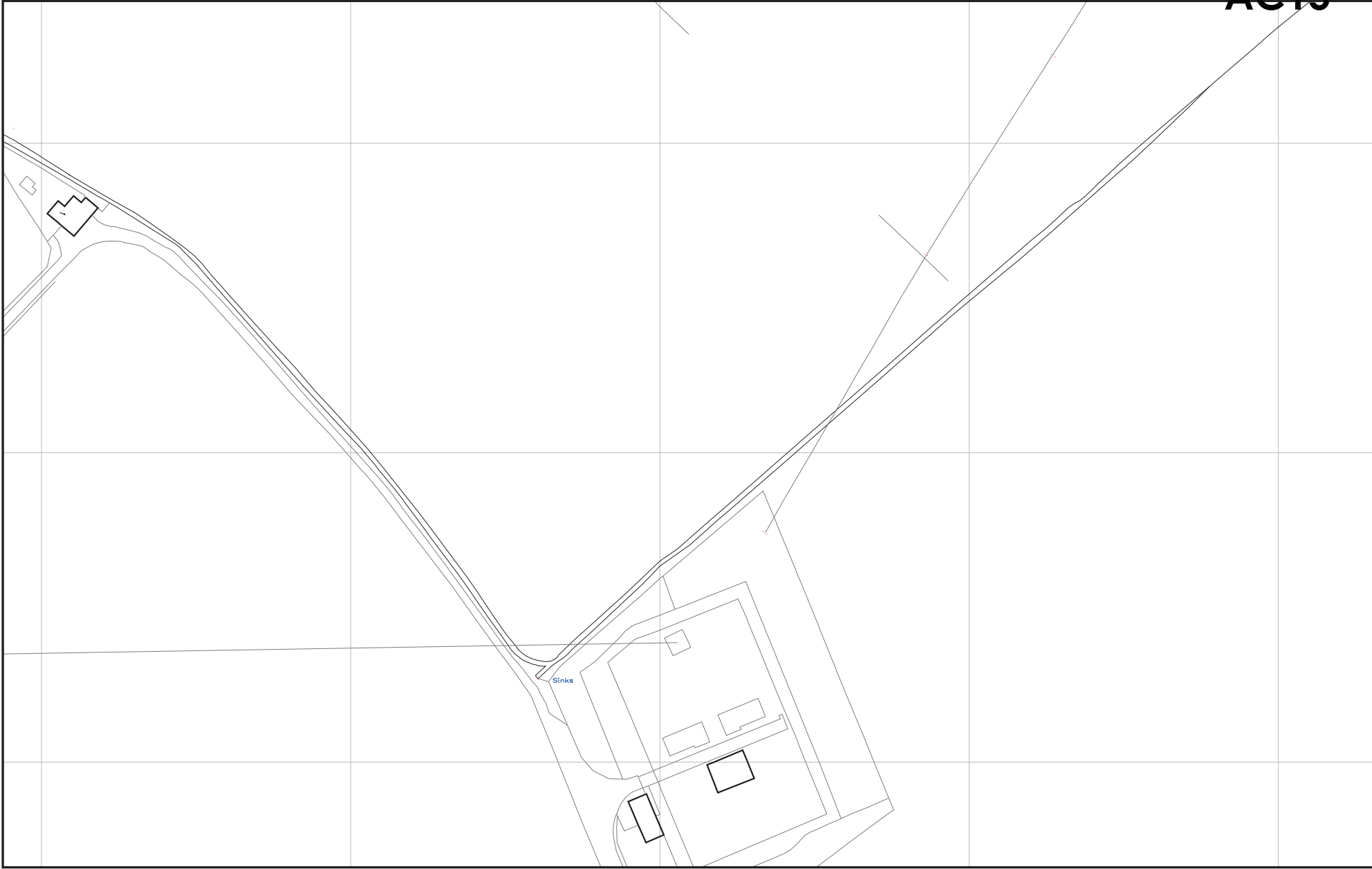
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Castle House,
6 Castle Drive,
Dunfermline,
KY11 8GG

Tel No: 0845 601 8855



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Date Plotted: 11/07/2018

Arbroath
Waste Water



Scale: 1:1250

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LEGEND

- EXISTING PLANT
- EXISTING PLANT

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Project

Plant Enquiry

Drawing

Existing Plant

Drawn by:

smallworld

Date: 18/05/2018

Drawing No.

CFH_EP_000001

Revision

001

Scale: 1:1250

A4

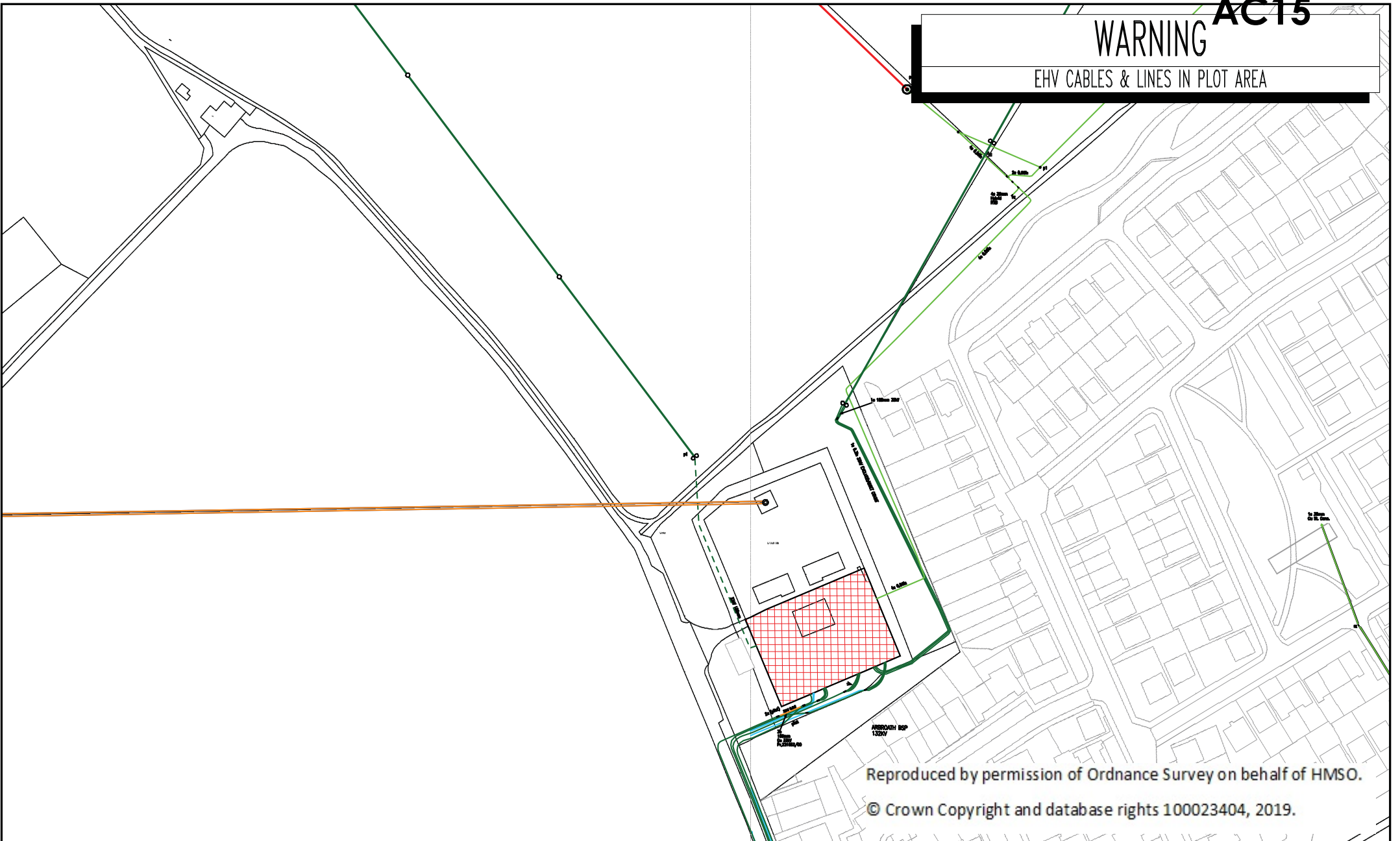


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This information is provided on the basis that the accuracy of any records, or any information on maps supplied, is not guaranteed beyond the standards required by the Road Works (Scotland) Regulations 1996. The responsibility for locating the apparatus on site shall be that of the excavator who shall be liable in any way for the loss or damage caused by his failure to do so.

Anyone causing damage to Scottish and Southern Electricity Networks plant (apparatus) will be held responsible for the full cost of repairs and consequential claims against Scottish and Southern Electricity Networks.

Further advice may be obtained by contacting the office indicated on this label.

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Cables laid by Scottish and Southern Electricity Networks will normally have a minimum depth of cover as shown in the table below. In exceptional circumstances the depth of cover encountered may be less than the norm. In these cases the actual depth will be shown for the specific locations where reduced cover exists.

DEPTH	15kV	CABLE VOLTAGE / TYPE	11	11F	11F Service
750mm	15kV	11kV	11kV	11kV	300mm
710mm	710mm	710mm	600mm	300mm	300mm

NOTE: The cable depths shown on this record may have changed since the cables were laid or the record updated, due to other excavations and reinstatement.

Therefore the use of a cable locating device, before digging, is strongly recommended.

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Name : TAYSIDE & CENTRAL
 Telephone : Tel: 01738 453072

Reference: X:361980 Y:741545
 Location: Arbroath, Angus DD11 3HE

Layer: ALL VOLTAGES

Date: 24/05/2018 Scale: 1:1250

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 having their registered office at Investment House 200 Dundee Road Perth PH1 3AQ



Contact Us

Mapping Enquiries:
All areas

General Enquiries:
All areas

Date Requested: 18/05/2018
Job Reference: 12870043
Site Location: 362009 741606
Requested by:
Miss Kirsty Bowman
Your Scheme/Reference:
3055
Exact Scales:
1:1000 Area or Circle dig site
1:1000 Line dig site

This plan shows the location of those pipes owned by Scotia Gas Networks (SGN) by virtue of being a licensed Gas Transporter (GT). Gas pipes owned by other GTs or third parties may also be present in this area but are not shown on this plan. Information with regard to such pipes should be obtained from the relevant owners. No warranties are given with regard to the accuracy of the information shown on this plan. Service pipes, valves, siphons, sub-connections etc. are not shown but their presence should be anticipated. You should be aware that a small percentage of our pipes/assets may be undergoing review and will temporarily be highlighted in yellow. If your proposed works are close to one of these pipes, you should contact the SGN Safety Admin Team on 0800 912 1722 for advice. No liability of any kind whatsoever is accepted by SGN or its agents, servants or sub-contractors for any error or omission contained herein. Safe digging practices, in accordance with HS (G)47, must be used to verify and establish the actual position of mains, pipes, services and other apparatus on site before any mechanical plant is used. It is your responsibility to ensure that plant location information is provided to all persons (whether direct labour or sub-contractors) working for you on or near gas apparatus. Information included on this plan should not be referred to beyond a period of 28 days from the date of issue.

Report damage immediately – KEEP EVERYONE AWAY FROM THE AREA
0800 111 999

Low Pressure Mains	
Medium Pressure Mains	
Intermediate Pressure Mains	
High Pressure Mains	
LAs	
GTs	
SSSIs	

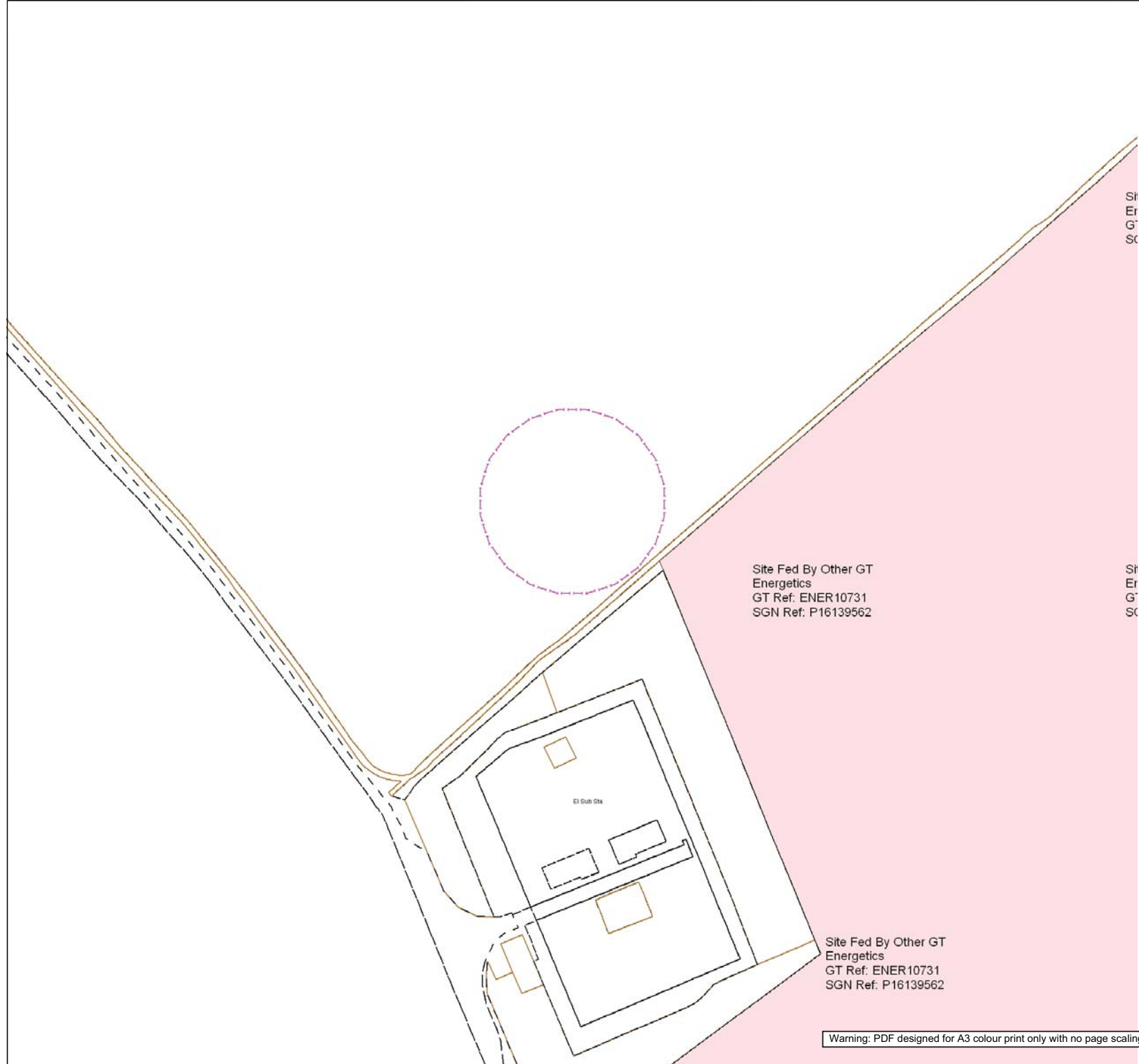
Some Examples Of Plant Items

Valve Syphon Depth of Cover Diameter Change Material Change

Digsite: Line: Area:



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Warning: PDF designed for A3 colour print only with no page scaling.

APPENDIX C – EMAIL CORRESPONDENCE (TO DATE)

Kirsty Bowman

From: Interoute Enquiries <interoute.enquiries@plancast.co.uk>
Sent: 18 May 2018 12:33
To: Kirsty Bowman
Subject: RE: 3055 Arbroath, Angus - Utility Map Request 18/05/18

This response does not include Vtesse or Easynet plant, please continue to use Vtesse or Easynet details for their enquiries

To whom it may concern

Thank you for your enquiry regarding the above proposals at the above location

We would advise that we are unaware of any Interoute plant or services in this Location as indicated in your enquiry.

We bring to your attention the fact that whilst we try to ensure the information we provide is accurate, the information is provided Without Prejudice and Interoute and its Agents accept no liability for claims arising from any inaccuracy, omissions or errors contained in this response.

All responses are only valid for 28 days

Yours faithfully

PLANCAST Plant Enquiry Department



The Old Haybarn
Rosebery Mews, Mentmore
Bedfordshire LU7 0UE

T: 01296 662647
www.plancast.co.uk

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Registered office: 1st Floor, The Old Haybarn, Rosebery Mews, Mentmore LU7 0UE.

Registered in England and Wales with number 4455025 VAT No. 8567 195 80

From: Kirsty Bowman <KirstyB@arcusconsulting.co.uk>
Sent: 18 May 2018 11:30
Subject: 3055 Arbroath, Angus - Utility Map Request 18/05/18

Kirsty Bowman

From: plantenquiryservice@gtc-uk.co.uk
Sent: 18 May 2018 14:55
To: Kirsty Bowman
Subject: GTC Plant Enquiry - Ref- 688473
Attachments: 688473.png

GTC Apparatus Not Found In Search Area

Our Plant Enquiry Service Ref: 688473
Your Enquiry Ref: 3055

Dear kirsty,

Thank you for your enquiry concerning apparatus in the vicinity of your proposed work. GTC can confirm that we have no apparatus in the vicinity but please note that other asset owners may have and ensure all utility owners have been consulted. For your records, the search area is shown in the attached map.

Please note our assets now include those owned and operated by:

- GTC Pipelines Limited
- Independent Pipelines Limited
- Quadrant Pipelines Limited
- Electricity Network Company Limited
- Independent Power Networks Limited
- Independent Water Networks Limited
- Independent Fibre Networks Limited
- Independent Community Heating Limited

If you have any queries or require any further information please do not hesitate to contact us.

Your sincerely,

GTC Plant Enquiry Service.

GTC
Energy House
Woolpit Business Park
Woolpit
Bury St Edmunds
Suffolk, IP30 9UP
Tel: 01359 240363
plant.enquiries@gtc-uk.co.uk

NOTE:

This E-Mail originates from GTC, Energy House, Woolpit Business Park, Woolpit, Bury St Edmunds, Suffolk, IP30 9UP
VAT Number: GB688 8971 40. Registered No: 029431.

DISCLAIMER

The information in this E-Mail and in any attachments is confidential and may be privileged. If you are not the intended

Kirsty Bowman

From: KPN Plant Enquiries <kpn.plantenquiries@instalcom.co.uk>
Sent: 21 May 2018 10:38
To: Kirsty Bowman
Subject: RE: K05-18- 1763 3055 Arbroath, Angus - Utility Map Request 18/05/18



Dear Sir or Madam,

With reference to your plant enquiry below, we can confirm that KPN do not have any apparatus within the immediate proximity of your proposed works.

If you require any further information, please do not hesitate to contact us.

Please note that this response is only valid for 3 months. If your works do not commence within this time period, please resubmit your plant enquiry for assessment before any works commence.

Regards

Plant Enquiries Dept
Instalcom Limited
Borehamwood Ind. Park
Rowley Lane
Borehamwood
WD6 5PZ

Office: +44 (0)208 731 4613
Fax: +44 (0)208 731 4601
Email: kpn.plantenquiries@instalcom.co.uk
Web: <http://www.instalcom.co.uk>



From: Kirsty Bowman [mailto:KirstyB@arcusconsulting.co.uk]
Sent: 18 May 2018 11:30
Subject: 3055 Arbroath, Angus - Utility Map Request 18/05/18

Dear Sir/Madam,

Kirsty Bowman

From: UK OSP-Team <osp-team@uk.verizon.com>
Sent: 21 May 2018 15:28
To: Kirsty Bowman
Cc: UK OSP-Team
Subject: RE: 3055 Arbroath, Angus - Utility Map Request 18/05/18

Dear Sir/Madam

Verizon is a licensed Statutory Undertaker.

We have reviewed your plans and have determined that Verizon (Formally known as MCI WorldCom, MFS) has no apparatus in the areas concerned.

If you have any further queries please do not hesitate to get in touch.

Yours faithfully

Plant Protection Officer E.mail osp-team@uk.verizon.com

From: Kirsty Bowman [mailto:KirstyB@arcusconsulting.co.uk]
Sent: Friday, May 18, 2018 11:30 AM
Subject: 3055 Arbroath, Angus - Utility Map Request 18/05/18

Dear Sir/Madam,

I would be obliged if you could provide us with utility maps for the site shown below, grid reference 362009, 741606.

Kirsty Bowman

From: Plant Enquiries <plantenquiries@energetics-uk.com>
Sent: 22 May 2018 12:55
To: Kirsty Bowman
Subject: RE: 3055 Arbroath, Angus - Utility Map Request 18/05/18

Dear Sir/Madam,

Thank you for submitting your recent plant enquiry.

Based on the information provided, I can confirm that Energetics **does not** have any plant within the area(s) specified in your request.

If you require further assistance with outstanding enquiries, please call 03300 587 443.

Please ensure all plant enquiries are sent to plantenquiries@energetics-uk.com

Regards

Plant Enquiries

E: plantenquiries@energetics-uk.com
W: www.energetics-uk.com



From: Kirsty Bowman <KirstyB@arcusconsulting.co.uk>
Sent: 18 May 2018 11:30
Subject: 3055 Arbroath, Angus - Utility Map Request 18/05/18

Dear Sir/Madam,

I would be obliged if you could provide us with utility maps for the site shown below, grid reference 362009, 741606.

Kirsty Bowman

From: Plantenquiries <Plantenquiries@instalcom.co.uk>
Sent: 23 May 2018 13:35
To: Kirsty Bowman
Subject: RE: E05-18-4279 3055 Arbroath, Angus - Utility Map Request 18/05/18

Dear Sir or Madam,

Thank you for your plant enquiry below.

We can confirm that CenturyLink Communications UK Limited (formerly Level 3), Global Crossing (Uk) Ltd, Global Crossing PEC, Fibernet UK Ltd and Fibrespan Ltd do not have any apparatus within the indicated works area.

Instalcom responds to plant enquiries for all of the above and therefore you only need send one plant enquiry to cover all of these companies.

Please note that this response is only valid for 3 months. If your works do not commence within this time period, please resubmit your plant enquiry for assessment before any works commence.

Regards

Plant Enquiries Dept
Instalcom Limited
Borehamwood Ind. Park
Rowley Lane
Borehamwood
WD6 5PZ

Office: +44 (0)208 731 4613
Fax: +44 (0)208 731 4601
Email: plantenquiries@instalcom.co.uk
Web: <http://www.instalcom.co.uk>



From: Kirsty Bowman [mailto:KirstyB@arcusconsulting.co.uk]
Sent: 18 May 2018 11:30
Subject: 3055 Arbroath, Angus - Utility Map Request 18/05/18

Dear Sir/Madam,

I would be obliged if you could provide us with utility maps for the site shown below, grid reference 362009, 741606.

Kirsty Bowman

From: Plantenquiries <plantenquiries@catelecomuk.com>
Sent: 29 May 2018 07:21
To: Kirsty Bowman
Subject: RE: 3055 Arbroath, Angus - Utility Map Request 18/05/18

Please Note: Our search criteria has changed. We previously searched for Colt Network which was within 200 metres, this has now changed to 50 metres. The negative response will be for all enquiries that the network is 50 metres or more away from the place of enquiry.

Dear Sir/Madam,

Thank you for your enquiry for the above reference.

We can confirm that Colt Technology Services do not have apparatus near the above location as presented on your submitted plan, if any development or scheme amendments fall outside the 50 metre perimeter new plans must be submitted for review.

Search is based on Overseeing Organisation Agent data supplied; we do not accept responsibility for O.O. Agent inaccurate data.

If we can be of any further assistance please do not hesitate to contact us.

Kind regards,

Plant Enquiry Team



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From: Kirsty Bowman [mailto:KirstyB@arcusconsulting.co.uk]
Sent: 18 May 2018 11:30
Subject: 3055 Arbroath, Angus - Utility Map Request 18/05/18

Dear Sir/Madam,



ANGUS COUNCIL

THE TOWN AND COUNTRY PLANNING (ENVIRONMENTAL IMPACT ASSESSMENT) (SCOTLAND) REGULATIONS 2017

EIA SCREENING OPINION

**CONSTRUCTION OF A BATTERY ELECTRICITY STORAGE FACILITY COMPRISING
CONTAINERISED BATTERY STORAGE UNITS, INVERTERS AND TRANSFORMERS,
DNO SUBSTATION, CLIENT SWITCHGEAR CONTAINER, ELECTRICAL GRID
COMPOUND, WELFARE AND PARTS STORAGE CONTAINERS AND ANCILLARY
DEVELOPMENT INCLUDING FORMATION OF ACCESS TRACK, SECURITY FENCING,
CCTV AND LANDSCAPING
LAND TO EAST OF CRUDIE ACRE COTTAGE, ARBROATH
APPLICATION REFERENCE – 18/00810/FULL**

Angus Council has received an application for planning permission for the construction of an electricity storage facility comprising battery storage units, associated plant, welfare and storage containers and engineering works at a 0.79ha area of agricultural field at the site Land to east of Crudie Acre Cottage, Arbroath.

The Development would consist of 15 containerised battery storage units inverters and 15 transformers on skids, a DNO substation, a switchgear container, an electrical grid compound, a welfare and parts storage container and security columns, which would all be contained within a fenced compound (palisade fence to the north and west and acoustic fence to the south and east). A new access is proposed off the C51 road to the east of the site and landscape planting is proposed.

The Planning Authority must screen the development against The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017 to determine whether the proposed development requires EIA.

1. The proposed development does not fall within Schedule 1 of the above Regulations;
2. The proposed development does fall within Schedule 2 of the above Regulations under (10) Infrastructure Project (b) "Urban development projects, including the construction of shopping centres and car parks, sport stadiums, leisure centres and multiplex cinemas," where the area of development exceeds 0.5hectare, for the following reason:

In determining whether a particular development is of a type listed in Schedule 1 or 2, planning authorities should have regard to the ruling of the European Court that the EIA Directive has a "wide scope and broad purpose". The fact that a particular type of development is not

specifically identified in one of the Schedules does not necessarily mean that it falls outside the scope of the Regulations. In particular, authorities should be aware that "urban development" in paragraph 10(b) of Schedule 2, embraces residential development (houses and flats) as well as what might be regarded as development of a more obviously urban nature. It should also be borne in mind that, in this context, the term "urban" applies not only to development which is to be sited in an already existing urban area. It could apply to development proposed for out of town or even rural areas which might have an urbanising effect on the local environment. This might be the case for example, where the development will bring a significant increase in the amount of traffic in that area (e.g. an out of town shopping complex).

3. The proposed development does not fall within a sensitive area, eg: SAC, SPA, SSSI, National Park, World Heritage Site or Scheduled Monument etc;
4. The proposed development is not likely to have "significant environmental effects" having regard to its nature, scale and location. The residual impacts arising from this development could be appropriately mitigated.

In coming to this view, it is noted that the development does not appear to involve unusually complex or potentially hazardous operations.

Accordingly, in terms of Regulation 9(1) of the 2017 Regulations, Angus Council is of the opinion that the proposal does not constitute Environmental Impact Assessment development and will not require the submission of a full Environmental Impact Assessment Report as required by regulation 5(1) and Schedule 4 of the Regulations.

Fraser MacKenzie
Planning Officer (Development Standards)
27 November 2018



ARCUS

**NOISE IMPACT ASSESSMENT
BATTERY ELECTRICITY STORAGE FACILITY
ARBROATH, ANGUS**

**FOR
CORONATION POWER**

VERSION 2

DECEMBER 2018



Prepared By:

Arcus Consultancy Services

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APPENDICES

APPENDIX 1: PROPOSED DEVELOPMENT PLAN

APPENDIX 2: HOUSING DEVELOPMENT LAYOUT

APPENDIX 3: SURVEY RECORD SHEETS

APPENDIX 4: NOISE MODEL GRID MAP - NIGHT

1 INTRODUCTION

Arcus Consultancy Services Ltd (Arcus) has been commissioned by Coronation Power to undertake a noise assessment in relation to the development of a battery electricity storage facility ('the Development') on Land North of an existing electrical substation to the northwest of Arbroath, Angus (the Site).

The Development was subject to planning pre-application consultation (ref: 18/00439/PREAPP) with Angus Council.

An original Noise Assessment, dated August 2018, was submitted as part of planning application Ref 18/00810/FULL. Comments from the Environmental Health Department have been reviewed and the assessment has been updated to reflect these comments.

Where appropriate, mitigation measures have been recommended to ensure that the amenity of residents in the locality of the Development is not unreasonably impacted by the Development.

2 DEVELOPMENT OVERVIEW

The Development consists of a compound containing containerised battery storage units, along with electrical infrastructure including inverters and transformers, a DNO switchroom and client switchgear container.

The Development is bound by agricultural land to the north and west, with an existing electrical substation to the south. The closest existing residential receptors are located on the East Muirlands Road, approximately 300 meters (m) to the south east. It is also noted that a new housing development of 128 dwellings is under construction on land south of the Site and east of existing substation. These represent the closest noise-sensitive receptors (NSRs), with the closest dwellings located approximately 30 m south of the Development.

Other NSRs include Crudie Acres Cottage and Crudie Acres Farm to the northwest and Bottle End Cottage to the northeast.

A figure detailing the Development layout is presented in Appendix 1. A figure showing the site context, and location of NSRs, is presented in Figure 1, (see Section 5 of this report). Appendix 2 presents the layout of the approved residential housing development.

3 RELEVANT GUIDANCE

The following guidance and standards are pertinent to the assessment:

- Planning Advice Note 1/2011: Planning and Noise (PAN 1/2011);
- Technical Advice Note: Planning and Noise (TAN); and
- BS4142:2014 Method for Rating and Assessing Industrial and Commercial Sound.

3.1 Planning Advice Note 1/2011: Planning and Noise

PAN 1/2011 provides advice on the role of the planning system in helping to prevent and limit the adverse effects of noise, with information and advice on assessment methods provided in TAN.

The PAN promotes the principles of good acoustic design and the appropriate location of new noise-generating development. The selection of a site, the design of a development and conditions that may be attached to a planning permission can all play a part in preventing, controlling, and mitigating the effects of noise. The level of detail required of a noise assessment should be balanced against the degree of risk to environmental quality, public health, and amenity. Issues that may be relevant when considering noise in relation to a development proposal include:

- The type of development and the likelihood of significance of its noise impact;
- The sensitivity of the location;
- Existing noise levels and the likely change in noise levels;
- The character (tonality, impulsivity etc.), duration, frequency of any repetition and time of day that noise is likely to be generated; and
- Absolute level and possible dose-response relationships

In relation to industrial sources, the PAN advises that as background noise levels vary throughout a 24-hour period, it will usually be necessary to assess the acceptability of noise levels for separate periods.

3.2 Technical Advice Note: Planning and Noise

The TAN provides guidance that may assist in the technical assessment of noise, although it is neither prescriptive nor exhaustive. It provides a summary of relevant and current (at the time of publication) technical standards, guidance and codes of practice, including BS4142 (at the time the 1997 version was current, which has been superseded by the 2014 version).

3.3 BS4142:2014

BS4142:2014 describes methods for rating and assessing sound in order to provide an indication of its likely impact upon nearby premises (typically residential dwellings).

The specific sound emitted from the Development (dB, L_{Aeq}) is rated by taking into account both the level and character (i.e. tonal elements, impulsivity, intermittency and distinctiveness) of the sound. This is achieved by applying appropriate corrections to the specific sound level externally at the receptor location, which gives the rating level of the sound in question. This is then assessed against the existing prevailing background sound level (dB, L_{A90}) at that location in order to determine a likely level of impact.

The level by which the rating level exceeds the prevailing background sound level indicates the following potential impacts:

- A difference of 10 dB or more is likely to be an indication of a significant adverse impact, depending on the context;
- A difference of around 5 dB is likely to be an indication of an adverse impact, depending on the context; and
- Where the rating level does not exceed the background level, this is an indication of the specific sound source having a low impact, depending on the context.

When considering the level of impact, BS4142:2014 emphasises the importance of the context in which a sound occurs. The standard therefore takes great care in the use of the words "sound" and "noise." Sound can be measured by a sound level meter or other measuring system, whereas noise is related to a human response and is routinely described as unwanted sound, or sound that is considered undesirable or disruptive.

4 IDENTIFICATION OF NOISE-SENSITIVE RECEPTORS

Figure 1 below shows the location of the closest noise-sensitive receptors to the Development and the two noise monitoring locations. Provided that the impact at the closest receptors is found to be acceptable, the impact at more distant receptors would also be acceptable.

Figure 1: Noise Monitoring Locations



The NSRs are the northern most plots (Plots 89 to 95) in the approved housing development (currently under construction), along with Crudie Acres Farm, 1 Crudie Acres Cottage and Bottle End Cottage to the northwest and northeast of the Development respectively.

5 BACKGROUND SURVEY RESULTS

In order to establish the ambient sound environment in the locality of the Development, a background sound survey was undertaken between 12th and 13th June 2018 in locations considered representative of the closest residential receptors, as detailed in Figure 1.

The monitoring equipment consisted of a Class 1 sound level meters, calibrated to traceable standards and housed in an all-weather case with long-life batteries. The microphones were positioned at a height of 1.4 m above ground level, with suitable proprietary windshield. Survey records along with photographs of monitoring equipment in situ are presented in Appendix 3.

The meter was field-calibrated at the start and end of the survey period; no significant calibration drift was found. Indices measured included $LA_{90, 15mins}$ (i.e. the background sound level respectively).

5.1 Survey Measurements

Charts 1 and 2 provide a summary of the background sound levels measured during the survey period, detailing $LA_{90, 15min}$ sound levels.

Chart 1: Sound Levels at Location 1 – Farmland east of Site

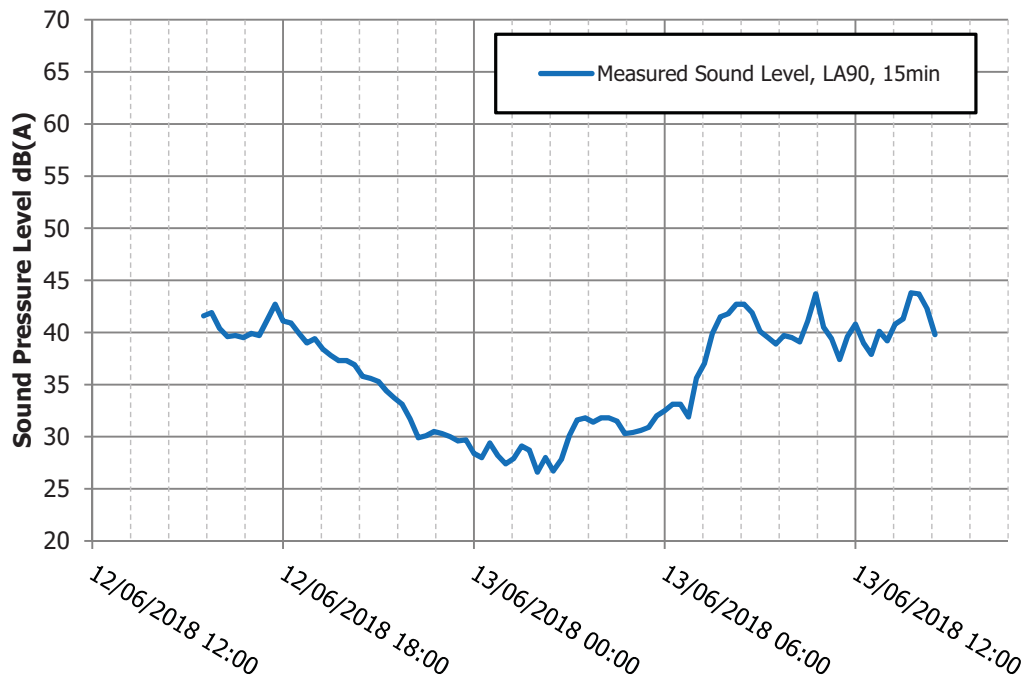
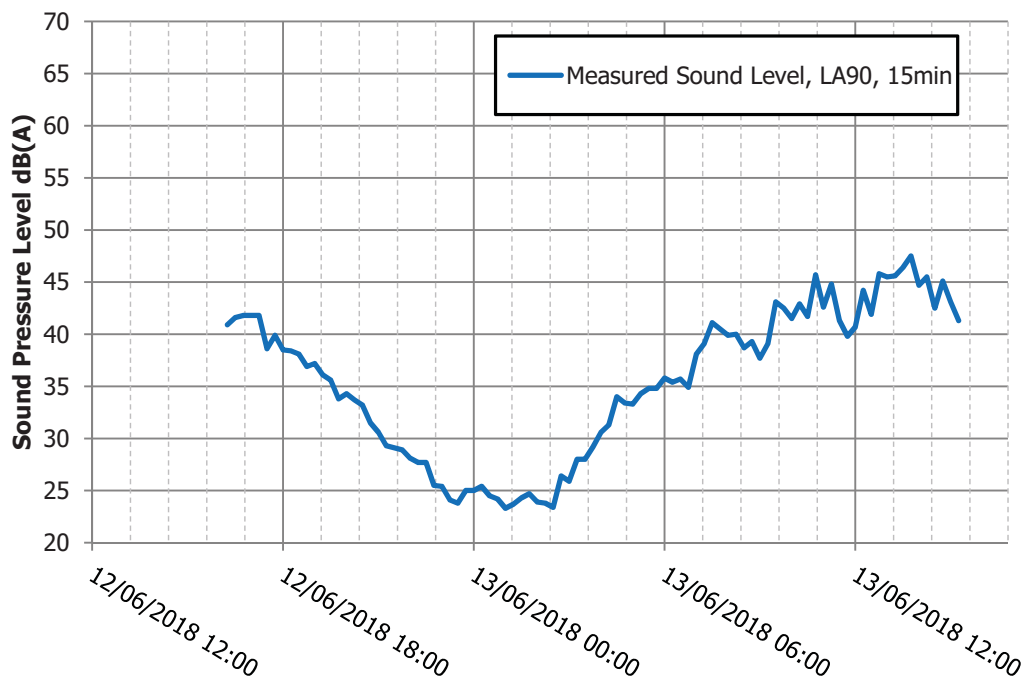


Chart 2: Sound Levels at Location 2 – Crudie Acres Farm



As can be seen in both charts, the sound environment follows a diurnal pattern with a substantial reduction in sound levels during the night-time period.

A weather station was installed at Location 1 to monitor wind speed and rainfall representative of both monitoring locations for the duration of the monitoring period. Weather conditions were found to be suitable for monitoring throughout the survey period, with wind speeds generally below 5 m/s and no precipitation recorded throughout the monitoring period.

5.2 Background Levels

When determining typical daytime and night-time levels, BS4142:2014 advises against assuming that the prevailing background level can be determined using any single approach (e.g. mean, median, mode etc.).

In order to determine the prevailing background sound level for the purposes of the assessment, Charts 3 and 4 present the range of $L_{A90,15min}$ levels recorded for each location during night time (2300-0700) periods, along with the percentage of periods for which they occurred.

It was observed during site visits that there was ongoing construction for the approved housing development on the land directly south of the Development site. Due to the nature of the construction works and proximity to the site, noise from construction works was considered the dominant source.

As shown in Charts 1 and 2, background sound levels appear to remain influenced by construction works throughout the day, with a substantial variability in the measured L_{A90} sound level. Therefore, measured daytime levels are considered atypical of the local environment.

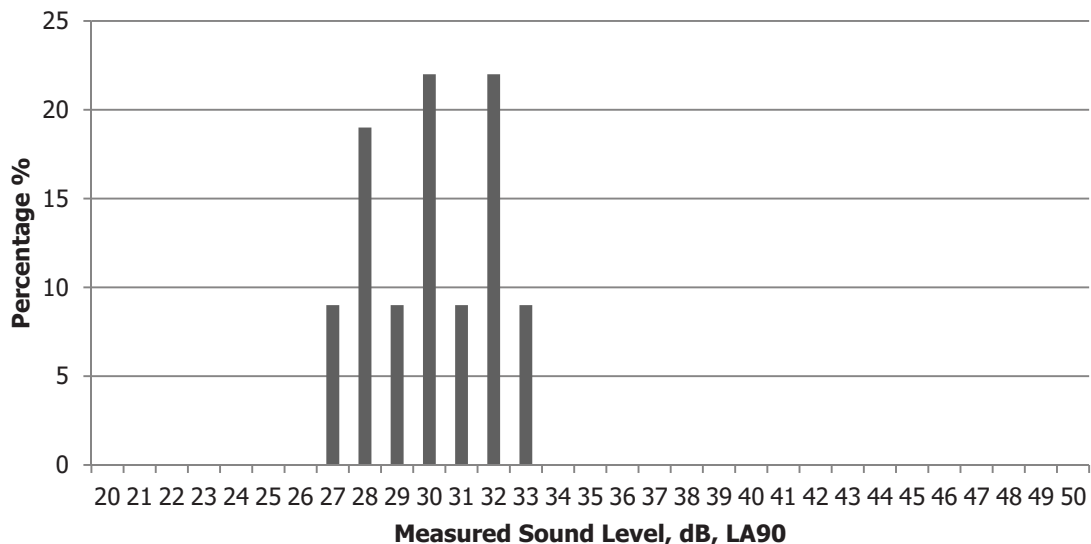
In light of the above, only night-time background sound levels have been assessed, as current daytime levels are considered to be unrepresentative of those once construction is complete.

This is a conservative approach as the Development has been assessed based on 24-hour operation, and as background levels are expected to be lower at night than during the day, an assessment against night-time levels illustrates the worst-case scenario.

5.2.1 Location 1 – Farmland East of Site

The background statistical analysis is presented in Chart 3 below for night-time periods at Location 1 (Farmland East of Site).

Chart 3: Background Statistical Analysis Night-time



As can be seen, the most commonly occurring background sound levels (the mode average) during night-time periods are 30 and 32 dB, L_{A90} . The median and mean averages for the dataset are both 30 dB, L_{A90} , and this level is therefore considered an appropriate value for the night-time background sound level.

Table 1 presents a summary of the background level results.

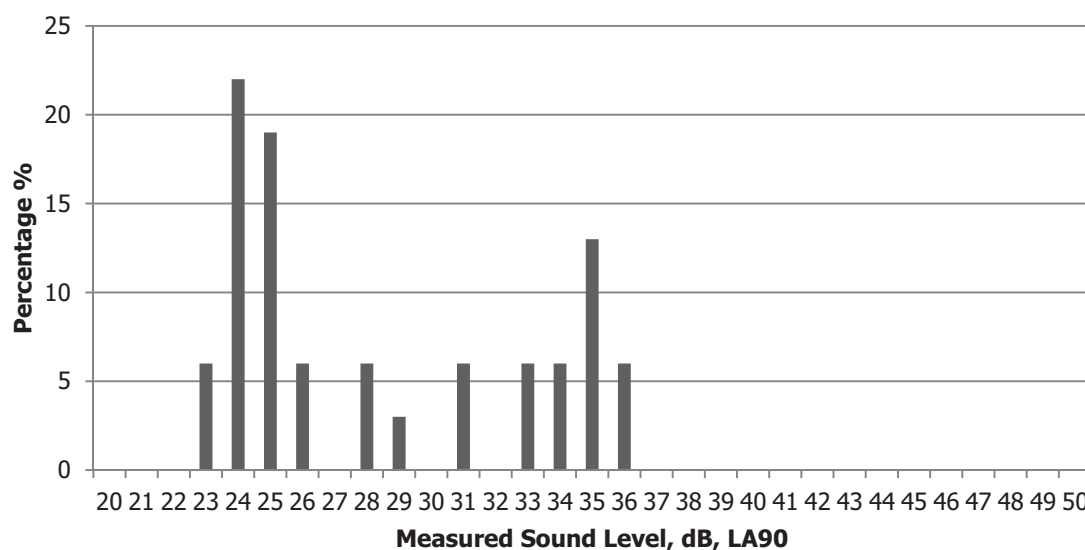
Table 1: Representative Background Levels – Location 1

Period	Mode	Median	Mean	Representative
Night	30	30	30	30

5.2.2 Location 2 – Crudie Acres Farm

The background statistical analysis is presented in Chart 4 below for night-time periods at location 2 (Crudie Acres Farm).

Chart 4: Background Statistical Analysis – Night-time



As can be seen, the most commonly occurring background sound level (the mode average) during night-time periods is 24 dB, LA90. The median and mean averages for the dataset are 26 and 28 dB, LA90. At the request of the Environmental Health Department the most conservative mode background level has been taken as the representative background level.

Table 2: Representative Background Levels – Location 2

Period	Mode	Median	Mean	Representative
Night	24	26	28	24

6 NOISE MODELLING

6.1 Sound Emission Data

The primary source of sound from the Development is anticipated to be the AC plant used to cool the battery containers. The sound emission data relating to the AC plant are shown in Table 3.

Table 3: Plant Emission Data

Octave-Band Frequency (Hz)	63	125	250	500	1k	2k	4k	8k	Total
Voyager 1 AC unit									
Sound Power Level, dB, LWA	57.7	67.8	61.6	66.3	68.3	67.9	65.8	58.5	75.0

The other key noise source is the inverter units, which will be installed in groups of four along with a single transformer unit, alternating with the battery containers. As stated in the manufacturer's documentation, the sound emission level from each inverter unit is 70dB(A) measured at a distance of 1 m.

An octave-band frequency spectrum was not available for the inverters; for the purposes of modelling, it has therefore been assumed that all sound from the inverters is emitted at a mean frequency of 500 Hz. Given that the sound emitted by the inverters will be characterised by the broadband sound emitted by the cooling fans, this assumption is considered appropriate.

The EHO requested that further consideration was given to the noise from the proposed transformers. As can be seen from the layout in Appendix 1, each transformer will be of a small scale, and located in the centre of each group of four inverters. As such, the number of transformer units is 25% of the number of inverter units, and the transformers will be afforded a substantial level of screening from the NSRs due to both the inverter cabinets, and the acoustic fencing. The noise model has been amended to include the screening provided by the inverter cabinets.

At this stage, the precise plant to be installed cannot be specified, as it will be subject to a procurement process and detailed electrical design. Notwithstanding this, the actual equipment to be constructed on site will be designed to ensure any noise limits specified in the Development's planning conditions are complied with.

Further to the above, the Development is located adjacent to an existing large-scale national grid substation, supporting the assertion that any noise generated by the Development's transformers will be negligible in context, and are unlikely to influence the either the character or overall level of noise emitted by the Development.

The specific sound level¹ at the façades of the nearest noise-sensitive properties at a height of 1.5 m (equivalent to head height), has been calculated in SoundPlan Essential, using the environmental noise propagation model ISO 9613-2:1996 – '*Acoustics; Attenuation of sound during propagation outdoors – Part 2: General method of calculation*'².

A noise map showing predicted specific levels for night-time are presented in Appendix 4.

6.2 Mitigation Options Modelled

Numerous model iterations were undertaken with various noise mitigation measures such as, effective position and height of acoustic fencing, optimising the position of battery containers, inverter units, and AC plant, along with the effect of screening / enclosing certain plant items.

The following measures were incorporated to minimise noise levels at noise-sensitive receptors:

- The AC units were placed together at the southwestern end of the Development site and the compound was shielded by a 2.5 m high acoustic fence;
- The inverter units, are housed within enclosures, allowing for a conservative 15 dB attenuation of the sound emission (enclosures typically offer a 15 dB attenuation where air intake / duct apertures are required); and
- An acoustic fence was positioned around the perimeter of the Development on all sides (3 m height to the northern, western and eastern boundaries, and 4.5 m height to the southern boundary) to provide screening for the NSRs in the new housing development to the south and existing dwellings to the north and east of the

¹ The sound level produced by a source, without corrections for acoustic features as discussed in Section 3.3.

² ISO 9613-2:1996 Acoustics; Attenuation of sound during propagation outdoors – Part 2: General method of calculation

Development. It should be noted that the acoustic fence in the model was lifted 0.1 m off the ground to allow water to flow freely in the event of flooding (see the Flood Risk Assessment submitted as part of the planning application for further details).

6.3 Rating Level Corrections

BS4142 states that corrections should be applied in order to account for certain acoustic features that have the potential to increase the level of impact at nearby noise-sensitive receptors.

The four acoustic features to be considered in the application of rating corrections are as follows:

- **Impulsivity:** No impulsive characteristics are anticipated;
- **Tonal Elements:** The sound emitted by the Development is likely to be characterised by the AC plant and inverter cooling fans, and is therefore considered to be non-tonal;
- **Intermittency:** The plant will operate on thermostats, cooling containers / inverters as required. As such, the units will not turn on/off in synchronisation, and is unlikely to result in an intermittency which is distinctive above the existing sound environment; a penalty for intermittency is not considered necessary;
- **Distinctiveness:** BS4142 states "*Where the specific sound features characteristics that are neither tonal nor impulsive, though otherwise are readily distinct against the residual acoustic environment, a penalty of 3dB can be applied*". Given the local context of the existing adjacent substation, it is considered that noise due to the Development is unlikely to be distinctive. However, a 3 dB correction for distinctiveness has nonetheless been applied as requested by the EHO

Based upon the above, the rating level is therefore 3 dB greater than the specific level at all NSRs.

As previously noted, the precise plant to be installed cannot be specified at this stage, as it will be subject to a procurement process and detailed electrical design. Notwithstanding this, assuming any planning condition noise limits are set with respect to a BS4142 rating level, any acoustic feature corrections will be inherently accounted for in the detailed design process.

7 ASSESSMENT OF IMPACT

An assessment of the likely impact has been made based upon the difference between the rating levels and prevailing background levels for night-time periods, and incorporating the mitigation measures detailed in Section 7.2. If the level of impact during night is found to be acceptable, it will be also acceptable during daytime when background levels are higher.

The results of the assessment are detailed in Table 4.

Table 4: Assessment Results

Receptor	Specific Level, dB, L _{Aeq}	Rating Level, dB	Night-time Background Sound Level, dB, L _{A90}	Difference, dB
1 Crudie Acres Cottage	23	26	24	+2
Crudie Acres Farm	19	22		-2
Bottle End Cottages	21	24	30	-6
Plot 89	30	33		+3
Plot 90	30	33		+3
Plot 91	30	33		+3
Plot 92	30	32		+2
Plot 93	29	31		+1
Plot 94	29	31		+1
Plot 95	29	31		+1

7.1 Contextual Factors

The Development is located adjacent to the existing Arbroath sub-station, and is therefore not considered out of context for the locality.

The future housing development plots are considered as NSRs in this assessment. Once complete and occupied, the housing development is likely to raise the background sound level of the area due to the generation of additional anthropogenic noise. In practice, the difference between the rating levels and background levels is therefore likely to be lower than presented.

7.2 Uncertainty

At this stage, the precise plant to be installed cannot be specified, as it will be subject to a procurement process and detailed electrical design. Notwithstanding this, the actual equipment to be constructed on site will be designed to ensure any noise limits specified in the Development's planning conditions are complied with.

Noise modelling has been undertaken assuming all plant is operating simultaneously and at full power, which is unlikely to occur in practice.

Only a night-time impact assessment has been undertaken as daytime background levels were considered unrepresentative of noise climate after Development completion, due to the construction work currently ongoing at the approved housing development. This is considered a reasonable approach as daytime background levels are likely to be higher than night-time, and this assessment therefore presents the worst-case scenario.

Furthermore, once complete and occupied, the adjacent housing development is likely to raise the background sound level of the area due to the generation of additional anthropogenic noise. In practice, the level of impact is therefore likely to be lower than presented.

Overall, it is considered that the assumptions made in this assessment are likely to result in an over-prediction of both the noise levels and the level of impact in practice, and that the uncertainties inherent in the assessment will not have a significant impact on the outcome of the assessment.

7.3 Assessment of Impact

As shown in Table 4, a worst-case difference of +3 dB has been identified during night-time periods. In terms of BS 4142, when all plant is operational, this equates to a worst-case impact of between Low and Adverse, depending on the context.

A number of worst-case factors have been assumed in this assessment, resulting in what is likely to be both an over-prediction of noise levels due to the Development, and an under-prediction of future background noise levels following the occupation of the nearby housing development. In addition, the presence of an existing large-scale electrical substation, means that the nature of the Development (i.e. electrical infrastructure) is in context with the locality. These are important considerations when determining the likely level of impact in practice.

As previously discussed, it was not possible to derive representative background noise levels for daytime periods due to ongoing construction works in the locality. However, given that the worst case difference when considering night-time levels is +3 dB, it is reasonable to assume that noise due to the Development will be similar to, or below the background sound level during daytime periods, therefore the critical period is night-time.

BS 4142 states:

"Where background sound levels and rating levels are low, absolute levels might be as, or more, relevant than the margin by which the rating level exceeds the background. This is especially true at night."

As such, it is considered that the absolute level of noise due to the Development is a key factor in determining the level of impact.

Absolute levels affecting residential dwellings are generally assessed against the guidance presented in BS 8233:2014. The standard defines indoor ambient noise levels for a range of building functions. In relation to dwellings, BS 8233 makes the following recommendations, as detailed in Table 5.

Table 5: BS 8233 Recommended Internal Noise Levels

Activity	Location	Noise Level, dB, L _{Aeq,t}	
		07:00-23:00	23:00-07:00
Resting	Living Room	35	-
Dining	Dining Room	40	-
Sleeping (daytime resting)	Bedroom	35	30

With regard to the Development, the worst-case external rating level has been predicted to be 33 dB. Assuming a typical 15 dB attenuation for an open window, this equates to an internal level of 18 dB. This is substantially below the BS 8233 criterion for even the most noise-sensitive rooms (i.e. inside bedrooms at night). Therefore, noise due to the development is highly unlikely to disturb sleep or impact resident's quality of life.

8 CONCLUSION

An assessment of noise impact has been undertaken in accordance with BS4142:2014. Subject to the mitigation measures detailed in this report, and given the level of conservatism in the assessment and the context of the local environment, it is anticipated that noise due to the Development will be acceptable at the closest, and therefore all residential dwellings.

9 GLOSSARY OF TERMS

Background Sound: The background sound level is the underlying level of noise present at a particular location for the majority (usually 90%) of a period of time.

Decibel (dB): The decibel is the basic unit of noise measurement. It relates to the cyclical changes in pressure created by the sound and operates on a logarithmic scale, ranging upwards from 0 dB. 0 dB is equivalent to the normal threshold of hearing at a frequency of 1000 Hertz (Hz). Each increase of 3 dB on the scale represents a doubling of the Sound Pressure, and is typically the minimum noticeable change in sound level under typical listening conditions.

dB(A): Environmental noise levels are usually discussed in terms of dB(A). This is known as the A-weighted sound pressure level, and indicates that a correction factor has been applied, which corresponds to the human ear's response to sound across the range of audible frequencies. The ear is most sensitive in the middle range of frequencies (around 1000-3000 Hz), and less sensitive at lower and higher frequencies. The A weighted noise level is derived by analysing the level of a sound at a range of frequencies and applying a specific correction factor for each frequency before calculating the overall level. In practice this is carried out automatically within noise measuring equipment by the use of electronic filters, which adjust the frequency response of the instrument to mimic that of the ear.

Frequency: The frequency of a sound is equivalent to its pitch in musical terms. The units of frequency are Hertz (Hz), which represents the number of cycles (vibrations) per second.

L_{A90,t}: This term is used to represent the A-weighted sound pressure level that is exceeded for 90% of a period of time, t. This is used as a measure of the background noise level.

L_{Aeq,t}: This term is known as the A-weighted equivalent continuous sound pressure level for a period of time, t. It is similar to an average, and represents the sound pressure level of a steady sound that has, over a given period, the same energy as the fluctuating sound in question.

Noise: Unwanted sound: May refer to both natural (e.g. wind, birdsong etc.) and artificial sounds (traffic, industrial noise, aircraft etc)

Rating Level: Sound levels which have been corrected for certain acoustic features, as required under BS4142 methodology.

Sound pressure level (L_p): Sound pressure measured on the decibel scale, relative to a sound pressure of 2×10^{-5} Pa.

Specific Level: In terms of BS4142 methodology, the specific level is the sound level produced by a source, without corrections for acoustic features.

Time Weighting: Time weightings determine how quickly the sound level meter responds to changes in noise level, and is generally set to 'Fast' or 'Slow'. A fast time weighting resulting in the sound level meter sampling every 1/8th second: a slow time weighting results in a sample measurement being taken by the sound level meter every 1 second.

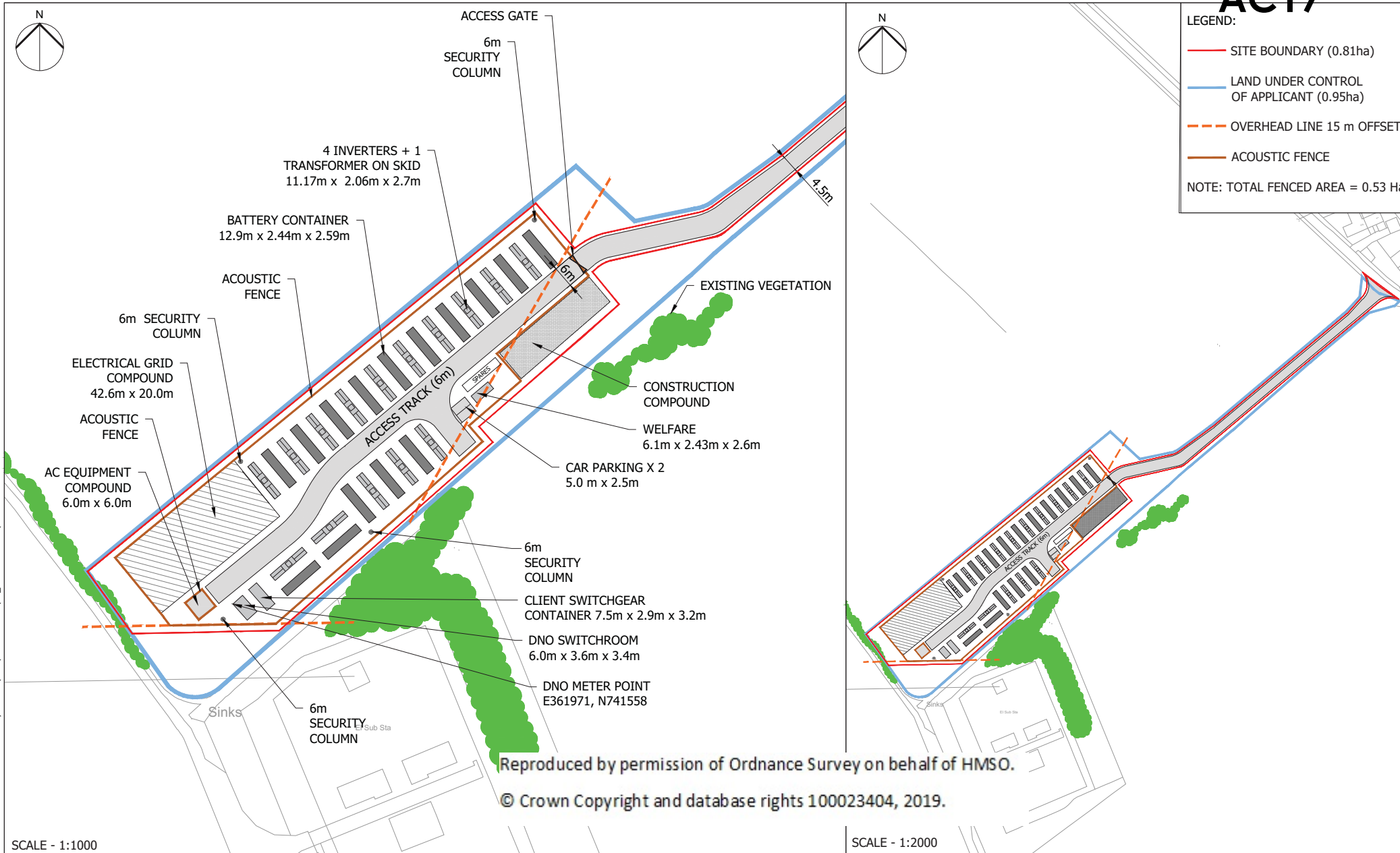
APPENDIX 1: PROPOSED DEVELOPMENT PLAN

AC17

LEGEND:

- SITE BOUNDARY (0.81ha)
- LAND UNDER CONTROL OF APPLICANT (0.95ha)
- - - OVERHEAD LINE 15 m OFFSET
- ACOUSTIC FENCE

NOTE: TOTAL FENCED AREA = 0.53 Ha



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Plot Date : 11 December 2018 14:14:12
File Name P:\PROJECTS\3055 ARBROATH BATTERY STORAGE\ANGUS\CAD\01-WORKING\01_01-DRAWINGS\3055-DR-P-0001- P10 - PLANNING DRAWING 02

Project Title ARBROATH BATTERY STORAGE ANGUS		Drawing Title PLANNING DRAWING 002 SITE LAYOUT PLAN		Purpose of Issue PRELIMINARY		THIS DOCUMENT HAS BEEN PREPARED IN ACCORDANCE WITH THE SCOPE OF ARCUS' APPOINTMENT WITH ITS CLIENT AND IS SUBJECT TO THE TERMS OF THAT APPOINTMENT. ARCUS ACCEPTS NO LIABILITY FOR ANY USE OF THIS DOCUMENT OTHER THAN BY ITS CLIENT AND ONLY FOR THE PURPOSES FOR WHICH IT WAS PREPARED AND PROVIDED		Arcus Consultancy Services 7th Floor 144 West George Street Glasgow, G2 2HG Tel: +44 (0)141 221 9997 Fax: +44 (0)141 221 5610 www.arcusconsulting.co.uk	
Client CORONATION POWER		Designed KB	Drawn KB	Checked DB	Approved AM	Date 10/12/18		Drawing Number 3055-DR-P-0001	Rev 10
		Arcus Internal Project No. 3055		Scale @ A3 1:1000					



APPENDIX 2: APPROVED HOUSING DEVELOPMENT LAYOUT



LEGEND

DUNLOP(GF)	08
DUNLOP(FF)	08
DOLLAR(GF)	06
DOLLAR(FF)	06
KELVIN	14
WALLACE	18
PORTREE	34
NEWMORE	34
NEWTON	18
FORTROSE	18
KEARN	28
LEITH	36
ETTRICK	15
BALERNO	28
THORNWOOD	14
TOTAL	285

**LEGEND
PHASE 1**

PORTREE	12
NEWMORE	12
NEWTON	06
FORTROSE	10
KEARN	09
LEITH	11
ETTRICK	03
BALERNO	09
THORNWOOD	02
TOTAL	74

WARNING TO HOUSE PURCHASERS
 Property Misdescriptions Act 1991
 It is to be noted that this is a working drawing and is not intended to be treated as a descriptive matter of any kind. It is to be used for the purpose of development, any of the Specific Matters prescribed by any Order made under the above Act. The contents of this drawing may be subject to change at any time and without notice. It is to be used for the purpose of the work without revision of the drawing. Consequently the layout, form, content & dimensions of the finished construction may differ materially from those shown. We do the contents of this drawing constitute a contract, part of any contract or warranty.

Rev A - 14th July 2017 (JAG)
 Layout updated to accord with RCC approval, P18 200 garage modification, Kearn, Fortrose & Dollar landscape correction.
 Rev B - 19th July 2017 (JAG)
 Dunlop footprints corrected.
 Rev C - 19th July 2017 (JAG)
 Footprint arrangements updated.
 Landscaping to Electric Substation updated to 2016 Planning Dept. comments.

ARRBROATH
 EAST MUIRLANDS ROAD

DEVELOPMENT LAYOUT

1:500/840	27/04/17	AC
001	08/04/01	001

**PERSIMMON
HOMES**
 NORTH SCOTLAND

Brookden House
 Brookden Business Park
 Lamberline Drive
 PERTH, PH1 3RW
 Telephone: 01738 509820

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APPENDIX 3: SURVEY RECORD SHEETS



Noise Survey Record Sheet – Page 1: Location and Equipment Details

Project No.	3055	Project Name:	Arbroath Battery Storage
Location (x of y)	1	Installed By:	BA
Lat/Long	56.56569, -2.61767	Location Name	NE Field above site boundary
Start Date	12/06/2018	Start Time	1530

Equipment Details	Make/Model	Serial No.
Sound Level Meter:	Rion NL-52	1276546
Calibrator:	Rion NC-74	35105087
Source of Equipment:	Arcus	
Meter Timestamp (Start/End, GMT/BST):	Start BST	

Description of Sound Source:	At middle of north field
Distance from façade::	>20m
Noise sources observed:	Construction noise for housing development, occasional traffic noise from road
Weather conditions	No precipitation low wind 1.4m/s
Additional notes:	Construction on adjacent south field is under way and noise from activities dominant.



Noise Survey Record Sheet – Page 2: Visit Record

Project No.	3055	Location (x of y)	1
--------------------	------	--------------------------	---

Installation (Visit 1)

Date:	12/06/2018	Time:	1530
Filename:	Auto_0101	Calibration level:	94
Range setting:	30-130dB	Meas. period:	15min
Freq weighting:	A	Weather station?	Weather Station
Lp Logging	Yes (100 ms)	Audio/ 8ve bands?	No
Notes:	Construction on adjacent south field is under way and noise from activities dominant.		

Visit 2

Date:	13/05/2018	Time:	1410
Visited by:	BA	Calibration level:	94
Level pre-calibration	93.8	Batts replaced?	N/A
Equipment Removed?			Yes
Notes:	Equipment and Weather station removed.		



Noise Survey Record Sheet – Page 3: Photographs

Project No.	3055	Location (x of y)	1
-------------	------	-------------------	---





Noise Survey Record Sheet – Page 1: Location and Equipment Details

Project No.	3055	Project Name:	Arbroath Battery Storage
Location (x of y)	2	Installed By:	BA
Lat/Long	56.56514, -2.62588	Location Name	At North NSR perimeter fence
Start Date	12/06/2018	Start Time	1615

Equipment Details	Make/Model	Serial No.
Sound Level Meter:	Rion NL-52	1276547
Calibrator:	Rion NC-74	35105087
Source of Equipment:	Arcus	
Meter Timestamp (Start/End, GMT/BST):	Start BST	

Description of Sound Source:	Placed at souther garden wall of NSR representative of two NSR to the north
Distance from façade::	1.5m from 0.7m height stone wall
Noise sources observed:	Bird noise, access road noise occasional at 10m distance from access road
Weather conditions	Sunny, no wind
Additional notes:	24 hour measurement with 15min LAeq



Noise Survey Record Sheet – Page 2: Visit Record

Project No.	3055	Location (x of y)	2
--------------------	------	--------------------------	---

Installation (Visit 1)

Date:	12/06/2018	Time:	1615
Filename:	Auto_0102	Calibration level:	94
Range setting:	30-130dB	Meas. period:	15min
Freq weighting:	A	Weather station?	No
Lp Logging	Yes (100 ms)	Audio/ 8ve bands?	No
Notes:	24 hour measurement with 15min LAeq		

Visit 2

Date:	13/05/2018	Time:	1430
Visited by:	BA	Calibration level:	94
Level pre-calibration	93.7	Batts replaced?	N/A
Equipment Removed?	Yes		
Notes:	Equipment removed		



Noise Survey Record Sheet – Page 3: Photographs

Project No.	3055	Location (x of y)	2
-------------	------	-------------------	---

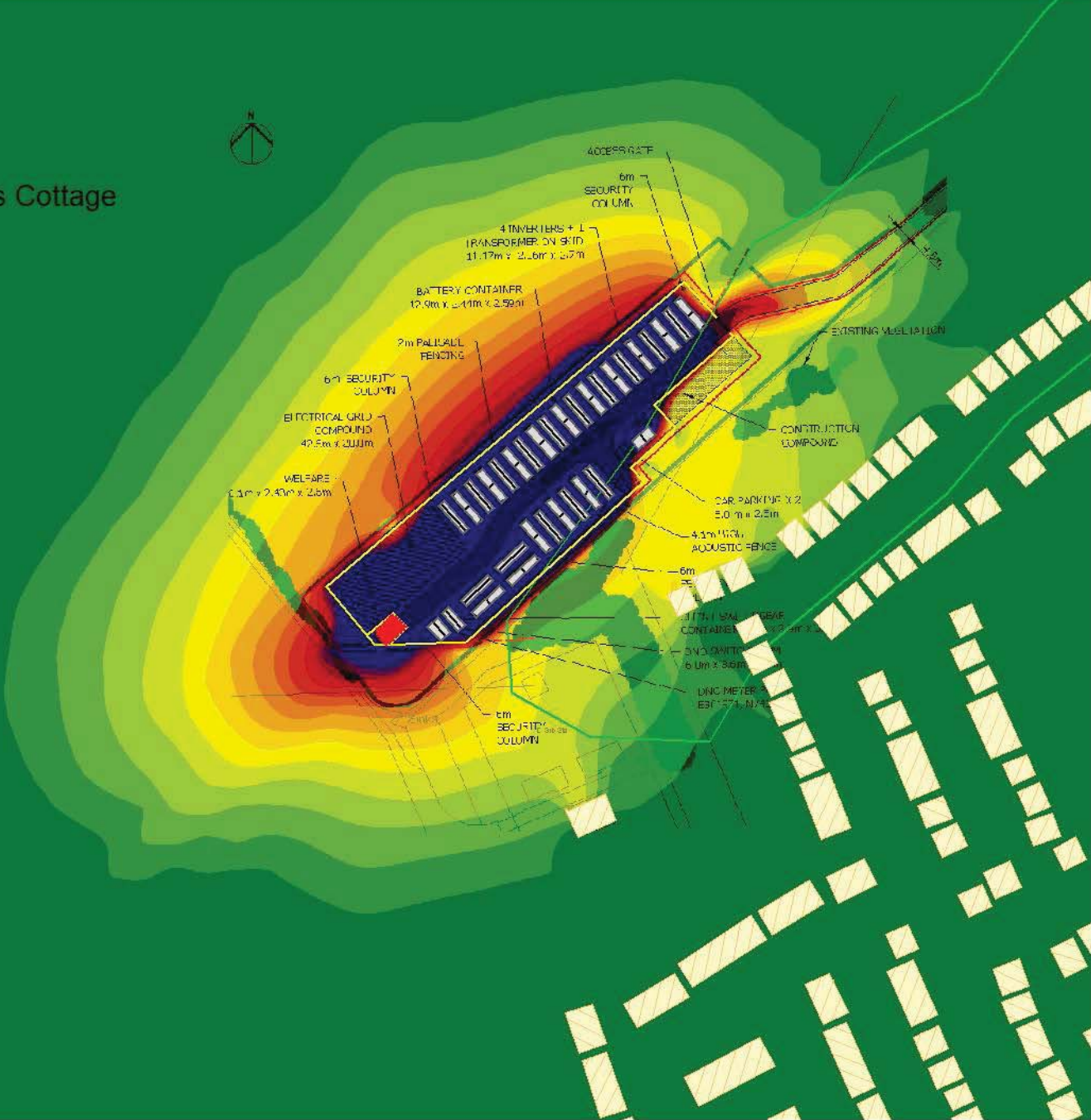


APPENDIX 4: NOISE MODEL GRID MAP –NIGHT

3055 Arbroath Battery Storage Development

Noise Grid Map With Acoustic Fence - Night

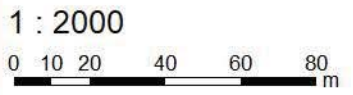
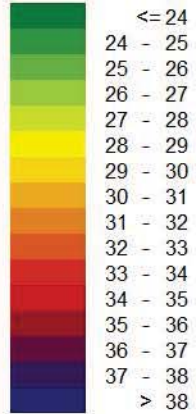
1 Crudie Acres Cottage



Signs and symbols

- Acoustic Fencing
- Main building
- Point source
- Area source

Levels in dB(A)



ARCUS

Martin Petrie
Environmental Health Department
Angus Council

16th January 2019

Our Reference: 3055/Noise
Your Reference: 18/00810/FULL

Dear Mr Petrie,

Battery Electricity Storage Facility - Arbroath

I am writing in response to your further comments regarding the noise assessment submitted as part of planning application Ref 18/00810/FULL. As requested, this letter presents the results of a further assessment against the recommended Noise Rating (NR) of NR20 with partially open windows, at a height of 4.5 m, within bedrooms of the proposed properties to the south of the Development.

A Noise Assessment, dated August 2018, was submitted as part of the planning application which assessed the Development in terms of BS4142:2014. This was later revised and resubmitted in December 2018 in response to your first round of comments. As you may recall, a noise spectrum for the inverters was unavailable, and as such the noise assessment assumed all noise from the inverters was emitted at a frequency 500 Hz. This was considered a conservative approach for the BS 4142:2014 assessment.

However, in order to assess the predicted noise level against NR curves as you have requested, a frequency spectrum is required. On the basis that the primary noise source from the inverters would be the cooling fans, the frequency spectrum of the Air Conditioning units has therefore been applied to the inverters and scaled accordingly, in order to facilitate a meaningful assessment. It should be noted that this change has resulted in the overall predicted noise level being lower, relative to the BS 4142:2014 assessment, and confirms the conservatism in the original assessment.

As requested, the prediction has been carried out at 4.5 m (the first floor) of the nearest façade (Plot 89), and assuming a conservative attenuation from a partially open window of 10 dB. As the octave-band performance of the partially open window is required for the purposes of an NR Curve assessment, it has been conservatively assumed that it provides 5 dB attenuation at the lower octave-bands (63 Hz and 125 Hz), and 10 dB at all other frequencies. It is of note that in practice, the level of attenuation afforded by the partially open window is likely to be greater than assumed.

Table 1 overleaf presents an assessment against the NR20 criterion. A negative headroom value demonstrates that the predicted internal noise level is below NR20.

Table 1: NR20 Assessment

	Octave Band Frequencies (Hz)							
	63	125	250	500	1000	2000	4000	8000
Level Incident upon Façade, dB, L_{Aeq}	-4.7	14.4	13.4	21.2	24.0	22.4	16.7	1.0
Partially open window attenuation	5	5	10	10	10	10	10	10
Predicted Internal Noise Level	-9.7	9.4	3.4	11.2	14.0	12.4	6.7	-9.0
NR20 Criterion	51.3	39.4	30.6	24.3	20.0	16.8	14.4	12.6
Headroom	-61	-30	-27.2	-13.1	-6.0	-4.4	-7.7	-21.6

As can be seen from the table above, the operation of the Development results in no exceedances of NR20 with a partially open windows of bedrooms at the nearest façade.

Yours sincerely,



Alan Moore
Senior Acoustics Consultant

DEVELOPMENT MANAGEMENT REVIEW COMMITTEE

APPLICATION FOR REVIEW

LAND TO EAST OF CRUDIE ACRE COTTAGE, ARBROATH

APPLICATION NO 18/00810/FULL

APPLICANT'S SUBMISSION

Page No

ITEM 1	Notice of Review
ITEM 2	Statement of Case
ITEM 3	Appendix 1: Suggested Planning Conditions
ITEM 4	Appendix 2: Landscape Masterplan
ITEM 5	Site Location Plan
ITEM 6	Site Layout Plan
ITEM 7	Application for Planning Permission
ITEM 8	Report of Handling
ITEM 9	Decision Notice



Angus House Orchardbank Business Park Forfar DD8 1AN Tel: 01307 473360 Fax: 01307 461 895 Email: plnprocessing@angus.gov.uk

Applications cannot be validated until all the necessary documentation has been submitted and the required fee has been paid.

Thank you for completing this application form:

ONLINE REFERENCE 100131097-003

The online reference is the unique reference for your online form only. The Planning Authority will allocate an Application Number when your form is validated. Please quote this reference if you need to contact the planning Authority about this application.

Applicant or Agent Details

Are you an applicant or an agent? * (An agent is an architect, consultant or someone else acting on behalf of the applicant in connection with this application)

Applicant Agent

Applicant Details

Please enter Applicant details

Title:	<input type="text" value="Mr"/>	You must enter a Building Name or Number, or both: *	
Other Title:	<input type="text"/>	Building Name:	<input type="text" value="7th Floor"/>
First Name: *	<input type="text" value="Jamie"/>	Building Number:	<input type="text" value="144"/>
Last Name: *	<input type="text" value="Gilliland"/>	Address 1 (Street): *	<input type="text" value="West George Street"/>
Company/Organisation	<input type="text" value="Arcus Consultancy Service Ltd"/>	Address 2:	<input type="text"/>
Telephone Number: *	<input type="text" value="0141 221 9997"/>	Town/City: *	<input type="text" value="Glasgow"/>
Extension Number:	<input type="text"/>	Country: *	<input type="text" value="United Kingdom"/>
Mobile Number:	<input type="text"/>	Postcode: *	<input type="text" value="G2 2HG"/>
Fax Number:	<input type="text"/>		
Email Address: *	<input type="text" value="JamieG@arcusconsulting.co.uk"/>		

Site Address Details

Planning Authority:

Angus Council

Full postal address of the site (including postcode where available):

Address 1:

Address 2:

Address 3:

Address 4:

Address 5:

Town/City/Settlement:

Post Code:

Please identify/describe the location of the site or sites

Northing

741675

Easting

362057

Description of Proposal

Please provide a description of your proposal to which your review relates. The description should be the same as given in the application form, or as amended with the agreement of the planning authority: *
(Max 500 characters)

Construction of a Battery Electricity Storage Facility comprising Containerised Battery Storage Units, Inverters and Transformers, DNO Substation, Client Switchgear Container, Electrical Grid Compound, Welfare and Parts Storage Containers and Ancillary Development including Formation of Access Track, Security Fencing, CCTV and Landscaping | Land To East Of Crudie Acre Cottage Arbroath

Type of Application

What type of application did you submit to the planning authority? *

- Application for planning permission (including householder application but excluding application to work minerals).
- Application for planning permission in principle.
- Further application.
- Application for approval of matters specified in conditions.

What does your review relate to? *

- Refusal Notice.
- Grant of permission with Conditions imposed.
- No decision reached within the prescribed period (two months after validation date or any agreed extension) – deemed refusal.

Statement of reasons for seeking review

You must state in full, why you are seeking a review of the planning authority's decision (or failure to make a decision). Your statement must set out all matters you consider require to be taken into account in determining your review. If necessary this can be provided as a separate document in the 'Supporting Documents' section: * (Max 500 characters)

Note: you are unlikely to have a further opportunity to add to your statement of appeal at a later date, so it is essential that you produce all of the information you want the decision-maker to take into account.

You should not however raise any new matter which was not before the planning authority at the time it decided your application (or at the time expiry of the period of determination), unless you can demonstrate that the new matter could not have been raised before that time or that it not being raised before that time is a consequence of exceptional circumstances.

Please see the attached Statement of Case submitted alongside this appeal.

Have you raised any matters which were not before the appointed officer at the time the Determination on your application was made? *

Yes No

If yes, you should explain in the box below, why you are raising the new matter, why it was not raised with the appointed officer before your application was determined and why you consider it should be considered in your review: * (Max 500 characters)

Please provide a list of all supporting documents, materials and evidence which you wish to submit with your notice of review and intend to rely on in support of your review. You can attach these documents electronically later in the process: * (Max 500 characters)

01 Site Location. 02 Site Layout. Appendix 1 Suggested Planning Conditions. Appendix 2 Landscaping Plan.

Application Details

Please provide details of the application and decision.

What is the application reference number? *

18/00810/FULL

What date was the application submitted to the planning authority? *

15/10/2018

What date was the decision issued by the planning authority? *

01/02/2019

Review Procedure

The Local Review Body will decide on the procedure to be used to determine your review and may at any time during the review process require that further information or representations be made to enable them to determine the review. Further information may be required by one or a combination of procedures, such as: written submissions; the holding of one or more hearing sessions and/or inspecting the land which is the subject of the review case.

Can this review continue to a conclusion, in your opinion, based on a review of the relevant information provided by yourself and other parties only, without any further procedures? For example, written submission, hearing session, site inspection. *

Yes No

In the event that the Local Review Body appointed to consider your application decides to inspect the site, in your opinion:

Can the site be clearly seen from a road or public land? *

Yes No

Is it possible for the site to be accessed safely and without barriers to entry? *

Yes No

Checklist – Application for Notice of Review

Please complete the following checklist to make sure you have provided all the necessary information in support of your appeal. Failure to submit all this information may result in your appeal being deemed invalid.

Have you provided the name and address of the applicant?. *

Yes No

Have you provided the date and reference number of the application which is the subject of this review? *

Yes No

If you are the agent, acting on behalf of the applicant, have you provided details of your name and address and indicated whether any notice or correspondence required in connection with the review should be sent to you or the applicant? *

Yes No N/A

Have you provided a statement setting out your reasons for requiring a review and by what procedure (or combination of procedures) you wish the review to be conducted? *

Yes No

Note: You must state, in full, why you are seeking a review on your application. Your statement must set out all matters you consider require to be taken into account in determining your review. You may not have a further opportunity to add to your statement of review at a later date. It is therefore essential that you submit with your notice of review, all necessary information and evidence that you rely on and wish the Local Review Body to consider as part of your review.

Please attach a copy of all documents, material and evidence which you intend to rely on (e.g. plans and Drawings) which are now the subject of this review *

Yes No

Note: Where the review relates to a further application e.g. renewal of planning permission or modification, variation or removal of a planning condition or where it relates to an application for approval of matters specified in conditions, it is advisable to provide the application reference number, approved plans and decision notice (if any) from the earlier consent.

Declare – Notice of Review

I/We the applicant/agent certify that this is an application for review on the grounds stated.

Declaration Name: Mr Jamie Gilliland

Declaration Date: 30/04/2019



**BATTERY ELECTRICITY STORAGE FACILITY,
EAST OF CRUDIE ACRE COTTAGE,
ARBROATH**

LOCAL REVIEW: STATEMENT OF CASE

**Town and Country Planning Scotland Act 1997 (as amended)
Town and Country Planning (Schemes of Delegation and Local Review Procedure)
(Scotland) Regulations 2013**

Appeal by Coronation Power Limited

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EXECUTIVE SUMMARY

This Statement of Case ('the Statement') has been prepared by Arcus Consultancy Services Ltd ('Arcus'), on behalf of Coronation Power Limited ('the Appellant'). The Statement accompanies the notice of review ('the Review') to the Development Management Review Committee ('the Committee') at Angus Council ('the Council') to review the case of Planning Application Ref. 18/00810/FULL ('the Application'). The Application is for the construction and operation of a Battery Electricity Storage Facility and associated infrastructure ('the Development') on land adjacent to the existing 132kV Arbroath substation, to the east of Crudie Acre Cottage, Arbroath ('the Site'), which was refused on the 1st February 2019.

The Development is designed to support the flexible operation of the National Grid and decarbonisation of electricity supply, importing and exporting electricity to the grid. The Development would be accessed via a new track off the unnamed minor road to the east of the Site. The location of the Site and layout of the Development are shown on Planning Drawings 1 and 2 respectively.

This Statement sets out the full particulars of the appeal, including the matters that the Appellant considers need to be taken into account in reviewing the case. Firstly, the Statement outlines the components of the Development in Section 2.2, before reviewing the planning history of the Site and pre-application advice given in Section 2.3. A summary of the key consultee responses is given in Section 3 of this Statement, which outlines that there were no objections from any of the statutory consultees were received and only one 3rd party response to the application. Additionally, it is important to note that the applicant for the adjacent consented housing development did not object to the proposal. Sections 4 and 5 go on to examine the primary reasons for refusal and rebut these arguments, with reference to Local Development Plan policies.

The two primary reasons for refusal were related to development outwith the development boundary, and development on prime agricultural land. Section 5.2.1 outlines the operational requirements of the Development and the locational necessity of being located outside of the development boundary and in close proximity to the existing substation, before further exploring the associated economic, social and environmental benefits of the Development. Section 5.2.2 discusses the limited impacts to prime agricultural land in Angus, with the Development resulting in a loss of only 0.0007% of the overall amount of prime agricultural land in the area.

Sections 5.2.3 to 5.2.7 go on to discuss additional points made by the case officer in the Report of Handling which did not result in refusal, such as impacts to visual amenity and landscape character, flood risk, traffic and road safety, noise and lighting and ecology. These sections re-emphasise why the Development was considered by both the Appellant and the case officer to be acceptable in relation these important factors. Section 5.3 raises some additional comments concerning the lack of correspondence from the case officer during the determination process regarding their concerns surrounding the landscaping of the Development.

Finally, Section 6 discusses a range of material considerations which are considered to give weight to the Development. Of note is the Development's role in supporting the development of renewable energy across the UK, and its contribution to reducing carbon emissions and meeting climate change targets. The Appellant considers these documents to be material to the determination of the Application.

The Statement concludes that the Development is considered to be acceptable with regard to the reasons for refusal detailed by the case officer in the Report of Handling. It is therefore respectfully requested that the Local Review Body overturn the refusal decision and approve the planning application.

1 INTRODUCTION AND BACKGROUND

This Statement of Case ('the Statement') has been prepared by Arcus Consultancy Services Ltd ('Arcus'), on behalf of Coronation Power Limited ('the Appellant'), to accompany the notice of review ('the Review') to the Development Management Review Committee ('the Committee') at Angus Council ('the Council') to review the case of Planning Application Ref. 18/00810/FULL ('the Application') for the Construction and Operation of a Battery Electricity Storage Facility and Associated Infrastructure ('the Development') which has been refused on the 1st February 2019.

The Development is located adjacent to the existing 132kV substation, on land to the east of Crudie Acre Cottage, Arbroath ('the Site') and would be accessed via a new track off the unnamed minor road to the east of the Site. The location of the Site and layout of the Development are shown on Planning Drawings 1 and 2 respectively.

The Review is requested under section 43A of the Town and Country Planning (Scotland) Act 1997 ('the Planning Act') and the Town and Country Planning (Schemes of Delegation and Local Review Procedure) (Scotland) Regulations 2013 on grounds of refusal of the Application, submitted 23rd October 2018. This Statement sets out the full particulars of the appeal, including the matters that the Appellant considers need to be taken into account in reviewing the case. The Appellant considers the review should be conducted in the form of Written Submissions.

In addition, the Statement is accompanied by the relevant supporting documents, which have been referenced throughout the Statement as follows:

- Report of Handling
- Planning Drawing 1
- Planning Drawing 2
- Appendix 1: Suggested Conditions
- Appendix 2: Landscaping Plan

2 THE APPEAL SITE AND ITS SURROUNDINGS

2.1 Site Description

The Site is currently used for arable agriculture and is located outwith but contiguous to the development boundary for Arbroath. There are anthropogenic developments in close proximity which include the existing SSE substation and associated overhead transmission lines and pylons. The substation is enclosed by a palisade fence approximately 3 m in height and is surrounded by mature trees to the west, south and east and by a mature hedgerow which borders Hercules Den Burn to the north.

The nearest residential properties to the Site are located to the south between Hercules Den Burn and the East Muirlands Road on the site currently under construction, known as the Crudie Acres development.

Access would be from a new access track constructed off the existing unnamed minor road to the east of the Site, approximately 180 m in length.

Given the above, the Site provides the optimum location for the Development, helping to improve the security of electricity supply while respecting the local surroundings. It has been deliberately located adjacent to the existing substation into which it would connect, a sufficient distance from residential properties to ensure no significant amenity impacts and at a location which is not subject to flood risk or impacts on ecological habitats or protected species. The new access proposed is acceptable to the Council's highways officers.

2.2 The Development

The Appellant is seeking planning permission for the construction and operation of a Battery Electricity Storage Facility.

The Development is designed to support the flexible operation of the National Grid and decarbonisation of electricity supply. The Development would import and export electricity, however it would not generate any additional electricity nor have any direct on-site emissions of CO₂.

The Development would consist of containerised battery storage units (15 No.), inverters and transformers on skids (15 No.), a DNO substation, a client switchgear container, electrical grid compound, welfare and parts storage containers and security columns, which would all be contained within a fenced compound (palisade fence to the north and west and acoustic fence to the south and east). In addition a new access is proposed off the unnamed minor road to the east of the Site and landscape planting is proposed to soften the appearance of the Development.

The Appellant seeks planning permission for the construction and operation of the aforementioned Development, which is anticipated to include a number of components. Each component of the Development is described in turn in the following sections.

2.2.1 Battery Storage Containers

Up to 15 battery storage containers would be sited on concrete plinths within the secure enclosure. Each container would be approximately 12.19 x 2.44 x 2.6 m. The elevation drawing is provided as Planning Drawing 3. There would be a separation distance of approximately 3 m between each container and the inverter/ transformer skid (described below) which would be arranged in rows alongside the access road.

2.2.2 Inverter / Transformers

Adjacent to each battery storage container will be a concrete skid housing 4 inverters and 1 transformer. There will be a total of up to 15 of these (i.e. one for each battery storage container), which will have a footprint of 11.17 x 2.06 x 2.7 m. There would be a separation distance of approximately 3 m between each inverter/ transformer skid and battery storage container (described above).

2.2.3 DNO Switchroom

The DNO switchroom has dimensions of 6.1 x 3.6 x 3.4 m. The container has an allowance for satellite communication equipment and would be of Glass Reinforced Plastic (GRP) construction. This would be mounted on concrete slabs which would be informed by civil design.

2.2.4 Client Switchgear Container

The client switchgear container has dimensions of 7.5 x 2.9 x 3.4 m. This would be mounted on concrete slabs which would be informed by civil design.

2.2.5 Electrical Grid Compound

The electrical grid compound has dimensions of 40.6 x 29 m in plan and will contain circuit breakers and a transformer. The height of equipment in this compound would be between 4.1 m and 6 m.

2.2.6 Welfare Container and Spares Container

There would be a welfare container associated with the Development which would have the following dimensions: 6.1 x 2.43 x 2.6. This would be serviced by a septic tank which

would be dealt with in isolation and not require mains access. There would also be an extra spares storage container, of similar size and appearance to the battery storage containers.

2.2.7 Perimeter Fencing

A perimeter fence would enclose all permanent and electrical elements of the Development. This would be a 2 m high palisade fence to the north and west, the colour of which would be agreed with the Council through appropriately worded conditions attached to any planning consent. To the south and east, and to ensure the amenity of residents of the new housing offsite to the south an acoustic fence is proposed. This would be of timber construction and would be 4 m in height. This would be raised 10 cm above ground level, to allow the ingress of potential flood waters, and thus would sit at a height of 4.1 m above ground level.

2.2.8 Security Columns

Approximately four poles would be mounted with directional static CCTV cameras and security lighting. These have been located at each corner of the fenced compound. It would be ensured that the cameras and lighting are inward facing and do not result in amenity issues through light pollution. The security column would be approximately 6.0 m in height and 0.1 m in width. Given that the Site is unmanned and remotely operated there would only be a requirement for lighting to be triggered in very occasional circumstances.

2.2.9 Site Access & On-Site Tracks

A new site entrance would be constructed from the unnamed minor road to the east of the Site, and a section of track approximately 180 m in length would provide access to the main compound.

The track would be of compacted stone construction and would have a width of 4.5 m extending on corners, and up to a maximum of 6 m within the main compound.

During the operational phase of the Development, a parking area would be provided within the main fences compound for maintenance personnel. In total the Site would include two dedicated parking spaces.

2.2.10 Cabling

Underground cables would connect the Development to the substation immediately to the west of the Development. The grid connection point where the cables enter the substation would be confirmed on receipt of a grid offer however, it is likely this would be taken from the west of the Site, which borders the substation. The cables would be buried in trenches up to 1 m deep and reinstated during construction.

2.2.11 Temporary Construction Compound

A temporary construction compound would be situated to the east of the Site allowing access for construction vehicles. The compound would be decommissioned following construction, and the remaining hardstanding would be reseeded / landscaped.

2.2.12 Planting

The Site currently consists of arable land with no existing planting or trees on-site. No nearby hedges or trees would be removed or altered as part of the Development. Perennial vegetation would be removed to allow for improved planting.

Landscape planting is proposed to provide amenity improvements, particularly for the residential properties to the south and east of the Development. It is designed to

supplement the existing offsite vegetation. Native shrub planting is proposed to the southwest, southeast and east of the Development, between the Development and the new housing to the south of the Site and wrapping around the east of the Site. No trees are proposed in this location given the overhead transmission line. In addition, a new hedgeline with hedgerow trees is proposed along the Site's northern boundary. Planting would occur on the outside of the perimeter fencing to ensure maximum benefit.

2.3 Planning History

On 21st May 2018, Arcus submitted a Pre-Application Advice Form to the Council for preliminary advice on the Development (18/00439/PREAPP). A formal written response was issued by the Council on 15th June 2018, the key points raised in this response are summarised below:

- The Council considers the Development would be contrary to the Policy DS1 of the Angus Local Development Plan as it would be located outwith but contiguous to the development boundary for Arbroath;
- The Council recommended that the Development should be directed to a suitable alternative site within the development boundary;
- The Development has the potential to adversely impact on the appearance and amenity of the surrounding area and landscape; and
- Planning permission has been granted for housing on land to the south of the Development and there is the potential for impacts on residential amenity (16/00354/FUL).

Consideration was given by the Applicant to the points raised in the pre application response, however, given the specific site location needs of battery storage technology and minimal impact of the Development on the surrounding area it was determined that the selected site and design should proceed to the planning application stage. Therefore, an application for full planning permission was submitted to the Council on 15th October 2018 and was validated on 23rd October 2018 (18/00810/FULL).

Post-submission of the Application, the Council requested an amended Noise Assessment. This was to assess against the recommended Noise Rating (NR) of NR20 with partially open windows, at a height of 4.5 m, within bedrooms of the proposed properties to the south of the Development. This information was submitted to the Council on the 16th January 2019.

The Application was refused planning permission on 1st February 2019.

2.4 Application Reference: 18/00810/FULL (Subject of the Local Review)

2.4.1 Application Overview

As stated in Section 2.3 the planning application was submitted to Angus Council on 15th of October 2018 for the construction and operation of a Battery Electricity Storage Facility comprising containerised battery storage units, inverters and transformers, DNO substation, client switchgear container, electrical grid compound, welfare and parts storage containers and ancillary infrastructure including formation of access track, fencing, CCTV and landscaping.

2.4.2 Reasons for the Application

There is a requirement to deliver a greater amount of clean energy through renewable technologies. Scotland is legally bound through the Climate Change (Scotland) Act (2009)¹ to reduce carbon emissions and through Renewable Energy Directive

¹ Scottish Government (2009) Climate Change (Scotland) Act 2009 [Online] Available at: <https://www.legislation.gov.uk/asp/2009/12/contents> (Accessed 08/04/19)

2009/28/EC² to increase electricity consumption from renewable resources. Renewable technologies are intermittent, generating when natural resources are available. As a result, demand and supply are more challenging to balance.

As such, there is a growing demand by network operators for a broad range of services such as energy storage and management. The Development is designed to support the flexible operation of the National Grid and decarbonisation of electricity supply. The Development will directly contribute to the continued development of renewable and low carbon technologies across Scotland.

2.4.3 Application Determination

Following submission on the 15th October 2018, the Application was validated and the consultation phase began. Section 3 contains details of the consultation responses and summarises the key issues.

3 SUMMARY OF CONSULTATION RESPONSES

3.1 Statutory Consultee Responses

Angus Council: Roads – Offered no objection to the proposal subject to the attachment of conditions regulating the provision, standard and maintenance of visibility splays at the junction with Hillend Road;

Scottish Environment Protection Agency (SEPA) – SEPA offered no objection to the proposal. SEPA deemed the Development to be ‘essential infrastructure’ and therefore there is a requirement to be located next to the existing substation for operational reasons;

Angus Council: Flood Prevention – Offered no objection to the proposal subject to the attachment of conditions regulating the height and design of containers and type of surface material;

Angus Council: Environmental Health – Offered no objection subject to the attachment of conditions regulating the attenuation of plant and equipment noise and the light spillage from external lighting;

SSE Plc – Offered no objection to the proposal subject to consultation by the Appellant with regards to the high voltage overhead lines and cables which cross and are in proximity to the proposed Development and the extra high voltage power line that lies to the south / south west of the proposed Development;

Scottish Water – There was no response from this consultee at the time of the drafting of the Report of Handling;

Forward Planning Section – There was no response from this consultee at the time of the drafting of the Report of Handling;

Community Council – There was no response from this consultee at the time of the drafting of the Report of Handling.

3.2 Third Party Responses

One Third Party comment was received in relation to the Application. It was an objection related to traffic and road safety impacts through the introduction of the site access junction merging on to a bend on the public road and at an area with the driveways of residential property opposite. It is noted however that the Angus Council Roads officer had no objection, subject to the imposition of conditions.

² European Commission (2009) DIRECTIVE 2009/28/EC [Online] Available at: <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32009L0028&from=EN> (Accessed 08/04/19)

It is important to note that Persimmon Homes North Scotland, the applicant for planning application Ref. 16/00354/FUL for the Erection of 287 Dwellings and Associated Open Space, Parking and Infrastructure, located to the southeast of the Site has not raised any comments or objections to the Application. Therefore, it can be reasonably assumed that Persimmon Homes North Scotland do not consider the Development to represent any adverse impact to the consented residential development.

4 CONSIDERATION OF THE APPLICATION AND THE ASSESSMENT REPORT

Paragraph 2 of SPP states that *“Planning should take a positive approach to enabling high-quality development and making efficient use of land to deliver long-term benefits for the public while protecting and enhancing natural and cultural resources.”*

Paragraph 4 of SPP goes on to state that the planning service should perform to a high standard and pursue continuous improvement. Furthermore, the service should focus on outcomes, maximising benefits and balancing competing interests. Planning should play a key role in facilitating sustainable economic growth, particularly the creation of new jobs and the strengthening the economic capacity.

Section 25(1) of the Planning Act states that *“where, in making any determination under the Planning Acts, regard is to be had to the development plan, the determination is, unless material considerations indicate otherwise to be made in accordance with that plan ...”*.

Section 37(2) of the Act states that *“in dealing with the application made to a planning authority for planning permission, the authority shall have regard to the provisions of the development plan, so far as material to the application, and to any other material considerations”*.

Accordingly, the appropriate approach to adopt when considering the Application under Local Review is as follows:

- Review and assess the appropriateness of the pre-application advice received from the Council;
- To identify the provisions of the Development Plan which are relevant to the consideration of the Application;
- To consider whether or not the granting of the planning permission accords with the Development Plan;
- To consider relevant technical and environmental issues in relation to acceptability of the Application in the context of the LDP;
- To identify and consider other relevant material considerations for and against the grant of planning permission; and
- To assess whether the considerations warrant a departure from the Development Plan.

This Statement of Appeal reflects the approach set out above and in Section 5 and address compliance of the Application with the Development Plan, comprising the Angus Local Development Plan and other material considerations to be taken into account, including the NPF3, Scottish Planning Policy, energy policies and, responses from statutory consultees and Third Party representations.

5 GROUNDS OF APPEAL

Sections 5.1 to 5.4 of this Statement address the key issues for consideration in the determination of this Appeal, based on matters within the statutory consultation responses.

In addition, Sections 5.2 and 6 of this Statement summarise the accordance with the Development Plan and associated material considerations, setting out the planning grounds and the reasons why the Appeal should be allowed.

A full assessment of the compliance with the Development Plan and material considerations is provided within accompanying documents including the Planning Statement, which should be read in conjunction with this Statement.

5.1 Relevant Planning Policy

Policy	Section Addressed
Policy DS1: Development Boundaries and Priorities	5.3.1
Policy DS2: Accessible Development	5.2.5
Policy DS3: Design Quality and Placemaking	5.3.3
Policy DS4: Amenity	5.3.3, 5.3.6
Policy PV5: Protected Species	5.3.7
Policy PV6: Development in the Landscape	5.3.3
Policy PV9: Renewable and Low Carbon Energy Development	5.3.1, 5.3.2
Policy PV12: Managing Flood Risk	5.3.4
Policy PV13: Resilience and Adaptation	5.3.4
Policy PV15: Drainage Infrastructure	5.3.4
Policy PV20: Soils and Geodiversity	5.3.2

5.2 Accordance with the Development Plan – Assessment of the Key Policies

The Planning Statement fully assessed the Application against a range of criteria, with the key issues relating to the Development outlined and examined below:

5.2.1 *Development Outwith the Development Boundary*

Development outside of the Development Boundary was raised as a concern for the Council in regards to this Application at the pre-application consultation stage, with compliance with Policy DS1 being a key requirement for approval.

Whilst Policy DS1 states a preference for development within the development boundary, it does not preclude development outwith these areas. The policy states that *'development outwith but contiguous with a development boundary will only be acceptable where it is in the public interest and social, economic, environmental or operational considerations confirm there is a need for the development that cannot be met within a development boundary'*.

The Development is required to be located in close proximity to the existing substation in order to ensure the functionality and viability of the Development is maintained through an appropriate point of connection to the electricity grid network. Locating the Development elsewhere, further away from the substation, would result in lengthy transmission cables which could cause significant disruption during the construction

process and would increase electrical transmission losses. The Development is not able to be located within the development boundary due to operational constraints associated with the nature of the Development.

A detailed site selection process was undertaken to ensure the Development was located in a suitable location in close proximity to an accessible grid connection point. By grouping the Development alongside the existing substation, which is itself outwith the development boundary, the Development will be in keeping with the precedent of development of essential infrastructure outside of the development boundary.

In addition, the proposed Development facilitates a number of economic, social and environmental benefits.

- **Economic:**
 - Local employment during the construction and decommissioning process;
 - Job creation along the supply chain;
 - Improves the UK's competitiveness in the energy market;
- **Social**
 - Essential infrastructure for ensuring the reliability of the electricity supply as we move towards the majority of our energy coming from renewable sources;
 - Greater energy security;
- **Environmental**
 - Very limited development footprint;
 - No significant effects on local amenity and the environment, specifically in respect of noise, visual amenity, flood risk, ecology and transport and access;
 - Supports the decarbonisation of the energy industry;
 - Improves the efficiency of renewables; and
 - Contributes to ongoing efforts to combat climate change.

The Development is required to be located at the Site due to its operational requirements and as demonstrated above has distinct social, economic and environmental benefits. The Development is therefore considered to be compliant with the requirements of Policy DS1, as well as being in line with Policy PV9 with regards to renewable and low carbon energy development.

5.2.2 Development on Prime Agricultural Land

Policy PV20 of the LDP seeks to safeguard prime agricultural land and only allows the development of prime agricultural land in limited circumstances, including where development constitutes renewable energy generation.

The Development will result in the loss of a small proportion of prime agricultural land. Given that the Development is required to be located in close proximity to the existing substation, there were limited options for the location of the Site as the substation is largely surrounded by similarly productive agricultural land.

The Applicant has sought to limit the footprint of the Development as far as possible and has limited the proportion of prime agricultural land required for development. This has resulted in the loss of only 0.79 ha of prime agricultural land. Scotland has

approximately 10,992 km² (1,099,200 ha) of prime agricultural land³, of which Angus contains 10%⁴ (109920 ha). This means that the proposed Development would only represent a loss of 0.0007% of the prime agricultural land present in Angus, and represents a very limited overall impact on the quality of agricultural land in the area.

This Site was chosen due to the limited amenity impacts of the Site that could be achieved, whilst respecting the importance of operational efficiency. The Scottish Government's Soil Framework, Land Use Strategy and the NPF3 state that whilst prime agricultural land is an important resource, this should be balanced against the need for new development and infrastructure. Whilst the Development does not generate renewable energy in and of itself, it represents essential infrastructure supporting the continued development of renewable energy in Scotland and will serve to manage the peaks and troughs associated with intermittent renewables generation. The Development is therefore considered to be a productive use for prime agricultural land with a direct link to renewable energy. For this reason, the Development is considered to be acceptable in regards to Policy PV20.

In addition, the Appellant is prepared to consider the use of an appropriately worded planning condition in relation to site restoration including the need for an appropriate site restoration scheme to ensure that the Development does not impact the future status of the site as prime agricultural land.

The Development is in line with the general requirements of Policy PV20 and the wider requirements of the Scottish Government's Soil Framework, Land Use Strategy and the NPF3. The Development is therefore considered to accord with the overarching aims of national policy relating to the development of prime agricultural land and be acceptable in terms of Policy PV20 relating to renewable energy development. The Development is also considered to be in accordance with the requirements of Policy PV9.

5.2.3 Impacts to Visual Amenity and Landscape Character

Impacts to visual amenity and landscape character were highlighted as being a key issue contributing to the refusal of the Development, especially in regards to the approved housing development at the adjacent site. Angus Council's Planning Advice Note 23: The Specification of Landscaping Proposals for Development Sites⁵ states that landscaping schemes are often important in making development proposals acceptable.

In order to combat visual impact, a landscaping plan was submitted alongside the Application illustrating how the Appellant proposes to screen the Development from view and reduce its visual impact (Appendix 2). The Development would utilise native shrub planting between the proposed acoustic fencing and the existing vegetation to the south / southwest of the Site, and would extend the existing vegetation boundary between the Site and the housing development. The Development would not result in the removal of any existing vegetation and would provide further screening to the north by new tree and hedge planting, including Field Maple, Scots Pine and Common Oak. The proposed planting will provide screening for all elements of the Development, including fencing, and would serve to maintain the character of the landscape by reflecting the screening surrounding the existing substation.

³ Climate Exchange (2018) NA2 Area of Prime Agricultural Land (Land Capability) [Online] Available at: <https://www.climateexchange.org.uk/research/indicators-and-trends/indicators/na2-area-of-prime-agricultural-land-land-capability/> (Accessed 24/04/2019)

⁴ Angus Council (2012) Main Issues Report Topic Paper 6: Economy [Online] Available at: <http://archive.angus.gov.uk/LDPMainissuesreport/pdfs/TopicPaperNo6Economy.pdf> (Accessed 26/04/2019)

⁵ Angus Council (n.d.) The Specification of Landscaping Proposals for Development Sites [Online] Available at: <http://www.angus.gov.uk/sites/angus-cms/files/Specification%20of%20landscaping%20proposals%20for%20development%20sites.pdf> (Accessed 24/04/2019)

The Development will be further removed from the housing development by the landscaped edge of the housing scheme to the south of the Site. This area of greenspace will provide further separation between the Development and housing, limiting views and reducing visual impacts, as well as reducing the impact of noise, which is further controlled by an acoustic fence to the southern boundary. Given the degree of separation between the housing site and the proposed Development, it is considered that there will be limited impacts to the amenity of the area and is in keeping with the requirements of Policy DS4. Given the industrial precedent set by the existing substation, and the extensive screening proposed by the Applicant, it is considered that the Development will be in keeping with the character of the surrounding area and is unlikely to represent a significant change in the character of the area. The Development will result in limited screened views from a small proportion of the houses, primarily the three houses in the northwest section of the housing development, with these screened by significant landscaping. Additionally, it is important to note that the Developer of the housing site did not submit an objection to the application, reflecting the limited impacts that the Development would have on the housing site.

The Development is therefore considered to comply with the requirements of Policies DS3, DS4 and PV6, as design mitigation strategies have been implemented to reduce adverse effects on the landscape, and will not result in significant impacts to the amenity of the area.

5.2.4 Flood Risk

Flood risk was raised as a potential concern during the determination process as the proposed Site is located within an area with potential risk of flooding due to the adjacent Hercules Den Burn and surface water. Due to the operational requirements of the Development it is required to be located in close proximity to the existing substation and is considered by both the Applicant and SEPA to represent essential infrastructure.

SEPA offered no objection to the Development on flood risk grounds. The Roads Service also offered no objection to the Development in regards to flood risk, subject to the attachment of planning conditions regulating the finished height of the proposed containers and requiring a permeable access track surface material, and stated that whilst some risk is present steps can be taken to mitigate those risks. In addition, Angus Council Flood Prevention offered no objection to the proposal with regards to flood risk.

SEPA, the Roads Service and Angus Council Flood Prevention recognise the locational requirements of the Development, and state that strategies are available that can mitigate any impacts in regards to flood risk. The Development is therefore considered to be compliant with Policy PV12, Policy PV13 and Policy PV15.

5.2.5 Traffic and Road Safety

One comment in objection was received from a member of the public regarding concerns about traffic and road safety impacts do to the proposed site access junction merging on the bed in the public road and in proximity to residential driveways. However, the Application was reviewed by the Roads Service who determined that the Development would not cause any adverse impact to the public road network, and offered no objection subject to planning conditions regulating the provision standard and maintenance of visibility splays at the junction with Hillend Road. The Development is therefore considered to be acceptable in terms of traffic and road safety and is considered to accord with the principles of Policy DS2.

5.2.6 Noise and Lighting

A Noise Impact Assessment (NIA) was submitted alongside the planning application. Preliminary comments from the Environmental Health Service were reviewed and an

updated NIA was submitted to the Council addressing the points raised. The Environmental Health Service reviewed the updated NIA and had no objections subject to the attachment of conditions regulating the attenuation of plant and equipment noise and light spillage from external lighting.

Given the Council's acknowledgement of the limited noise and lighting impacts of this type of development, it can also be inferred that the anticipated impacts on the nearby housing site would also be limited. The Report of Handling stated that any issues created by noise and lighting could be mitigated through appropriately worded conditions. The Development is therefore considered to be compliant with Policy DS4 with regards to amenity.

5.2.7 Ecology

An Ecological Report was undertaken to examine the ecological resource of the Site. This determined that the Site was of low ecological value and found no evidence of protected species within the survey area. The Ecological Report provided some additional general mitigation strategies for breeding birds, reptiles and amphibians which could be secured by an appropriately worded planning condition. In their Report of Handling the Council agrees with the findings of the Appellant's Ecology Report and did not highlight any concerns relating to ecology. The Development is therefore compliant with Policy PV5.

5.3 Assessment of Other Issues

The Appellant would like to address a number of other issues relating to the Development and the application process.

The visual impact and landscaping implications of the Development are considered to be key issues. Given that the Site is capable of being screening from view, as is seen from the landscaping plan submitted alongside the Application, it would have been beneficial to the application process had the Council consulted the Appellant on the landscaping plan to explore multiple options for screening.

During the determination process the Appellant nor their Agent received any correspondence regarding any concerns from the Council regarding screening the Development from view. Had these concerns been raised throughout the determination process, the Appellant would have been able to alter their landscaping plan to further improve the screening of the Development in consultation with the Council. By not consulting on this issue, the Council did not provide the Appellant with the opportunity to provide additional information and alleviate any concerns. Alternatively, a comprehensive landscaping plan could have been requested by an appropriately worded condition, and need not have been a reason for refusal as outlined in paragraph 26 of the SPP.

6 MATERIAL CONSIDERATIONS

In its Report of Handling, the Council states that there are no material considerations that justify the grant of planning permission contrary to the Development Plan. However, the Development is a technology which directly supports the overarching aims of national policy in relation to climate change and carbon reduction, and provides further support to the continued development of renewable energy projects across Scotland. There are therefore a number of material considerations which provide significant weight to the Application, and deliver additional justification as to why the Development should be deemed acceptable.

Alongside the clear support provided within these material considerations for developments that facilitate mitigation and adaptation to the impacts of climate change, there is clear support for the development of energy storage facilities to support existing

energy infrastructure. The following material considerations are considered to be in support of the Development.

6.1 Renewable and Low Carbon Energy Development

This document forms part of the supplementary guidance (SG) for the Angus LDP. The Renewable and Low Carbon Energy Development SG (2017)⁶ details criteria to assist the preparation and assessment of proposals for renewable and low carbon energy development, and provide further detail on Policy PV9.

The SG states that *"Well sited and designed developments can, at best, enhance their setting or at least minimise potential impacts. Poorly sited or designed development can do the opposite – and may have an adverse impact on amenity for decades to come. Appropriate landscaping and planting can help a building or other appropriately scaled structure to blend into the landscape."* The Development is considered to be a well-designed development, and utilises an extensive landscaping plan that will serve to integrate the Development into the landscape and screen it from nearby view. Further, the Appellant would be willing to consider a site restoration scheme as a planning condition to the Development. This would serve to ensure that the Development does not impact the future use of prime agricultural land at the Site.

The Development is therefore considered to be compliant with the requirements of the Renewable and Low Carbon Energy Development SG.

6.2 Scottish Planning Policy

The 2014 Scottish Planning Policy⁷ ("SPP") supersedes the previous SPP (published in 2010) and is a non-statutory document which outlines the Scottish Government's priorities for land use planning and therefore should be afforded significant weight in the determination of planning applications.

It is clear from SPP that the Scottish Government is committed to further development of energy projects in appropriate locations.

Paragraphs 14 to 23 of SPP (pages 6-7) detail four key Planning Outcomes which detail how planning can contribute to making Scotland a sustainable and low carbon place.

Outcome 2: A Low Carbon Place – reducing our carbon emissions and adapting to climate change, reiterates the Scottish Government's targets of reducing greenhouse gas emissions and paragraph 19 states that (page 7):

"The SPP sets out how this should be delivered on the ground. By seizing opportunities to encourage mitigation and adaptation measures, planning can support the transformational change required to meet emission reduction targets and influence climate change. Planning can also influence people's choices to reduce the environmental impacts of consumption and production, particularly through energy efficiency and the reduction of waste."

In addition to Outcome 2: A Low Carbon Place, SPP also seeks to support sustainable development through Outcome 1: A Successful, Sustainable Place. This is to be achieved through supporting sustainable economic growth and well-designed sustainable places. SPP considers that sustainable development is the key principle when considering future developments (page 9):

⁶ Angus Council (2017) Renewable and Low Carbon Energy Development [Online] Available at:

<http://www.angus.gov.uk/sites/angus-cms/files/2017-10/ALDP%20Renewable%20and%20Low%20Carbon%20Energy%20Development%20Supplementary%20Guidance.pdf>
(Accessed 24/04/2019)

⁷ The Scottish Government (2014) Scottish Planning Policy [Online] Available at:

<https://www.gov.scot/binaries/content/documents/govscot/publications/publication/2014/06/scottish-planning-policy/documents/00453827-pdf/00453827-pdf/govscot:document/?inline=true/> (Accessed 08/04/2019)

"This SPP introduces a presumption in favour of development which contributes to sustainable development."

In respect of the economic aspects of sustainable development, paragraph 93 of SPP states that planning should give due weight to the net economic benefits of proposed development, whilst paragraph 169 states that proposals for energy infrastructure development should take into account the consideration of net economic impacts, including local and community socio-economic benefits such as employment, associated business and supply chain opportunities.

The Development is also considered to be a well-planned and designed development, and as has been demonstrated throughout this Statement, the Development has been designed to address environmental and technical constraints, whilst also providing a viable development in support of renewable energy.

The Development is therefore considered to comply with SPP.

6.3 National Planning Framework 3 (2014)

National Planning Framework 3⁸ ("NPF3") was published on 23rd June 2014, and sets the context for development planning in Scotland and a framework for spatial development of Scotland as a whole.

It outlines the Scottish Government's development priorities over the next 20 – 30 years and identifies fourteen national developments. It focuses on supporting sustainable economic growth and the transition to a low carbon economy.

NPF3 is a statutory document and is one of the most recent expressions of Scottish Government planning policy. Its findings, including its reiteration of national renewable energy targets, should be afforded significant weight in the determination of planning applications.

Paragraph 2.7 of the NPF3 emphasises the Scottish Government's commitment to embracing new technologies that support combatting climate change:

"Emerging technologies for renewable energy and improved digital connectivity are changing our understanding of what constitutes a sustainable community. We must ensure that development facilitates adaptation to climate change, reduces resource consumption and lowers greenhouse gas emissions."

Paragraph 3.8 reaffirms the Scottish Government's energy targets and states:

"By 2020, we aim to reduce total final energy demand by 12%. To achieve this, and maintain secure energy supplies, improved energy efficiency and further diversification of supplies will be required."

Paragraph 3.13 reiterates the importance of flexibility for decision makers with regards to new technology:

"The low carbon energy sector is fast moving and will continue to be shaped by technological innovation and a changing environment. As a result, our strategy must remain sufficiently flexible to adapt to uncertainty and change so we are well placed to make the most of the new opportunities that will undoubtedly emerge."

NPF3 is supportive of energy developments in appropriate locations and the Development fully accords with these aims and objectives. NPF3 also sets out that planning supports business and employment, including the need for sustainable economic growth and for development to deliver economic growth.

⁸ The Scottish Government (2014) National Planning Framework 3 [Online] Available at: <https://www.gov.scot/publications/national-planning-framework-3/> (Accessed 08/04/2019)

6.4 Climate Change (Scotland) Act (2009)

There is a focus at International, European and national levels on how the UK can deliver secure, clean and affordable energy to consumers. The UK is legally bound through the Climate Change (Scotland) Act (2009)⁹ to reduce carbon emissions.

The Development is designed to support the flexible operation of the National Grid and decarbonisation of electricity supply. The Development would import and export electricity however, would not generate any additional electricity nor have any on-site emissions of CO₂. As such, the Development would contribute to the legal obligations of the Climate Change (Scotland) Act 2009.

6.5 Climate Change (Emissions Reduction Targets (Scotland) Bill

Climate Change (Emissions Reduction Targets) (Scotland) Bill¹⁰ (“the Climate Change Bill”) was introduced to the Scottish Parliament on 23rd May 2018.

The primary objective of the Climate Change Bill is to raise the ambition of the greenhouse gas emissions reduction targets set out in the Climate Change (Scotland) Act 2009 (“the 2009 Act”). The 2009 Act established Scotland as a world leader in tackling climate change. The Climate Change Bill reaffirms the Scottish Government’s commitment to remain at the forefront of global ambition. This is achieved by increasing the ambition of the emissions reduction targets in line with an appropriate contribution to limiting global temperature rises to 1.5 degrees Celsius above pre-industrial levels

The Climate Change Bill increases the target levels for 2020 and 2050, and introduces interim targets for 2030 and 2040. The interim and 2050 target levels proposed: are 56% reduction by 2020; 66% reduction by 2030; 78% reduction by 2040; and finally 90% reduction by 2050. These target levels are arguably the most ambitious legislative targets in the world. The target levels proposed are those that the Climate Change Committee (“CCC”) set out as a high ambition scenario. The Scottish Government accepted the CCC high ambition scenario as Scotland’s targets should be very challenging, and should reflect a fair contribution to maintaining global temperatures to well below 2 degrees above pre-industrial levels as set out in the Paris Agreement.

The Development will help contribute to Scotland’s ability to achieve emissions reduction targets, and will directly support national and international efforts to combat climate change. The Development is therefore considered to comply with the requirements of the Climate Change (Emissions Reduction Targets) (Scotland) Bill.

6.6 Scottish Energy Strategy: The Future of Energy in Scotland

The Scottish Energy Strategy: the Future of Energy in Scotland¹¹ (“the Energy Strategy”) was published in December 2017 and establishes the importance of the energy sector in Scotland and the delivery of goals and policies with the Strategy.

The Energy Strategy addresses that Scotland should not only have the capacity and connections to maintain secure and reliable energy supplies but also have the flexibility and resilience as an additional priority and that developments that provide an innovative local energy system will be supported by the Scottish Government.

⁹ UK Government (2009) Climate Change (Scotland) Act 2009 [Online] Available at: <https://www.legislation.gov.uk/asp/2009/12/contents> (Accessed 08/04/2019)

¹⁰ The Scottish Parliament (2018) Climate Change (Emissions Reduction Targets) (Scotland) Bill, [Online], Available at: [http://www.parliament.scot/Climate%20Change%20\(Emissions%20Reduction%20Targets\)%20\(Scotland\)%20Bill/SPBill30PMS052018.pdf](http://www.parliament.scot/Climate%20Change%20(Emissions%20Reduction%20Targets)%20(Scotland)%20Bill/SPBill30PMS052018.pdf) (Accessed 08/04/2019)

¹¹ The Scottish Government (2017) Scottish Energy Strategy: The Future of Energy in Scotland [Online] Available at: <https://www.gov.scot/publications/scottish-energy-strategy-future-energy-scotland-9781788515276/> (Accessed 08/04/2019)

The Energy Strategy emphasises that a diverse and well-balanced energy supply portfolio or 'energy mix' will continue to be essential as Scotland continues attempts to decarbonise heat, transport and electricity systems.

The UK's exit from the European Union ("Brexit") could have a significant bearing on future energy systems. The impacts of Brexit are largely amplified in Scotland due to the important role that energy plays in the Scottish economy. Being part of the internal European energy market is vitally important, as it safeguards Scotland's energy security. Legally-binding European Union renewable energy and energy efficiency targets have played a defining role in stimulating the huge growth in renewable energy in Scotland. The ability to continue trading energy openly and fully across Europe can, if unaffected, play a big part in the progress we make towards Scotland's renewable and climate change targets, and the growth of Scotland's low carbon energy sector.

The Development will contribute to the continued growth and improvement of the energy sector in Scotland, and will serve to diversify the energy mix by supporting the use of intermittent renewable energy generation technology. The Development is therefore considered to be compliant with the Scottish Energy Strategy.

6.7 A Plan for Scotland: The Scottish Government's Programme for Scotland 2018 – 2019 (September 2018)

The Plan for Scotland: The Scottish Government's Programme for Scotland 2018 – 2019¹² was published on 4th of September 2018, and builds on the climate change targets from previous programmes to reduce greenhouse gas emissions.

The Programme states that the proposals in the new Climate Change (Emission Reduction Targets) (Scotland) Bill will introduce tougher targets and ensure that Scotland plays its full part in effects to limit global temperature rise to below 2°C above pre-industrial levels. The 90% reduction target for all greenhouse gases set out in the Climate Change Bill means achieving net-zero carbon dioxide by 2050. In other words, Scotland will be carbon neutral.

The Scottish Government is committed to achieving net-zero emissions of all greenhouse gases as soon as possible. To achieve this, targets include the equivalent of 50% of the energy for Scotland's heat, transport and electricity consumption to be supplied from renewable resources, and an increase by 30% in the productivity of energy use across the Scottish Economy.

The ongoing support granted by the 2018 - 2019 programme to energy developments such as the Development indicates the level of support such proposals warrant from the Scottish Government. The Development will contribute to achieving the ambitious net-zero emissions target, and assist with the 90% reduction target for greenhouse gases by supporting the National Grid through the intermittent generation associated with renewable energy technology. The Development is therefore considered to be in line with the principles of the Programme for Scotland.

6.8 Climate Change Plan: the third Report on Proposals and Policies 2018 – 2032

Published in February 2018, the Climate Change Plan¹³ sets out a new transport emissions reduction target of 37% for the reduction in emissions from transport to be achieved by 2032 and outlines the approach in realising the emissions reduction target of

¹² The Scottish Government (2018) Delivering for today, investing for tomorrow: the Government's programme for Scotland 2018 – 2019 [Online] Available at: <https://www.gov.scot/publications/delivering-today-investing-tomorrow-governments-programme-scotland-2018-19/> (Accessed 08/04/2019)

¹³ The Scottish Government (2018) Climate Change Plan: third report on proposals and Policies 2018 – 2032 (RPP3) [Online] Available at: <https://www.gov.scot/publications/scottish-governments-climate-change-plan-third-report-proposals-policies-2018/> (Accessed 08/04/2019)

80% by 2050 and Scotland's approach to the Paris Agreement. Generally, the plan sets out a requirement for an emissions reduction plan that maximises opportunities for Scotland whilst protecting the domestic economy.

The Development will contribute to reducing emissions from energy sources in Scotland, whilst providing diversity in the energy sector, especially as long-term centralised sources go offline. The Development is therefore considered to fully comply with the Climate Change Plan.

6.9 The Scottish Soil Framework

The Scottish Soil Framework (2009)¹⁴ discusses how to integrate decision-making regarding soil into the development process. The Framework promotes the sustainable management and protection of soils, whilst recognising the economic, social and environmental needs of Scotland. This identifies that there is a balance needed between protection of soils and development of land.

6.10 Getting The Best From Our Land: A Land Use Strategy for Scotland

Scotland's Land Use Strategy (2011)¹⁵ outlines the ways in which Scotland's land resources will be used in the future, with a focus on economic performance, the environment, sense of place and community, and quality of life. The Strategy states that land use decision making in regards to the location of infrastructure should take account of the benefits of development, and should utilise a range of material considerations relating to land use throughout the decision making process.

The Strategy sets out key principles for the use and management of Scotland's land. It emphasises that land use should deliver multiple benefits and encourages us to make best use of our land assets.

6.11 System Integration Costs for Alternative Low Carbon Generation Technologies

The system integration costs for alternative low carbon generation technologies report produced for the Committee on Climate Change¹⁶ in 2015 finds that technologies which provide flexible solutions, such as the Development "*will be essential for managing the costs associated with integrating low carbon plant onto the power system and achieving high levels of decarbonisation.*"

The Development will offer support to intermittent energy generation, and will serve to help with the integration of these technologies into the energy mix. The Development is therefore considered to be supported by the principles of the report.

7 DETERMINATION AND CONCLUSIONS

This Statement accompanies the notice of review to the Development Management Review Committee at Angus Council to review the case of Planning Application Ref. 18/00810/FULL for the construction and operation of a Battery Electricity Storage Facility and associated infrastructure on land adjacent to the Arbroath substation, which was refused on the 1st February 2019.

¹⁴ The Scottish Government (2009) The Scottish Soil Framework [Online] Available at: <https://www.gov.scot/publications/scottish-soil-framework/> (Accessed 24/04/2019)

¹⁵ The Scottish Government (2011) Getting the best from our land: land use strategy for Scotland [Online] Available at: <https://www.gov.scot/publications/getting-best-land-land-use-strategy-scotland/> (Accessed 24/04/2019)

¹⁶ Committee on Climate Change, (2015), System Integration Costs for Alternative Low Carbon Generation Technologies (NERA), [Online] Available at: <https://www.theccc.org.uk/publication/system-integration-costs-for-alternative-low-carbon-generation-technologies-policy-implications/> (Accessed 08/04/2019)

This Statement has set out the full particulars of the Appeal, outlined the components of the Development, and reviewed the planning history of the Site and pre-application advice received.

A summary of the key consultee responses has been provided, outlining that there are no objections from any of the statutory consultees and only one Third Party response to the Application. Additionally, it is important to note that the applicant for the adjacent consented housing development did not submit an objection to the Application.

The Statement examined the reasons for refusal and addressed these arguments with reference to LDP policies. The two primary reasons for refusal related to development outside of the development boundary, and development on prime agricultural land. Section 5.2.1 outlined the operational requirements of the Development and the locational necessity of the chosen location outside of the development boundary adjacent to the existing substation, and further explored the economic, social and environmental benefits of the Development. The Statement then discussed the limited impacts on prime agricultural land in Angus, with the Development only resulting in a loss of 0.0007% of the overall amount of prime agricultural land in the Council area.

The subsequent sections discuss additional points made by the case officer in the Report of Handling which did not directly result in refusal, such as impacts to visual amenity and landscape character, flood risk, traffic and road safety, noise and lighting and ecology. These sections re-emphasised why the Development was considered by both the Appellant and the case officer to be acceptable in these regards. The Statement examines additional concerns from the Appellant regarding the lack of correspondence from the case officer during the determination process regarding their concerns surrounding the landscaping of the Development.

Finally, a range of material considerations which are considered to give weight to the Development have been examined. Of note is the Development's role in supporting the development of renewable energy across the UK, and its contribution to reducing carbon emissions and meeting climate change targets. The Appellant considers these documents to be material to the determination of the Application.

Given the conclusions and further information provided within this Statement, the Development is considered to be acceptable with regard to the issues raised by the case officer in the Report of Handling. Alongside this Application the Appellant has provided some suggested conditions to ensure the Development's acceptability in relation to the development plan.

It is therefore respectfully requested that the Local Review Body overturn the refusal decision and approve the planning application.



ARCUS

**BATTERY ELECTRICITY STORAGE FACILITY,
EAST OF CRUDIE ACRE COTTAGE,
ARBROATH**

APPENDIX 1: SUGGESTED PLANNING CONDITIONS

Appeal by Coronation Power Limited

APRIL 2019

Prepared By:
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1 INTRODUCTION

This document is presented as an appendix to the Statement of Case ('the Statement') prepared by Arcus Consultancy Services Ltd ('Arcus'), on behalf of Coronation Power Limited ('the Appellant'), to accompany the notice of review ('the Review') to the Development Management Review Committee ('the Committee') at Angus Council ('the Council') to review the case of Planning Application Ref. 18/00810/FULL ('the Application') for the Construction and Operation of a Battery Electricity Storage Facility and Associated Infrastructure ('the Development') which has been refused on the 1st February 2019.

The document provides a number of suggested planning conditions based on the analysis within the Statement to ensure the Development's compliance with the policies and principles of the Local Development Plan.

If the Local Review Body is minded to approve the application it is considered that the following conditions could be applied. The Appellant would be willing to discuss the wording of these conditions with the Council or any alternative conditions considered necessary for the approval of the application.

2 SUGGESTED PLANNING CONDITIONS

1) The development shall be begun before the expiration of three years from the date of this permission.

Reason: In accordance with Section 58 of the Town and Country Planning (Scotland) Act 1997 (as amended).

2) No works in connection with the development hereby approved shall commence unless a scheme of hard and soft landscaping works has been submitted to and approved in writing by the planning authority. Details of the scheme shall include:

- a) Existing landscape features and vegetation to be retained.
- b) Protection measures for the landscape features to be retained.
- c) Existing and proposed finished levels.
- d) The location of new trees, shrubs, hedges, grassed areas and water features.
- e) A schedule of planting to comprise species, plant sizes and proposed numbers and density.
- f) The location, design and materials of all hard landscaping works including fences, and gates.
- g) An indication of existing trees, shrubs and hedges to be removed.
- h) A programme for the implementation, completion and subsequent management of the proposed landscaping.

All soft and hard landscaping proposals shall be carried out in accordance with the approved planting scheme and management programme. Any planting which, within a period of 5 years from the completion of the development, in the opinion of the planning authority is dying, being severely damaged or becoming seriously diseased, shall be replaced by plants of similar size and species to those originally required to be planted. Once provided, all hard landscaping works shall thereafter be permanently retained.

Reason: To ensure the implementation and management of a satisfactory scheme of landscaping which will help to integrate the proposed development into the local landscape in the interests of the visual amenity of the area.

3) Prior to commencement of development, Visibility Splays, measuring 2.4m by 215 m west and 180 m east of the junction of the vehicular access with the public road. The

visibility splays so formed shall thereafter be kept free of all permanent obstructions above adjacent carriageway level.

Reason: To ensure the provision of a means of access to an adequate standard in the interests of public safety.

4) Notwithstanding the submitted details, prior to the erection of any fencing or the construction of any buildings or the siting of any structures/ plant details of their appearance, including colours and finishes, shall be submitted to the local planning authority for approval in writing.

Reason: To ensure the design of the development is acceptable in terms of the visual amenity of the area.

5) The restoration and landscaping of the site must be detailed in a dedicated site restoration plan, the details of which must be confirmed in writing by the planning authority. Restoration of the site shall be progressively completed in stages as soon as reasonably practicable in accordance with the scheme approved.

Reason: To ensure the site is able to return to its former status as productive agricultural land.

6) The Development shall operate in accordance with the parameters contained within the Noise Impact Assessment prepared by Arcus Consultancy Services (December 2018) and subsequent Noise Letter, dated January 2019.

Reason: To ensure that noise limits are not exceeded and to enable prompt investigation of complaints in order to protect nearby residents from undue noise and disturbance from the development.

7) Details of any lighting at the site shall be submitted to and agreed in writing with the local planning authority.

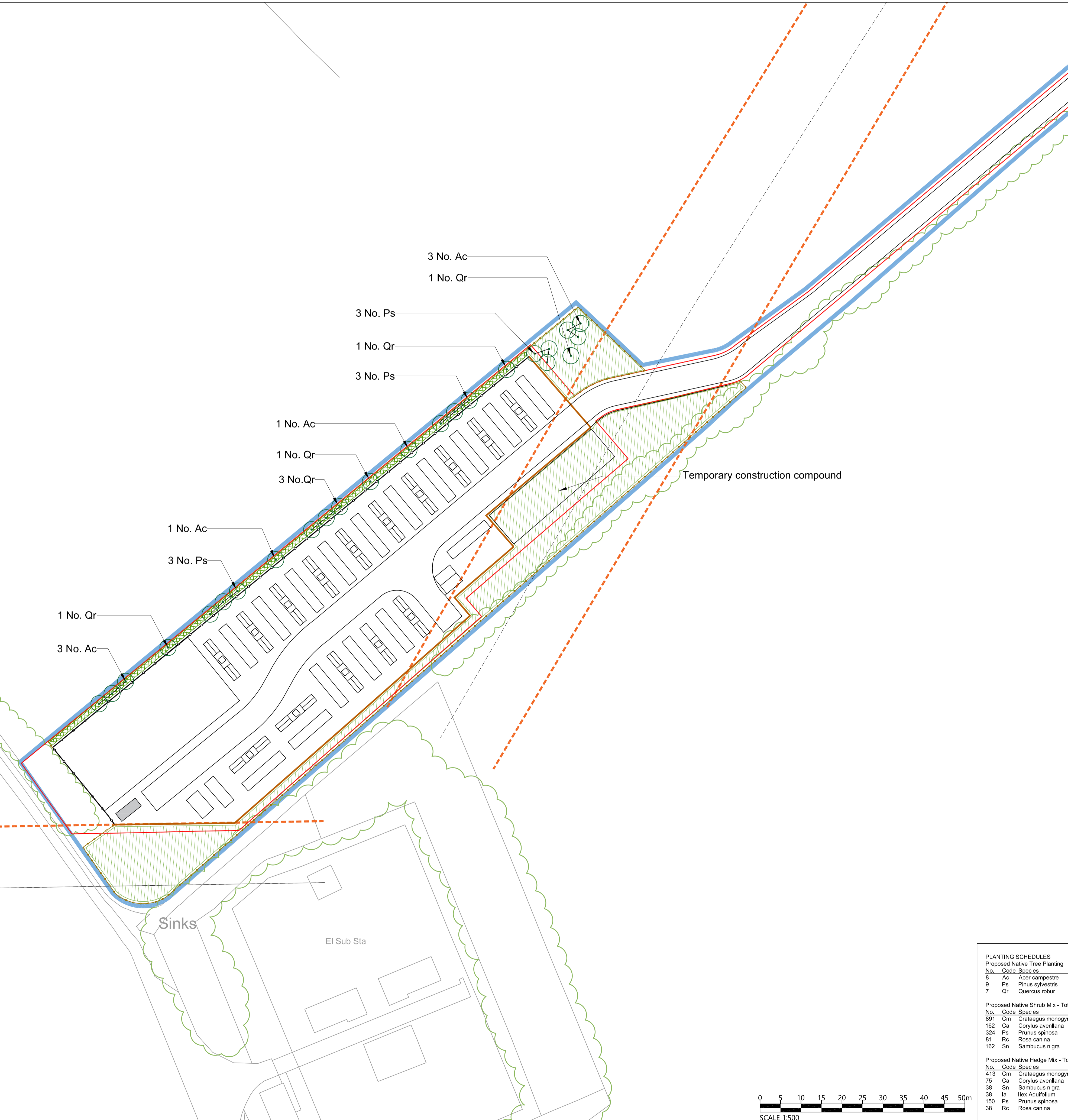
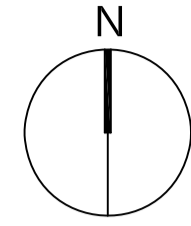
Reason: To ensure that the development does not result in unacceptable levels of light pollution.

8) The mitigation measures detailed in the Preliminary Ecological Appraisal Report prepared by Arcus Consultancy Services (August 2018) should be implemented.

Reason: To ensure that the development does not result in unacceptable ecological impacts.

9) The mitigation measures detailed in the Flood Risk Assessment Report prepared by Arcus Consultancy Services (August 2018) should be implemented.

Reason: To ensure that the development does not result in unacceptable flood risk impacts.



PLANTING SPECIFICATION

The handling of plants to be in accordance with National Plant Specification 'Handling and Establishing Landscape Plants'. All plants and planting operations are to comply with the requirements and recommendations of all current relevant British Standard specification including but not limited to:

- BS 8545 - Trees: From Nursery to Independence in the Landscape
- BS 3936-1:1992 - Nursery stock, Specification for trees and shrubs
- BS 3882:2015 - Specification for topsoil
- BS 4428:1989 - Code of practice for general landscape operations (excluding hard surfaces) (AMD 6784)
- BS 5837:2012 - Trees in relation to design, demolition and construction, Recommendations

All planting to be carried out during appropriate climatic conditions and where possible in the optimal planting period October through until March. Existing topsoil and/or imported, clean/inert horticultural ameliorant's from sustainable sources. Any hedgerows cut back or removed during the construction phase to be reinstated post build.

Clearance
Fastened Tree and Shrub Planting
 Clear all grass and perennial vegetation including brambles, suckering and epocormic growth. All arising's to be removed from site.

Herbicide and cultivation
 Topsoil and surface vegetation (within all proposed meadow grassland areas where shrub removal and clearance work has occurred only) to be treated with two applications of selective broadleaf herbicide prior to planting and seeding, where necessary, avoiding bulb and wildflowers and strictly in accordance with the Control of Pesticides Regulations 1986 (COPR) (as amended 1997) (or, otherwise, updated/superseded legislation) and following manufacturer's instructions by qualified staff.

General
 All rubbish and debris to be removed from site. Stone picking of all stones and debris over 25mm to be undertaken across site. All trees and shrubs to be retained to be protected during works in line with BS5837:2012.

Tree works
 Any required works to existing trees to be undertaken in line with BS 3996:2010.

Topsoil
 Topsoil shall be a minimum of 400mm deep over new planting areas and graded to fall. Where necessary imported topsoil must be BS 3882:2015 compliant and existing topsoil must be cultivated in accordance with BS 3882:2015 outside RPAs of existing trees. No cultivation should take place in wet/ waterlogged conditions and within the RPAs of existing trees.

Trees
 All trees to be planted in pits 1200mm diameter x 750mm deep, or dimensions of rootball, whichever is greater. Tree to be supported by 1no. stake, 1no. biodegradable tie and appropriate tree guard.

Hedge
 Hedging to comprise of a double staggered row, 300mm between plants and 500mm between rows. All plants to be notch planted with shrub / rabbit guards and canes.

Shrubs
 Shrubs to comprise a random mix in groups of 1, 3, and 5 and notch planted. All shrub plants to be planted with shrub shelter/rabbit guard and cane.

Mulch
 All shrub and tree planting areas to be covered using coarse bark mulch 75mm deep, leaving stem of plant clear.

Plant position
 Final position of trees and shrubs subject to confirmation of service location and approval of statutory undertakers. Allow for location of service information prior to work commencing on site.

Plant Quality
 Supplier listed in the Horticultural Trades Association, Nursery Certification Scheme.

Key

- Application Boundary
- Land under the control of the Applicant
- Overhead Power Line
- Overhead Power Line 15m offset
- Existing Vegetation Retained
- Proposed Native Shrub Planting
- Proposed Tree Planting
- Proposed Hedge Planting
- Proposed Stock proof / Deer Fence

NOTES:

- Stock proof / deer fence, subject to confirmation of adjacent land use.
- All proposed trees to be planted out with the highlighted overhead power line easements.

REVISION SCHEDULE

Rev	Date	Description
A	14.08.18	Amended to reflect revised site layout (JC)
B	29.08.18	Amended to reflect change in site access (JC)

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PLANTING SCHEDULES

Proposed Native Tree Planting

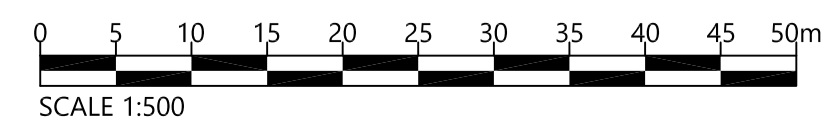
No.	Code	Species	Common name	Form	Age	Height (cm)	Root
8	Ac	Acer campestre	Field Maple	Feathered	2x	150-175	BR
9	Ps	Pinus sylvestris	Scots Pine	-	4x	150-175	RB
7	Qr	Quercus robur	Common Oak	Feathered	2x	150-175	BR

Proposed Native Shrub Mix - Total Area: 1620m², planted 1 plant per m²

No.	Code	Species	Common name	Form	Age	Height (cm)	Root	Mix (%)
891	Cm	Crataegus monogyna	Hawthorn	Transplant	1+1	60-80	BR	55
162	Ca	Corylus avellana	Hazel	Transplant	1+1	60-80	BR	10
324	Ps	Prunus spinosa	Blackthorn	Transplant	1+1	60-80	BR	20
81	Rc	Rosa canina	Dog Rose	Transplant	1+1	60-80	BR	5
162	Sn	Sambucus nigra	Elder	Transplant	1+1	60-80	BR	10

Proposed Native Hedge Mix - Total Area: 150 lin.m, planted 5 per m in double staggered row

No.	Code	Species	Common name	Form	Age	Height (cm)	Root	Mix (%)
413	Cm	Crataegus monogyna	Hawthorn	Transplant	1+1	60-80	BR	55
75	Ca	Corylus avellana	Hazel	Transplant	1+1	60-80	BR	10
38	Sn	Sambucus nigra	Elder	Transplant	1+1	60-80	BR	5
38	Ia	Ilex Aquifolium	Holly	Transplant	1+1	60-80	BR	5
150	Ps	Prunus spinosa	Blackthorn	Transplant	1+1	60-80	BR	20
38	Rc	Rosa canina	Dog Rose	Transplant	1+1	60-80	BR	5



STATUS: FOR PLANNING

BASE: 3055-M2-0001

GRID REFERENCE: NO 61971 41565

PROJECT: ABRDATH BATTERY STORAGE ANGUS

TITLE: LANDSCAPE MASTERPLAN

CLIENT: CORONATION POWER

DATE: 08.08.2018 SCALE: 1:500@A1

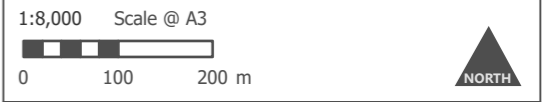
DRAWN: BM DRAWING NO.: 3055-DR-LAN-101

CHECKED: JC REVISION: B

ARCUS
 Arcus Consultancy Services
 Landscape Architecture &
 Arboriculture
 1C Swinigate Court East
 York, YO1 8BA
 tel: +44 (0)1904 715 470
 www.arcusconsulting.co.uk



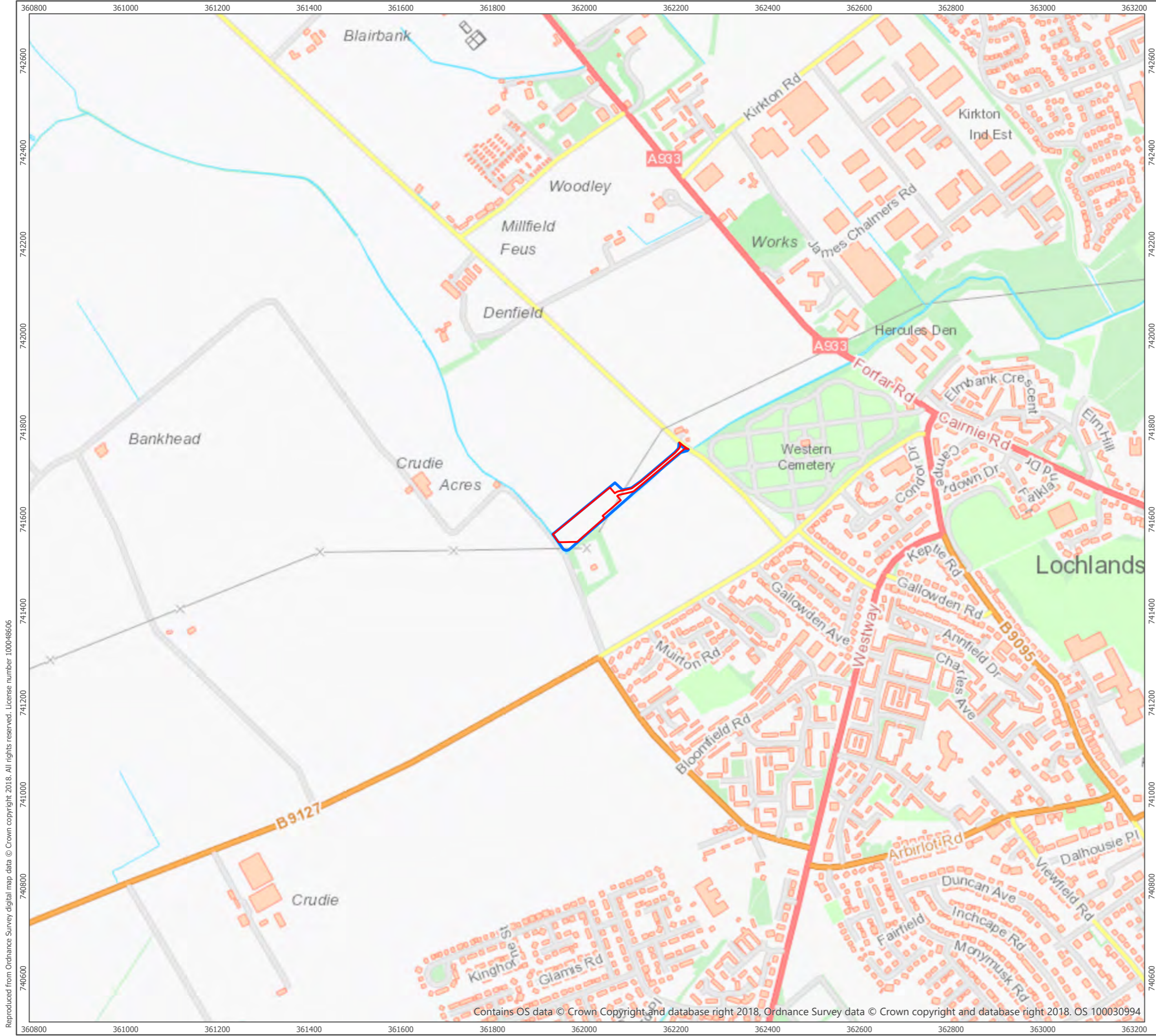
- Land Under Control of Applicant
- Planning Application Boundary



Produced By: KE	Ref: 3055-REP-001
Checked By: AM	Date: 30/08/2018

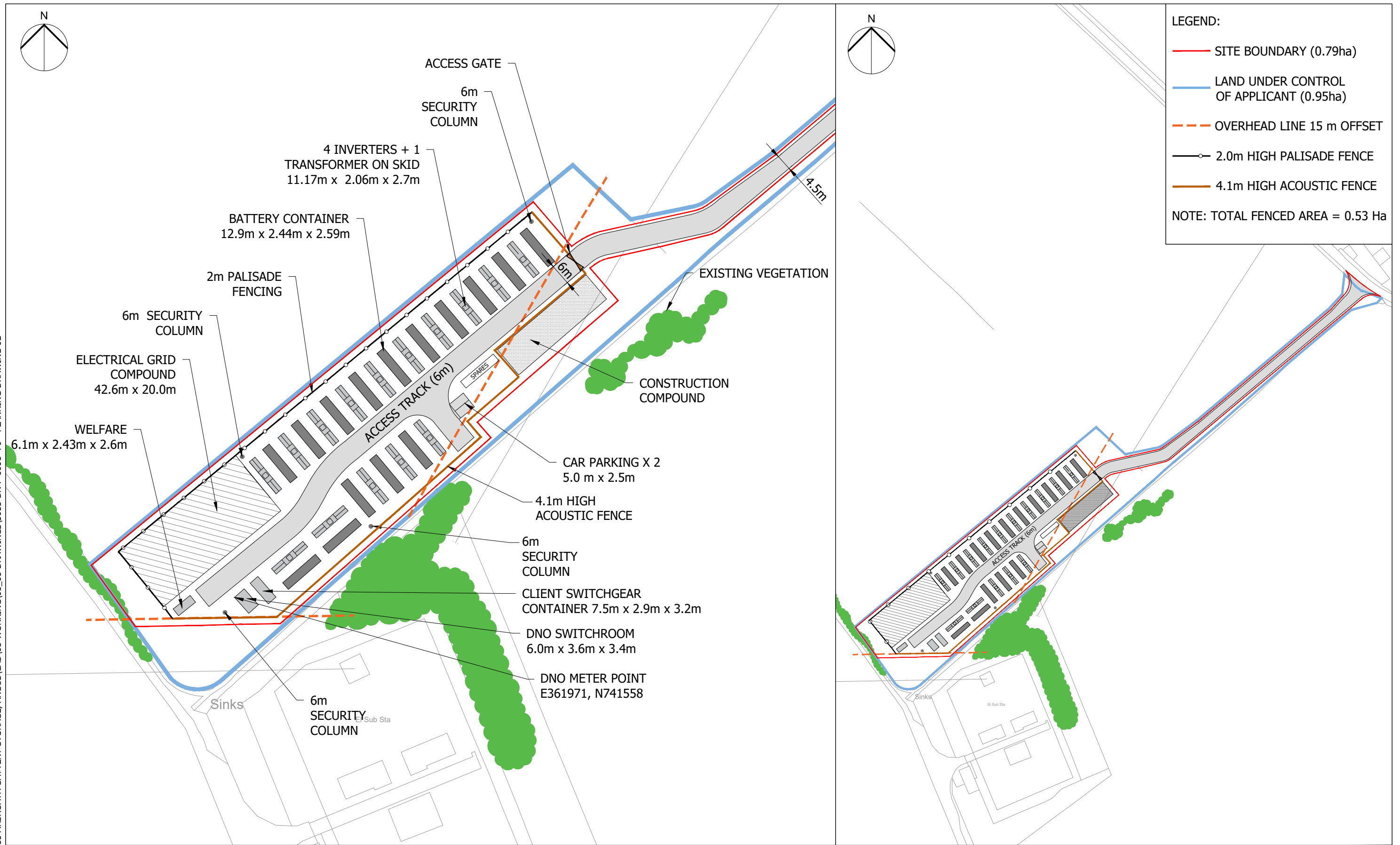
Site Location Plan
Planning Drawing 001

Arbroath Battery Electricity Storage
Planning Application



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Plot Date : 30 August 2018 09:35:15
File Name P:\PROJECTS\3055 ARBROATH BATTERY STORAGE, ANGUS\CAD\01-WORKING\01_01-DRAWINGS\3055-DR-P-0001-P9 - PLANNING DRAWING 02

Project Title ARBROATH BATTERY STORAGE ANGUS		Drawing Title PLANNING DRAWING 002 SITE LAYOUT PLAN		Purpose of issue PRELIMINARY		THIS DOCUMENT HAS BEEN PREPARED IN ACCORDANCE WITH THE SCOPE OF ARCUS' APPOINTMENT WITH ITS CLIENT AND IS SUBJECT TO THE TERMS OF THAT APPOINTMENT. ARCUS ACCEPTS NO LIABILITY FOR ANY USE OF THIS DOCUMENT OTHER THAN BY ITS CLIENT AND ONLY FOR THE PURPOSES FOR WHICH IT WAS PREPARED AND PROVIDED		Arcus Consultancy Services 7th Floor 144 West George Street Glasgow, G2 2HG Tel: +44 (0)141 221 9997 Fax: +44 (0)141 221 5610 www.arcusconsulting.co.uk	
Client CORONATION POWER		Scale @ A3 1:1000		Designed KB	Drawn KB	Checked DB	Approved AM	Drawing Number 3055-DR-P-0001	Rev 9
		Arcus Internal Project No. 3055		Date 28/08/18					





Angus House Orchardbank Business Park Forfar DD8 1AN Tel: 01307 473360 Fax: 01307 461 895 Email: plnprocessing@angus.gov.uk

Applications cannot be validated until all the necessary documentation has been submitted and the required fee has been paid.

Thank you for completing this application form:

ONLINE REFERENCE 100131097-001

The online reference is the unique reference for your online form only. The Planning Authority will allocate an Application Number when your form is validated. Please quote this reference if you need to contact the planning Authority about this application.

Type of Application

What is this application for? Please select one of the following: *

- Application for planning permission (including changes of use and surface mineral working).
- Application for planning permission in principle.
- Further application, (including renewal of planning permission, modification, variation or removal of a planning condition etc)
- Application for Approval of Matters specified in conditions.

Description of Proposal

Please describe the proposal including any change of use: * (Max 500 characters)

The Development would consist of containerised battery storage units, inverters and transformers on skids, DNO substation, client switchgear container, electrical grid compound, welfare and parts storage container, security columns and planting, which would all be contained within a 2 m high perimeter security fence, and site access track

Is this a temporary permission? *

Yes No

Description of Proposal Cont.

Please state how long permission is required for and why: * (Max 500 characters)

Not known

If a change of use is to be included in the proposal has it already taken place?

Yes No

(Answer 'No' if there is no change of use.) *

Has the work already been started and/or completed? *

No Yes – Started Yes - Completed

Applicant or Agent Details

Are you an applicant or an agent? * (An agent is an architect, consultant or someone else acting on behalf of the applicant in connection with this application)

Applicant Agent

Agent Details

Please enter Agent details

Company/Organisation:	Arcus Consultancy Service Ltd		
Ref. Number:	<input type="text"/>	You must enter a Building Name or Number, or both: *	
First Name: *	Jamie	Building Name:	7th Floor
Last Name: *	Gilliland	Building Number:	144
Telephone Number: *	0141 221 9997	Address 1 (Street): *	West George Street
Extension Number:	<input type="text"/>	Address 2:	<input type="text"/>
Mobile Number:	<input type="text"/>	Town/City: *	Glasgow
Fax Number:	<input type="text"/>	Country: *	United Kingdom
		Postcode: *	G2 2HG
Email Address: *	JamieG@arcusconsulting.co.uk		

Is the applicant an individual or an organisation/corporate entity? *

Individual Organisation/Corporate entity

Applicant Details

Please enter Applicant details

Title:	<input type="text"/>	You must enter a Building Name or Number, or both: *	
Other Title:	<input type="text"/>	Building Name:	108
First Name: *	<input type="text"/>	Building Number:	<input type="text"/>
Last Name: *	<input type="text"/>	Address 1 (Street): *	Aldersgate Street
Company/Organisation	Coronation Power Limited	Address 2:	<input type="text"/>
Telephone Number: *	<input type="text"/>	Town/City: *	London
Extension Number:	<input type="text"/>	Country: *	England
Mobile Number:	<input type="text"/>	Postcode: *	EC1A 4JQ
Fax Number:	<input type="text"/>		
Email Address: *	<input type="text"/>		

Site Address Details

Planning Authority:

Angus Council

Full postal address of the site (including postcode where available):

Address 1:

Address 2:

Address 3:

Address 4:

Address 5:

Town/City/Settlement:

Post Code:

Please identify/describe the location of the site or sites

Northing

741675

Easting

362057

Pre-Application Discussion

Have you discussed your proposal with the planning authority? *

Yes No

Pre-Application Discussion Details Cont.

In what format was the feedback given? *

Meeting Telephone Letter Email

Please provide a description of the feedback you were given and the name of the officer who provided this feedback. If a processing agreement [note 1] is currently in place or if you are currently discussing a processing agreement with the planning authority, please provide details of this. (This will help the authority to deal with this application more efficiently.) * (max 500 characters)

The council advised the development was not in accordance with policy DS1 of the Angus Local Development Plan, thus meaning that it was likely the development may be refused. Since this response the design evolution has considered key points raised by the council during the pre-application consultation.

Title:

Mr

Other title:

First Name:

Fraser

Last Name:

MacKenzie

Correspondence Reference Number:

18/00439/PREAPP

Date (dd/mm/yyyy):

15/06/2018

Note 1. A Processing agreement involves setting out the key stages involved in determining a planning application, identifying what information is required and from whom and setting timescales for the delivery of various stages of the process.

Site Area

Please state the site area:

0.79

Please state the measurement type used:

Hectares (ha) Square Metres (sq.m)

Existing Use

Please describe the current or most recent use: * (Max 500 characters)

Agricultural Land

Access and Parking

Are you proposing a new altered vehicle access to or from a public road? *

Yes No

If Yes please describe and show on your drawings the position of any existing. Altered or new access points, highlighting the changes you propose to make. You should also show existing footpaths and note if there will be any impact on these.

Are you proposing any change to public paths, public rights of way or affecting any public right of access? *

Yes No

If Yes please show on your drawings the position of any affected areas highlighting the changes you propose to make, including arrangements for continuing or alternative public access.

How many vehicle parking spaces (garaging and open parking) currently exist on the application Site?

0

How many vehicle parking spaces (garaging and open parking) do you propose on the site (i.e. the Total of existing and any new spaces or a reduced number of spaces)? *

4

Please show on your drawings the position of existing and proposed parking spaces and identify if these are for the use of particular types of vehicles (e.g. parking for disabled people, coaches, HGV vehicles, cycles spaces).

Water Supply and Drainage Arrangements

Will your proposal require new or altered water supply or drainage arrangements? *

Yes No

Do your proposals make provision for sustainable drainage of surface water?? * (e.g. SUDS arrangements) *

Yes No

Note:-

Please include details of SUDS arrangements on your plans

Selecting 'No' to the above question means that you could be in breach of Environmental legislation.

Are you proposing to connect to the public water supply network? *

- Yes
 No, using a private water supply
 No connection required

If No, using a private water supply, please show on plans the supply and all works needed to provide it (on or off site).

Assessment of Flood Risk

Is the site within an area of known risk of flooding? *

Yes No Don't Know

If the site is within an area of known risk of flooding you may need to submit a Flood Risk Assessment before your application can be determined. You may wish to contact your Planning Authority or SEPA for advice on what information may be required.

Do you think your proposal may increase the flood risk elsewhere? *

Yes No Don't Know

Trees

Are there any trees on or adjacent to the application site? *

Yes No

If Yes, please mark on your drawings any trees, known protected trees and their canopy spread close to the proposal site and indicate if any are to be cut back or felled.

Waste Storage and Collection

Do the plans incorporate areas to store and aid the collection of waste (including recycling)? *

Yes No

If Yes or No, please provide further details: * (Max 500 characters)

no waste will be generated

Residential Units Including Conversion

Does your proposal include new or additional houses and/or flats? *

Yes No

All Types of Non Housing Development – Proposed New Floorspace

Does your proposal alter or create non-residential floorspace? *

Yes No

Schedule 3 Development

Does the proposal involve a form of development listed in Schedule 3 of the Town and Country Planning (Development Management Procedure (Scotland) Regulations 2013) *

Yes No Don't Know

If yes, your proposal will additionally have to be advertised in a newspaper circulating in the area of the development. Your planning authority will do this on your behalf but will charge you a fee. Please check the planning authority's website for advice on the additional fee and add this to your planning fee.

If you are unsure whether your proposal involves a form of development listed in Schedule 3, please check the Help Text and Guidance notes before contacting your planning authority.

Planning Service Employee/Elected Member Interest

Is the applicant, or the applicant's spouse/partner, either a member of staff within the planning service or an elected member of the planning authority? *

Yes No

Certificates and Notices

CERTIFICATE AND NOTICE UNDER REGULATION 15 – TOWN AND COUNTRY PLANNING (DEVELOPMENT MANAGEMENT PROCEDURE) (SCOTLAND) REGULATION 2013

One Certificate must be completed and submitted along with the application form. This is most usually Certificate A, Form 1, Certificate B, Certificate C or Certificate E.

Are you/the applicant the sole owner of ALL the land? *

Yes No

Is any of the land part of an agricultural holding? *

Yes No

Do you have any agricultural tenants? *

Yes No

Are you able to identify and give appropriate notice to ALL the other owners? *

Yes No

Certificate Required

The following Land Ownership Certificate is required to complete this section of the proposal:

Certificate B

Land Ownership Certificate

Certificate and Notice under Regulation 15 of the Town and Country Planning (Development Management Procedure) (Scotland) Regulations 2013

I hereby certify that

(1) - No person other than myself/the applicant was an owner [Note 4] of any part of the land to which the application relates at the beginning of the period of 21 days ending with the date of the accompanying application;

or –

(1) - I have/The Applicant has served notice on every person other than myself/the applicant who, at the beginning of the period of 21 days ending with the date of the accompanying application was owner [Note 4] of any part of the land to which the application relates.

Name:

Mr Peter John Stirling

Address:

Windy Hills Farm, Auchmithie, Arbroath, DD11 5SF

Date of Service of Notice: *

12/10/2018

(2) - None of the land to which the application relates constitutes or forms part of an agricultural holding;

or –

(2) - The land or part of the land to which the application relates constitutes or forms part of an agricultural holding and I have/the applicant has served notice on every person other than myself/himself who, at the beginning of the period of 21 days ending with the date of the accompanying application was an agricultural tenant. These persons are:

Name:

Address:

Date of Service of Notice: *

Signed: Jamie Gilliland

On behalf of: Coronation Power Limited

Date: 12/10/2018

Please tick here to certify this Certificate. *

Checklist – Application for Planning Permission

Town and Country Planning (Scotland) Act 1997

The Town and Country Planning (Development Management Procedure) (Scotland) Regulations 2013

Please take a few moments to complete the following checklist in order to ensure that you have provided all the necessary information in support of your application. Failure to submit sufficient information with your application may result in your application being deemed invalid. The planning authority will not start processing your application until it is valid.

a) If this is a further application where there is a variation of conditions attached to a previous consent, have you provided a statement to that effect? *

Yes No Not applicable to this application

b) If this is an application for planning permission or planning permission in principle where there is a crown interest in the land, have you provided a statement to that effect? *

Yes No Not applicable to this application

c) If this is an application for planning permission, planning permission in principle or a further application and the application is for development belonging to the categories of national or major development (other than one under Section 42 of the planning Act), have you provided a Pre-Application Consultation Report? *

Yes No Not applicable to this application

Town and Country Planning (Scotland) Act 1997

The Town and Country Planning (Development Management Procedure) (Scotland) Regulations 2013

d) If this is an application for planning permission and the application relates to development belonging to the categories of national or major developments and you do not benefit from exemption under Regulation 13 of The Town and Country Planning (Development Management Procedure) (Scotland) Regulations 2013, have you provided a Design and Access Statement? *

Yes No Not applicable to this application

e) If this is an application for planning permission and relates to development belonging to the category of local developments (subject to regulation 13. (2) and (3) of the Development Management Procedure (Scotland) Regulations 2013) have you provided a Design Statement? *

Yes No Not applicable to this application

f) If your application relates to installation of an antenna to be employed in an electronic communication network, have you provided an ICNIRP Declaration? *

Yes No Not applicable to this application

g) If this is an application for planning permission, planning permission in principle, an application for approval of matters specified in conditions or an application for mineral development, have you provided any other plans or drawings as necessary:

Site Layout Plan or Block plan.

Elevations.

Floor plans.

Cross sections.

Roof plan.

Master Plan/Framework Plan.

Landscape plan.

Photographs and/or photomontages.

Other.

If Other, please specify: * (Max 500 characters)

Provide copies of the following documents if applicable:

A copy of an Environmental Statement. *

Yes N/A

A Design Statement or Design and Access Statement. *

Yes N/A

A Flood Risk Assessment. *

Yes N/A

A Drainage Impact Assessment (including proposals for Sustainable Drainage Systems). *

Yes N/A

Drainage/SUDS layout. *

Yes N/A

A Transport Assessment or Travel Plan

Yes N/A

Contaminated Land Assessment. *

Yes N/A

Habitat Survey. *

Yes N/A

A Processing Agreement. *

Yes N/A

Other Statements (please specify). (Max 500 characters)

*Noise Impact Assessment Report *Utilities Report *Preliminary Ecological Appraisal Report

Declare – For Application to Planning Authority

I, the applicant/agent certify that this is an application to the planning authority as described in this form. The accompanying Plans/drawings and additional information are provided as a part of this application.

Declaration Name: Mr Jamie Gilliland

Declaration Date: 12/10/2018

Payment Details

Cheque: Coronation Power Limited, 101427

Created: 15/10/2018 10:02

Angus Council

Application Number:	18/00810/FULL
Description of Development:	Construction of a Battery Electricity Storage Facility comprising Containerised Battery Storage Units, Inverters and Transformers, DNO Substation, Client Switchgear Container, Electrical Grid Compound, Welfare and Parts Storage Containers and Ancillary Development including Formation of Access Track, Security Fencing, CCTV and Landscaping
Site Address:	Land To East Of Crudie Acre Cottage Arbroath
Grid Ref:	362082 : 741652
Applicant Name:	Coronation Power Limited

Report of Handling**Proposal**

Planning Permission is sought for the formation of a battery electricity storage facility comprising battery storage units, associated plant, welfare and storage containers and engineering works on a 0.79HA area of agricultural land to the north west of Arbroath outwith but immediately adjacent to the development boundary and to the north of the Crudie Acres/East Muirlands Road allocated housing site which is currently under construction.

The development would consist of 15 containerised battery storage units, inverters and 15 transformers on skids, a DNO substation, a switchgear container, an electrical grid compound, a welfare and parts storage container and security columns, which would all be contained within a fenced compound (palisade fence to the north and west and acoustic fence to the south and east). A new access is proposed off the C51 Road to the east of the site and an improved track following the south boundary of the field is proposed. Landscape planting is also proposed.

The Site Location Plan Planning Drawing 001 Ref: 3055-REP-001 Date: 30/08/2018, amends and supersedes Site Location Plan Planning Drawing 001 Ref: 3055-REP-001 Date: 01/08/2018, in that it shows the proposed access track and junction that would merge with the C51 Road.

Planning Drawing 002 Site Layout Plan Drawing Number 3055-DR-P-0001 Rev 10 Date; 10/12/18 amends and supersedes Planning Drawing 002 Site Layout Plan Drawing Number 3055-DR-P-0001 Rev 8 Date; 28/08/18, in that it shows the proposed access track and junction that would merge with the C51 Road and provides an amended layout an noise attenuation measures to earlier site layout drawings.

Publicity

The application was subject to normal neighbour notification procedures.

The application was advertised in the Dundee Courier on 2 November 2018 for the following reasons:

- Contrary to Development Plan

The nature of the proposal did not require a site notice to be posted.

Planning History

Pre-Application Enquiry Reference: 18/00439/PREAPP for "Erection of a battery storage facility" at Land To East Of Crudie Acre Cottage, Arbroath, was provided to the applicant on 15 June 2018. The advice provided to the applicant indicated that an application for planning permission for this form of development at this site would be refused planning permission because the site was adjacent to the Arbroath development boundary and there was no public interest and social, economic, environmental or operational considerations confirm there is a need for the proposed development that cannot be met on a site within a development boundary.

Planning application 16/00354/FUL for the erection of 287 dwellings and associated open space, parking and infrastructure was approved planning permission in November 2016. That application related to the development of the allocated Crudie Acres/East Muirlands Road site to the immediate west of the current application site but within the development boundary. The approved plans indicated that a large green area would be formed along the north section of the site providing a green edge to that development and the Arbroath development boundary.

Applicant's Case

The Supporting Statement provides an overview of the site and site selection process. It indicates that the development would provide a grid balancing service to the National Grid to balance peaks and troughs associated with electricity supply and demand and to avoid strains on transmission and distribution networks and to keep the electricity system stable.

It indicates the applicant considered a range of potential development sites across Scotland, targeting developments on land in close proximity to grid supply points with adequate import and export capacities that could accommodate battery storage developments. A total of 46 potential development sites were identified across Scotland. Within Angus, a total of 3 substation locations were reviewed for potential at Arborath, Lunanhead and Bridge of Dun and potential developable sites were identified at all three. The Arbroath site is one of the few places where there is capacity to connect to the grid and a formal grid connection offer was submitted. Once the connection offer was received this confirmed that the project could be viably connected to the network.

The potential site at Lunanhead was discounted because it was found to be part of a recently deceased estate which limited the possibility of getting reasonable dialogue for lease negotiations. The potential site at Bridge of Dun was discounted as the land is on an agricultural tenancy and the tenant refused to agree to terms. This has left the development site close to the Arbroath substation as the only viable development site identified by the applicant in Angus. A description of the scale, nature and components of the proposal is provided and it is indicated the development would have economic and employment benefits in the form contract opportunities for local and regional contractors both for construction activities themselves and throughout the supply chain.

The planning history is discussed, including the pre-application enquiry (reference: 18/00439/PREAPP), and it is indicated refinements to the design were undertaken throughout the pre-application process as new information and feedback became available. The proposal is discussed in relation to EIA screening and the Scheme of Delegation and assessed in the context of development plan policy, supplementary guidance and National Planning Framework considerations. The Statement concludes the development would contribute to the Angus Local Development Plan's (ALDP) overarching aims of respecting environmental assets; developing a sustainable approach to growth and development; and sustainable economic growth. It considers the development complies with the ALDP in its entirety and also draws support from wider material considerations including Energy Storage and Management Drivers, National Energy Policy, NPF3 and SPP. The statement concludes that the development accords with the Development Plan and the associated benefits outweigh the minimal visual and other environmental impacts of the Development.

The Ecological Report consists a desk study and site visit for the investigation of habitats and protected species within the site including bats, badgers, water voles, red squirrels, reptiles, amphibians and birds. The Report concludes the site was assessed to be of low ecological value and no evidence of protected species was recorded within the site. The report indicates no further surveys are required, however, in

order to ensure legal compliance and mitigate potential impacts from the proposed development, measures are recommended in relation to breeding birds (time of vegetation removal outwith bird nesting season) and reptiles and amphibians (Reasonable Avoidance Measures including pre-vegetation clearance check by an experienced ecologist).

The Flood Risk Assessment indicates the site is located adjacent to Hercules Den Burn which is classed as Medium likelihood of flooding (Moderate to High Risk). A steady 1D Hydraulic model has confirmed that flows during the 1:200 year return period, plus a 20 % allowance for climate change, would be contained within the channel of Hercules Den Burn. The Assessment recommends finished floor levels should be set to no lower than the 1:200 year flood event, plus climate change and freeboard, which equates to 34.56 m AOD. The access track leading to the main compound area should be flush to the ground to ensure no loss of conveyance on the floodplain downstream of the Site. Flood resistant doors should be fitted to all buildings. The operator of the development shall sign up to SEPA's Floodline warning service to ensure the site is protected during extreme weather events. In order to ensure that the risk of flooding at the development due to bridge blockage is minimised, the operator shall commit to checking the bridge downstream is clear from debris at the same time as the maintenance visits for the development. The development should be classed as 'essential infrastructure' under SEPA's Flood Risk and Land Use Vulnerability Guidance as it has to be located near the existing substation for operational reasons, which itself is located close to Hercules Den Burn. The Assessment concludes it is therefore acceptable as an exception to the risk framework outlined in Scottish Planning Policy.

The Utilities Report indicates details on the presence of underground and overhead utilities and provides a full utilities search for assets in the vicinity of the site. Plans of the identified underground and overhead utilities and consultation correspondence with operators and interested parties are provided.

The Noise Impact Assessment consists a background noise survey at two locations, noise modelling - including mitigation options modelled - and an assessment of impact. For mitigation options modelled, the following measures were incorporated to minimise noise levels at noise-sensitive receptors:

- The AC units were placed together at the south-western end of the Development site and the compound was shielded by a 2.5 m high acoustic fence;
- The inverter units, are housed within enclosures, allowing for a conservative 15 dB attenuation of the sound emission (enclosures typically offer a 15 dB attenuation where air intake / duct apertures are required); and
- An acoustic fence was positioned around the perimeter of the Development on all sides (3 m height to the northern, western and eastern boundaries, and 4.5m in height to the southern boundary) to provide screening for the NSRs in the new housing development to the south and existing dwellings to the north and east of the Development. It should be noted that the acoustic fence in the model was lifted 0.1m off the ground to allow water to flow freely in the event of flooding (see the Flood Risk Assessment submitted as part of the planning application for further details).

The report concludes the assessment of noise impact was undertaken in accordance with BS4142:2014. Subject to the mitigation measures detailed in this report, and given the level of conservatism in the assessment and the context of the local environment, the assessment concludes it is anticipated that noise due to the Development will be acceptable at the closest, and therefore all residential dwellings. The Noise Impact Assessment is supported by additional information provided on 16 January 2019 at the request of the Environmental Health Service.

Consultations

Community Council - There was no response from this consultee at the time of report preparation.

Angus Council - Roads - Offered no objection to the proposal subject to the attachment of conditions regulating the provision, standard and maintenance of visibility splays at the junction with Hillend Road.

Scottish Water - There was no response from this consultee at the time of report preparation.

Forward Planning Section - There was no response from this consultee at the time of report preparation.

Scottish Environment Protection Agency - SEPA offered no objection to the proposal but comments that they would strongly recommend that an alternative location is found for the proposed site away from the Hercules Den Burn, however as the proposed development is deemed as essential infrastructure and is required to be located next to the existing substation for operational reasons, we have no objection to the proposed development.

Angus Council - Flood Prevention - This Service offered no objection to the proposal subject to the attachment of conditions regulating the height and design of containers and type of surface material.

Angus Council Environmental Health - This Service offered no objection subject to the attachment of conditions regulating the attenuation of plant and equipment noise and the light spillage from external lighting.

SSE Plc - Offered no objection to the proposal subject to consultation by the applicant with regards to the high voltage overhead lines and cables which cross and are in proximity to the proposed development and the extra high voltage tower line that lies to the south / south west of the proposed development.

Representations

1 letters of representation were received, of which 0 offered comments which neither supported nor objected to the proposal, 1 objected to the proposal and 0 supported the proposal.

The main points of concern were as follows:

- Traffic and road safety impacts through the introduction of the site access junction merging on to a bend on the public road and at an area with the driveways of residential property opposite.

This matter is addressed in the Assessment Section below.

Development Plan Policies

Angus Local Development Plan 2016

Policy DS1 : Development Boundaries and Priorities
Policy DS3 : Design Quality and Placemaking
Policy DS4 : Amenity
Policy PV5 : Protected Species
Policy PV6 : Development in the Landscape
Policy PV9 : Renewable and Low Carbon Energy Development
Policy PV12 : Managing Flood Risk
Policy PV13 : Resilience and Adaptation
Policy PV15 : Drainage Infrastructure
Policy PV20 : Soils and Geodiversity

TAYplan Strategic Development Plan

The proposal is not of strategic significance and policies of TAYplan are not referred to in this report.

The full text of the relevant development plan policies can be viewed at Appendix 1 to this report.

Assessment

Sections 25 and 37(2) of the Town and Country Planning (Scotland) Act 1997 require that planning decisions be made in accordance with the development plan unless material considerations indicate otherwise.

The site is located outside but immediately adjacent to the development boundary of Arbroath. The local development plan indicates that Angus Council has defined development boundaries to protect the landscape setting of Angus towns and villages and prevent the uncontrolled spread of development. Development boundaries provide the definition between built up areas and the open countryside. Policy DS1 states that the focus of development will be sites allocated or otherwise identified for development within the local development plan and indicates that proposals for sites outwith but contiguous with a development boundary will only be acceptable where it is in the public interest and social, economic, environmental or operational considerations confirm there is a need for the development that cannot be met within a development boundary.

The site is located outwith but adjacent to the development boundary of Arbroath. There is some public interest in having infrastructure which helps ensure a reliable source of power in the electricity network at times of peak demand. However, the applicant's justification for the proposed site suggests that the site has been chosen because there is a willing landowner, capacity in the substation and the location avoids lengthy transmission cables. The information submitted does not consider alternative sites within a development boundary (including the Arbroath development boundary) and as such it cannot be concluded that there is a need for the development which cannot be met within a development boundary. There is available employment land in Arbroath and other Angus towns as well as other potentially suitable sites within towns outside of existing employment areas. It is noted that a similar proposal has recently been granted planning permission at Orchardbank Business Park in Forfar (ref: 17/00848/FULL) which illustrates that this type of development can be located within a development boundary.

The proposed site is located to the immediate north of the Crudie Acres housing development. Housing allocation A1 of the local development plan required that the housing development formed a landscaped edge to the town. That housing development (which is currently under construction) has been designed so that there is green space on its northern edge to allow a soft and defensible development boundary for Arbroath and to allow a landscaped transition from the built up area to the open countryside. The proposed Battery Electricity Storage Facility would erode the landscape setting of Arbroath by introducing an industrial type of development with palisade fencing, 4m high acoustic fencing, plant and machinery and other functional apparatus which would introduce a new hard boundary to Arbroath which would undermine the planned landscaped edge which would come forward as part of the housing development and undermining one of the policy requirements of that housing allocation.

The proposal is contrary to Policy DS1 because the development would undermine the landscape setting of Arbroath and no evidence has been submitted to demonstrate that there is a need for the proposed development which could not be accommodated within a development boundary.

The site is located on prime quality agricultural land (Class 2 and 3.1 in the Macaulay Land Capability for Agriculture maps). Policy PV20 of the local development plan seeks to safeguard prime agricultural land and only allows development of prime quality land in limited circumstances including where: development proposals support delivery of the development strategy and policies in this local plan; are small scale and directly related to a rural business or mineral extraction; or constitute renewable energy development and are supported by a commitment to a bond commensurate with site restoration requirements. The proposal would not involve renewable energy generation and is for electricity storage only. It is not directly related to a rural business or mineral extraction and is contrary to Policy DS1.

The proposal does not accord with any of the acceptable circumstances allowing the development of prime quality agricultural land and is contrary to Policy PV20.

The application site is located in an area which is identified on the SEPA flood maps as potentially subject to flooding from the adjacent burn and from surface water. Policies PV12 and PV13 deal with managing flood risk and resilience and adaptation and indicate, among other things, that there will be a general presumption against built development proposals on the functional floodplain; which involve land raising

resulting in the loss of the functional flood plain; or, which would materially increase the probability of flooding to existing or planned development. The Flood Risk Framework in Table 3 indicates that medium to high risk areas of coastal or watercourse flooding are generally not suitable for civil infrastructure; but may be suitable for essential infrastructure within built up areas which are designed and constructed to remain operational during floods and not impede water flow.

The flood risk information submitted indicates that the development should be classed as 'essential infrastructure' under SEPA's Flood Risk and Land Use Vulnerability Guidance as it has to be located near the existing substation for operational reasons, which itself is located close to Hercules Den Burn. The Assessment concludes it is therefore acceptable as an exception to the risk framework outlined in Scottish Planning Policy.

SEPA has offered no objection to the proposal on flood risk grounds but has indicated that they would strongly recommend that an alternative location is found for the proposed site away from the Hercules Den Burn. Angus Council's Roads Service has reviewed the submitted the flood risk information and has noted that the battery storage containers would require to be elevated above the ground by 300mm on steel supports to ensure that the facility remains operational during a 1 in 200 year (plus a climate change allowance) flood event. The Roads Service has offered no objection to the proposal, subject to the attachment of planning conditions regulating the finished height of the proposed containers and requiring a permeable access track surface material. Notwithstanding SEPAs recommendation that an alternative location away from the Hercules Den Burn be considered, they have not objected to the proposal and the Roads Service is satisfied that the information submitted shows that while the site would be subject to a level of flood risk, steps could be taken to mitigate that risk.

Policies DS3 and PV6 deal with design quality and development in the landscape and indicate, among other things, that development which has an adverse effect on landscape will only be permitted where the site selected is capable of accommodating the proposed development; the siting and design integrate with the landscape context and minimise adverse impacts on the local landscape; potential cumulative effects with any other relevant proposals are considered to be acceptable; and, mitigation measures and/or reinstatement are proposed where appropriate. Policy DS4 deals with amenity impacts and indicates that development will not be permitted where there is an unacceptable adverse impact on the surrounding area or the environment or amenity of existing or future occupiers of adjoining or nearby properties.

The existing electricity substation benefits from a substantial mature landscape framework which largely mitigates its visual impact; and the planned housing development incorporates a large landscaped/open space area along its northern edge to reflect the edge of settlement location and provide a soft edge to the town. The applicant has submitted noise assessment information which indicates that in order to safeguard the residential amenity of nearby housing, an acoustic fence measuring 4.6m in height would be required along the southern boundary of the site where it borders the housing development, with a 3.1m high acoustic fence along the other boundaries.

The applicant's supporting statement indicates that the development would result in limited visual impact on landscape character and visual amenity and appropriate mitigation measures in the form of a landscaping scheme would be provided. A landscaping scheme has not been submitted and it is hard to see how a landscaping scheme could effectively mitigate the impact of the development having regard to the proximity of acoustic fencing to the site boundary and the limited space remaining. The development is located in a sensitive location on the edge of Arbroath and it would not be desirable to see such an expanse of tall timber fencing of that height in this location. Tall timber fencing of that height would be more suitable in an existing employment area rather than a location in the open countryside.

Public comment in objection was submitted that raises concerns regarding traffic and road safety impacts through the introduction of the site access junction merging on to a bend on the public road and at an area with the driveways of residential property opposite. The Roads Service considered the application in terms of the traffic likely to be generated by the proposal and its impact on the public road network and has offered no objection subject to planning conditions regulating the provision, standard and maintenance of visibility splays at the junction with Hillend Road. Having regard to that advice, it is considered that the proposal could be accommodate without unacceptable impacts on the public road network.

The Environmental Health Service reviewed the submitted Noise Impact Assessment (NIA) and offered no objection subject to the attachment of conditions regulating the attenuation of plant and equipment noise and the light spillage from external lighting. Were the proposal otherwise acceptable, these matters could be regulated by condition. This form of development is not anticipated to create a significant amount of waste beyond the construction period and there would be space for the storage of operational waste and recyclates within the site.

The proposal would not require altered drainage arrangement or a connection to the water supply and would use a sustainable drainage system for surface water disposal. This is compatible with the policy aims of PV15.

Policy PV5 deals with protected species and indicates development proposals which are likely to affect protected species will be assessed to ensure compatibility with the appropriate regulatory regime. The submitted Ecological Report assessed the site to be of low ecological value and no evidence of protected species was recorded within the site. More general mitigation recommendations for breeding birds and reptiles and amphibians were provided in the report and, were the proposal otherwise acceptable, awareness of this recommended mitigation could be raised through the attachment of an advisory note.

In terms of remaining matters, SSE offered no objection to the proposal, subject to consultation by the applicant with regards to the high voltage overhead lines and cables which cross and are in proximity to the proposed development and the extra high voltage tower line that lies to the south / south west of the proposed development. This matter could be dealt with by attachment of an advisory note were the proposal otherwise acceptable.

In conclusion, the proposed battery electricity storage facility proposal is contrary to Policy DS1 because the development would undermine the landscape setting of Arbroath and no evidence has been submitted to demonstrate that there is a need for the proposed development which could not be accommodated within a development boundary; and is contrary to Policy PV20 because it does not accord with any of the acceptable circumstances allowing the development of prime quality agricultural land. There are no material considerations that justify the grant of planning permission contrary to the development plan.

Human Rights Implications

The decision to refuse this application has potential implications for the applicant in terms of his entitlement to peaceful enjoyment of his possessions (First Protocol, Article 1). For the reasons referred to elsewhere in this report justifying the decision in planning terms, it is considered that any actual or apprehended infringement of such Convention Rights, is justified. Any interference with the applicant's right to peaceful enjoyment of his possessions by refusal of the present application is in compliance with the Council's legal duties to determine this planning application under the Planning Acts and such refusal constitutes a justified and proportionate control of the use of property in accordance with the general interest and is necessary in the public interest with reference to the Development Plan and other material planning considerations as referred to in the report.

Equalities Implications

The issues contained in this report fall within an approved category that has been confirmed as exempt from an equalities perspective.

Decision

The application is Refused

Reason(s) for Decision:

1. The proposal is contrary to Policy DS1 of the Angus Local Development Plan 2016 because the development would undermine the landscape setting of Arbroath and no evidence has been submitted to demonstrate that there are any social, economic, environmental or operational considerations that confirm there is a need for the proposed development that cannot be met within a development boundary.
2. The proposal is contrary to Policy PV20 of the Angus Local Development Plan 2016 because the proposal would involve the development of prime agricultural land and does not comply with any of the circumstances which allow for the development of prime quality agricultural land.

Notes:

Case Officer: Fraser MacKenzie
Date: 30 January 2019

Appendix 1 - Development Plan Policies

Angus Local Development Plan 2016

Policy DS1 : Development Boundaries and Priorities
All proposals will be expected to support delivery of the Development Strategy.

The focus of development will be sites allocated or otherwise identified for development within the Angus Local Development Plan, which will be safeguarded for the use(s) set out. Proposals for alternative uses will only be acceptable if they do not undermine the provision of a range of sites to meet the development needs of the plan area.

Proposals on sites not allocated or otherwise identified for development, but within development boundaries will be supported where they are of an appropriate scale and nature and are in accordance with relevant policies of the ALDP.

Proposals for sites outwith but contiguous* with a development boundary will only be acceptable where it is in the public interest and social, economic, environmental or operational considerations confirm there is a need for the proposed development that cannot be met within a development boundary.

Outwith development boundaries proposals will be supported where they are of a scale and nature appropriate to their location and where they are in accordance with relevant policies of the ALDP.

In all locations, proposals that re-use or make better use of vacant, derelict or under-used brownfield land or buildings will be supported where they are in accordance with relevant policies of the ALDP.

Development of greenfield sites (with the exception of sites allocated, identified or considered appropriate for development by policies in the ALDP) will only be supported where there are no suitable and available brownfield sites capable of accommodating the proposed development.

Development proposals should not result in adverse impacts, either alone or in combination with other proposals or projects, on the integrity of any European designated site, in accordance with Policy PV4 Sites Designated for Natural Heritage and Biodiversity Value.

*Sharing an edge or boundary, neighbouring or adjacent

Policy DS3 : Design Quality and Placemaking

Development proposals should deliver a high design standard and draw upon those aspects of landscape or townscape that contribute positively to the character and sense of place of the area in which they are to be located. Development proposals should create buildings and places which are:

- o Distinct in Character and Identity: Where development fits with the character and pattern of development in the surrounding area, provides a coherent structure of streets, spaces and buildings and retains and sensitively integrates important townscape and landscape features.
- o Safe and Pleasant: Where all buildings, public spaces and routes are designed to be accessible, safe and attractive, where public and private spaces are clearly defined and appropriate new areas of landscaping and open space are incorporated and linked to existing green space wherever possible.
- o Well Connected: Where development connects pedestrians, cyclists and vehicles with the surrounding area and public transport, the access and parking requirements of the Roads Authority are met and the principles set out in 'Designing Streets' are addressed.
- o Adaptable: Where development is designed to support a mix of compatible uses and accommodate changing needs.
- o Resource Efficient: Where development makes good use of existing resources and is sited and designed to minimise environmental impacts and maximise the use of local climate and landform.

Supplementary guidance will set out the principles expected in all development, more detailed guidance on the design aspects of different proposals and how to achieve the qualities set out above. Further details on the type of developments requiring a design statement and the issues that should be addressed will also be set out in supplementary guidance.

Policy DS4 : Amenity

All proposed development must have full regard to opportunities for maintaining and improving environmental quality. Development will not be permitted where there is an unacceptable adverse impact on the surrounding area or the environment or amenity of existing or future occupiers of adjoining or nearby properties.

Angus Council will consider the impacts of development on:

- Air quality;
- Noise and vibration levels and times when such disturbances are likely to occur;
- Levels of light pollution;
- Levels of odours, fumes and dust;
- Suitable provision for refuse collection / storage and recycling;
- The effect and timing of traffic movement to, from and within the site, car parking and impacts on highway safety; and
- Residential amenity in relation to overlooking and loss of privacy, outlook, sunlight, daylight and overshadowing.

Angus Council may support development which is considered to have an impact on such considerations, if the use of conditions or planning obligations will ensure that appropriate mitigation and / or compensatory measures are secured.

Applicants may be required to submit detailed assessments in relation to any of the above criteria to the Council for consideration.

Where a site is known or suspected to be contaminated, applicants will be required to undertake investigation and, where appropriate, remediation measures relevant to the current or proposed use to prevent unacceptable risks to human health.

Policy PV5 : Protected Species

Angus Council will work with partner agencies and developers to protect and enhance all wildlife including its habitats, important roost or nesting places. Development proposals which are likely to affect protected species will be assessed to ensure compatibility with the appropriate regulatory regime.

European Protected Species

Development proposals that would, either individually or cumulatively, be likely to have an unacceptable adverse impact on European protected species as defined by Annex 1V of the Habitats Directive

(Directive 92/24/EEC) will only be permitted where it can be demonstrated to the satisfaction of Angus Council as planning authority that:

- o there is no satisfactory alternative; and
- o there are imperative reasons of overriding public health and/or safety, nature, social or economic interest and beneficial consequences for the environment, and
- o the development would not be detrimental to the maintenance of the population of a European protected species at a favourable conservation status in its natural range

Other Protected Species

Development proposals that would be likely to have an unacceptable adverse effect on protected species unless justified in accordance with relevant species legislation (Wildlife and Countryside Act 1981 and the Protection of Badgers Act 1992) subject to any consequent amendment or replacement.

Further information on protected sites and species and their influence on proposed development will be set out in a Planning Advice Note.

Policy PV6 : Development in the Landscape

Angus Council will seek to protect and enhance the quality of the landscape in Angus, its diversity (including coastal, agricultural lowlands, the foothills and mountains), its distinctive local characteristics, and its important views and landmarks.

Capacity to accept new development will be considered within the context of the Tayside Landscape Character Assessment, relevant landscape capacity studies, any formal designations and special landscape areas to be identified within Angus. Within the areas shown on the proposals map as being part of 'wild land', as identified in maps published by Scottish Natural Heritage in 2014, development proposals will be considered in the context of Scottish Planning Policy's provisions in relation to safeguarding the character of wild land.

Development which has an adverse effect on landscape will only be permitted where:

- o the site selected is capable of accommodating the proposed development;
- o the siting and design integrate with the landscape context and minimise adverse impacts on the local landscape;
- o potential cumulative effects with any other relevant proposal are considered to be acceptable; and
- o mitigation measures and/or reinstatement are proposed where appropriate.

Landscape impact of specific types of development is addressed in more detail in other policies in this plan and work involving development which is required for the maintenance of strategic transport and communications infrastructure should avoid, minimise or mitigate any adverse impact on the landscape.

Further information on development in the landscape, including identification of special landscape and conservation areas in Angus will be set out in a Planning Advice Note.

Policy PV9 : Renewable and Low Carbon Energy Development

Proposals for renewable and low carbon energy development* will be supported in principle where they meet the following criteria:

- o the location, siting and appearance of apparatus, and any associated works and infrastructure have been chosen and/or designed to minimise impact on amenity, landscape and environment, while respecting operational efficiency;
- o access for construction and maintenance traffic can be achieved without compromising road safety or causing unacceptable change to the environment and landscape;
- o the site has been designed to make links to the national grid and/or other users of renewable energy and heat generated on site;
- o there will be no unacceptable impact on existing or proposed aviation, defence, seismological or telecommunications facilities;

- o there will be no unacceptable adverse impact individually or cumulatively with other existing or proposed development on:
 - o landscape character, setting within the immediate and wider landscape (including cross boundary or regional features and landscapes), sensitive viewpoints and public access routes;
 - o sites designated for natural heritage (including birds), scientific, historic, cultural or archaeological reasons;
 - o any populations of protected species; and
 - o the amenity of communities or individual dwellings including visual impact, noise, shadow flicker.
- o during construction, operation and decommissioning of the energy plant there will be no unacceptable impacts on:
 - o groundwater;
 - o surface water resources; or
 - o carbon rich soils, deep peat and priority peatland habitat or geodiversity.

Where appropriate mitigation measures must be supported by commitment to a bond commensurate with site restoration requirements.

Consideration may be given to additional factors such as contribution to targets for energy generation and emissions, and/or local socio-economic economic impact.

Supplementary guidance will be prepared to set out a spatial framework to guide the location of onshore wind farm developments, consistent with the approach set out in Table 1 of Scottish Planning Policy. It will also provide further detail on the factors which should be taken into account in considering and advising on proposals for all types of renewable energy development.

Prior to the adoption of that supplementary guidance, the Council will apply the principles and considerations set out in Scottish Planning Policy in assessing the acceptability of any planning applications for onshore wind farms.

*infrastructure, activity and materials required for generation, storage or transmission of energy where it is within the remit of the council as local planning authority (or other duty). Includes new sites, extensions and/or repowering of established sites for onshore wind.

Policy PV12 : Managing Flood Risk

To reduce potential risk from flooding there will be a general presumption against built development proposals:

- o on the functional floodplain;
- o which involve land raising resulting in the loss of the functional flood plain; or
- o which would materially increase the probability of flooding to existing or planned development.

Development in areas known or suspected to be at the upper end of low to medium risk or of medium to high flood risk (as defined in Scottish Planning Policy (2014), see Table 4) may be required to undertake a flood risk assessment. This should demonstrate:

- o that flood risk can be adequately managed both within and outwith the site;
- o that a freeboard allowance of at least 500-600mm in all circumstances can be provided;
- o access and egress to the site can be provided that is free of flood risk; and
- o where appropriate that water-resistant materials and construction will be utilised.

Where appropriate development proposals will be:

- o assessed within the context of the Shoreline Management Plan, Strategic Flood Risk Assessments and Flood Management Plans; and
- o considered within the context of SEPA flood maps to assess and mitigate surface water flood potential.

Built development should avoid areas of ground instability (landslip) coastal erosion and storm surges. In areas prone to landslip a geomorphological assessment may be requested in support of a planning application to assess degree of risk and any remediation measures if required to make the site suitable

for use.

Policy PV13 : Resilience and Adaptation

Development should not require an increase in the provision and / or maintenance of flood defences.

To increase resilience to the effects of climate change such as flood and drought, extreme weather events and rising sea levels Angus Council may require development proposals to incorporate adaptation measures including:

- o use of flood resistant materials and construction techniques;
- o removal of culverts and other engineering works where opportunity arises and avoidance of development over or requiring new culverts or other unnecessary engineering works unless there is no practical alternative;
- o minimising the area of impermeable surfaces by using permeable surfaces where possible for car parking and hard landscaping and where appropriate, green roofs and green infrastructure; and
- o natural flood management measures which reduce water flow and enhance biodiversity and the quality of the water environment. Such schemes can contribute to local green networks, biodiversity and provision of amenity open space and should form an integral part of the design process.

Policy PV15 : Drainage Infrastructure

Development proposals within Development Boundaries will be required to connect to the public sewer where available.

Where there is limited capacity at the treatment works Scottish Water will provide additional wastewater capacity to accommodate development if the Developer can meet the 5 Criteria*. Scottish Water will instigate a growth project upon receipt of the 5 Criteria and will work with the developer, SEPA and Angus Council to identify solutions for the development to proceed.

Outwith areas served by public sewers or where there is no viable connection for economic or technical reasons private provision of waste water treatment must meet the requirements of SEPA and/or The Building Standards (Scotland) Regulations. A private drainage system will only be considered as a means towards achieving connection to the public sewer system, and when it forms part of a specific development proposal which meets the necessary criteria to trigger a Scottish Water growth project.

All new development (except single dwelling and developments that discharge directly to coastal waters) will be required to provide Sustainable Drainage Systems (SUDs) to accommodate surface water drainage and long term maintenance must be agreed with the local authority. SUDs schemes can contribute to local green networks, biodiversity and provision of amenity open space and should form an integral part of the design process.

Drainage Impact Assessment (DIA) will be required for new development where appropriate to identify potential network issues and minimise any reduction in existing levels of service.

*Enabling Development and our 5 Criteria (<http://scotland.gov.uk/Resource/0040/00409361.pdf>)

Policy PV20 : Soils and Geodiversity

Development proposals on prime agricultural land will only be supported where they:

- o support delivery of the development strategy and policies in this local plan;
- o are small scale and directly related to a rural business or mineral extraction; or
- o constitute renewable energy development and are supported by a commitment to a bond commensurate with site restoration requirements.

Design and layout should minimise land required for development proposals on agricultural land and should not render any farm unit unviable.

Development proposals affecting deep peat or carbon rich soils will not be allowed unless there is an overwhelming social or economic need that cannot be met elsewhere. Where peat and carbon rich soils are present, applicants should assess the likely effects of development proposals on carbon dioxide

emissions.

All development proposals will incorporate measures to manage, protect and reinstate valuable soils, groundwater and soil biodiversity during construction.

TAYplan Strategic Development plan

The proposal is not of strategic significance and policies of TAYplan are not referred to in this report.



TOWN AND COUNTRY PLANNING (SCOTLAND) ACT 1997
(AS AMENDED)
TOWN AND COUNTRY PLANNING (DEVELOPMENT MANAGEMENT PROCEDURE)
(SCOTLAND)
REGULATIONS 2013

PLANNING PERMISSION REFUSAL
REFERENCE : 18/00810/FULL

To **Coronation Power Limited**
c/o Arcus Consultancy Service Ltd Jamie Gilliland
FAO Jamie Gilliland
7th Floor
144 West George Street
Glasgow
United Kingdom
G2 2HG

With reference to your application dated 23 October 2018 for planning permission under the above mentioned Acts and Regulations for the following development, viz.:-

Construction of a Battery Electricity Storage Facility comprising Containerised Battery Storage Units, Inverters and Transformers, DNO Substation, Client Switchgear Container, Electrical Grid Compound, Welfare and Parts Storage Containers and Ancillary Development including Formation of Access Track, Security Fencing, CCTV and Landscaping at Land To East Of Crudie Acre Cottage Arbroath for Coronation Power Limited

The Angus Council in exercise of their powers under the above mentioned Acts and Regulations hereby **Refuse Planning Permission (Delegated Decision)** for the said development in accordance with the particulars given in the application and plans docqueted as relative hereto in paper or identified as refused on the Public Access portal.

The reasons for the Council's decision are:-

- 1 The proposal is contrary to Policy DS1 of the Angus Local Development Plan 2016 because the development would undermine the landscape setting of Arbroath and no evidence has been submitted to demonstrate that there are any social, economic, environmental or operational considerations that confirm there is a need for the proposed development that cannot be met within a development boundary.
- 2 The proposal is contrary to Policy PV20 of the Angus Local Development Plan 2016 because the proposal would involve the development of prime agricultural land and does not comply with any of the circumstances which allow for the development of prime quality agricultural land.

Amendments:

- 1 The Site Location Plan Planning Drawing 001 Ref: 3055-REP-001 Date: 30/08/2018, amends and supersedes Site Location Plan Planning Drawing 001 Ref: 3055-REP-001 Date: 01/08/2018, in that it shows the proposed access track and junction that would merge with the C51 Road.
- 2 Planning Drawing 002 Site Layout Plan Drawing Number 3055-DR-P-0001 Rev 10 Date; 10/12/18 amends and supersedes Planning Drawing 002 Site Layout Plan Drawing Number 3055-DR-P-0001 Rev 8 Date; 28/08/18, in that it shows the proposed access track and junction that would merge with the C51 Road and provides an amended layout an noise attenuation measures to earlier site layout drawings.

Dated this **1 February 2019**

Kate Cowey - Service Manager
Angus Council
Place
Angus House
Orchardbank Business Park
Forfar DD8 1AN

Planning Decisions – Guidance Note

Please retain – this guidance forms part of your Decision Notice

You have now received your Decision Notice. This guidance note sets out important information regarding appealing or reviewing your decision. There are also new requirements in terms of notifications to the Planning Authority and display notices on-site for certain types of application. You will also find details on how to vary or renew your permission.

Please read the notes carefully to ensure effective compliance with the new regulations.

DURATION

This permission will lapse 3 years from the date of this decision, unless there is a specific condition relating to the duration of the permission or development has commenced by that date.

PLANNING DECISIONS

Decision Types and Appeal/Review Routes

The 'decision type' as specified in your decision letter determines the appeal or review route. The route to do this is dependent on the how the application was determined. Please check your decision letter and choose the appropriate appeal/review route in accordance with the table below. Details of how to do this are included in the guidance.

Determination Type	What does this mean?	Appeal/Review Route
Development Standards Committee/Full Council	National developments, major developments and local developments determined at a meeting of the Development Standards Committee or Full Council whereby relevant parties and the applicant were given the opportunity to present their cases before a decision was reached.	DPEA (appeal to Scottish Ministers) – See details on attached Form 1
Delegated Decision	Local developments determined by the Service Manager through delegated powers under the statutory scheme of delegation. These applications may have been subject to less than five representations, minor breaches of policy or may be refusals.	Local Review Body – See details on attached Form 2
Other Decision	All decisions other than planning permission or approval of matters specified in condition. These include decisions relating to Listed Building Consent, Advertisement Consent, Conservation Area Consent and Hazardous Substances Consent.	DPEA (appeal to Scottish Ministers) – See details on attached Form 1

NOTICES

Notification of initiation of development (NID)

Once planning permission has been granted and the applicant has decided the date they will commence that development they must inform the Planning Authority of that date. The notice must be submitted before development commences – failure to do so would be a breach of planning control. The relevant form is included with this guidance note.

Notification of completion of development (NCD)

Once a development for which planning permission has been given has been completed the applicant must, as soon as practicable, submit a notice of completion to the planning authority. Where development is carried out in phases there is a requirement for a notice to be submitted at the conclusion of each phase. The relevant form is included with this guidance note.

Display of Notice while development is carried out

For national, major or 'bad neighbour' developments (such as public houses, hot food shops or scrap yards), the developer must, for the duration of the development, display a sign or signs containing prescribed information.

The notice must be in the prescribed form and:-

- displayed in a prominent place at or in the vicinity of the site of the development;
- readily visible to the public; and
- printed on durable material.

A display notice is included with this guidance note.

Should you have any queries in relation to any of the above, please contact:

Angus Council
Place
Angus House
Orchardbank Business Park
Forfar
DD8 1AN

Telephone 01307 473212 / 473207 / 473335

E-mail: planning@angus.gov.uk

Website: www.angus.gov.uk



TOWN AND COUNTRY PLANNING (SCOTLAND) ACT 1997 (AS AMENDED)

The Town & Country Planning (Development Management Procedure) (Scotland) Regulations 2013 – Schedule to Form 1

*Notification to be sent to applicant on refusal of planning permission
or on the grant of permission subject to conditions decided by Angus Council*

1. If the applicant is aggrieved by the decision of the planning authority-
 - a) to refuse permission for the proposed development;
 - b) to refuse approval, consent or agreement required by condition imposed on a grant of planning permission;
 - c) to grant planning permission or any approval, consent or agreement subject to conditions,

the applicant may appeal to the Scottish Ministers to review the case under section 47 of the Town and Country Planning (Scotland) Act 1997 within three months beginning with the date of this notice. The notice of appeal should be addressed to Directorate for Planning & Environmental Appeals, 4 The Courtyard, Callendar Business Park, Falkirk, FK1 1XR. Alternatively you can submit your appeal directly to DPEA using the national e-planning web site <https://eplanning.scotland.gov.uk>.

2. If permission to develop land is refused or granted subject to conditions and the owner of the land claims that the land has become incapable of reasonably beneficial use in its existing state and cannot be rendered capable of reasonably beneficial use by the carrying out of any development which has been or would be permitted, the owner of the land may serve on the planning authority a purchase notice requiring the purchase of the owner of the land's interest in the land in accordance with Part 5 of the Town and Country Planning (Scotland) Act 1997.



TOWN AND COUNTRY PLANNING (SCOTLAND) ACT 1997 (AS AMENDED)

The Town & Country Planning (Development Management Procedure) (Scotland) Regulations 2013 – Schedule to Form 2

*Notification to be sent to applicant on refusal of planning permission
or on the grant of permission subject to conditions decided through
Angus Council's Scheme of Delegation*

1. If the applicant is aggrieved by the decision of the planning authority-
 - a) to refuse permission for the proposed development;
 - b) to refuse approval, consent or agreement required by condition imposed on a grant of planning permission;
 - c) to grant planning permission or any approval, consent or agreement subject to conditions,

the applicant may require the planning authority to review the case under section 43A of the Town and Country Planning (Scotland) Act 1997 within three months beginning with the date of this notice. The notice of review should be addressed to Committee Officer, Angus Council, Resources, Legal & Democratic Services, Angus House, Orchardbank Business Park, Forfar, DD8 1AN.

A Notice of Review Form and guidance can be found on the national e-planning website <https://eplanning.scotland.gov.uk>. Alternatively you can return your Notice of Review directly to the local planning authority online on the same web site.

2. If permission to develop land is refused or granted subject to conditions and the owner of the land claims that the land has become incapable of reasonably beneficial use in its existing state and cannot be rendered capable of reasonably beneficial use by the carrying out of any development which has been or would be permitted, the owner of the land may serve on the planning authority a purchase notice requiring the purchase of the owner of the land's interest in the land in accordance with Part 5 of the Town and Country Planning (Scotland) Act 1997.

PLANNING

Your experience with Planning

Please indicate whether you agree or disagree with the following statements about your most recent experience of the Council's handling of the planning application in which you had an interest.

Q.1 I was given the advice and help I needed to submit my application/representation:-

Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	It does not apply
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q.2 The Council kept me informed about the progress of the application that I had an interest in:-

Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	It does not apply
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q.3 The Council dealt promptly with my queries:-

Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	It does not apply
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q.4 The Council dealt helpfully with my queries:-

Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	It does not apply
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q.5 I understand the reasons for the decision made on the application that I had an interest in:-

Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	It does not apply
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q.6 I feel that I was treated fairly and that my view point was listened to:-

Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	It does not apply
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

OVERALL SATISFACTION: Overall satisfaction with the service:

Q.7 Setting aside whether your application was successful or not, and taking everything into account, how satisfied or dissatisfied are you with the service provided by the council in processing your application?

Very satisfied	Fairly satisfied	Neither Satisfied nor Dissatisfied	Fairly Dissatisfied	Very Dissatisfied
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

OUTCOME: Outcome of the application:

Q.8 Was the application that you had an interest in:-

Granted Permission/Consent	<input type="checkbox"/>	Refused Permission/Consent	<input type="checkbox"/>	Withdrawn	<input type="checkbox"/>
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Q.9 Were you the:- Applicant Agent Third Party objector who made a representation

Please complete the form and return in the pre-paid envelope provided.
Thank you for taking the time to complete this form.