Agenda Item	**3.1**
Report No	**HC/50/19**

HIGHLAND COUNCIL

Committee: Highland Council

Date: 12 September 2019

Report Title: 19/01092/FUL: Scottish Hydro Electric Transmission Plc

Land 400M SW Of Former Kennels Building, Dounreay Nuclear Research Establishment, Dounreay

Report By: Acting Head of Development Management – Highland

1. Purpose/Executive Summary

1.1 **Description:** Erection of 275/220 kV electricity substation comprising platform area, electrical infrastructure and buildings, associated plant, ancillary infrastructure and temporary site compound

1.2 **Ward:** 02 - Thurso And North West Caithness

Development category: National Development

Pre-Determination Hearing: Yes

Pre-Meeting Site Visit: No

Reason referred to Committee: National Development

All relevant matters have been taken into account when appraising this application. It is considered that the proposal accords with the principles and policies contained within the Development Plan and is acceptable in terms of all other applicable material considerations.

2. Recommendations

2.1 Members are asked to agree the recommendation to grant planning permission as set out in section 11 of the report.

3. PROPOSED DEVELOPMENT

3.1 This application is for the erection of a 275/220 kV electricity substation comprising platform area, electrical infrastructure and buildings, associated plant, ancillary infrastructure and temporary site compound.

3.2 The proposal is part of a wider programme of works to provide an electricity transmission connection from the Orkney Islands to facilitate the connection of renewables generation (contracted between National Grid and developers). There is currently no transmission infrastructure on the Orkney Islands. A marine cable linking Mainland Orkney and Mainland Scotland is required. The proposed 275 /220kV substation is a key part of this. An onshore 220 kV HVAC Cable is proposed to landfall to the northwest of the proposed substation but is not part of this planning application.

3.3 The applicant has requested at the outset that the time limit on any planning permission be five years rather than the standard three years to allow for changes in the timescales for project delivery.

3.4 The proposed development includes:

Substation electrical infrastructure and buildings located on a platform within an area approximately 245 m by 145 m (although the site is not rectangular).

5 individual buildings which will vary in height between approximately 5.5 m and 16 m to the apex. All electrical infrastructure will be housed within buildings so that it is protected from the elements. The buildings are of steel clad design. These all have a utilitarian industrial/agricultural shed appearance with rectangular footprints and dual pitched roofs.

Palisade security fencing 2.4m in height will surround the perimeter of the platform area.

A post and wire fence will surround the rest of the site

Permanent access to the new substation taken from the existing unnamed road which serves the existing Dounreay substation and the Vulcan Naval Reactor Test Establishment (VNRTE) from the A836.

Other ancillary infrastructure: access roads within the platform and security lighting.

Temporary compound, materials storage area and use of existing access track off the A836 for construction.

Temporary construction access will be taken from the existing access track from the A836. Works to this track will include the upgrade to the existing temporary bell mouth at the intersection with the A836 and potentially upgrades and widening. The private road to Vulcan NRTE will only be used for the initial site set up to establish the temporary construction access, access to the works at the existing substation site and for all abnormal load deliveries.

3.5 Once operation the site will not be manned. Staff attendance on site will be on an ad hoc basis for maintenance and fault repair purposes only.

3.6 The construction start date currently proposed is April 2020 for a period of 3 years with a maximum of 150 workers on site at any one time.

3.7 A request was made to THC for a screening opinion under Regulation 8 of The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017 on 15th May 2018, with a screening opinion provided to the Applicant on 23rd May 2015. THC adopted an opinion that Environmental Impact Assessment (EIA) is not required for the proposal. Notwithstanding this, the Applicant's statutory obligations as transmission licence holder under the Electricity Act 1989 require the Applicant to take forward all development proposals in a responsible manner with due regard for the environment. As such, the Applicant has undertaken a voluntary EA as part of a package of supporting information to accompany the application for planning permission. The EA was undertaken to identify, assess and respond to any potential environmental effects of the Proposed Development. This Planning Statement utilises the findings of the EA in assessing the Proposed Development in the context of the relevant tests under the Town and Country Planning (Scotland) Act 1997 as set out above.

3.8 The proposal is identified within Annex A of National Planning Framework 3 (NPF 3) as a National Development. The proposal falls under the class of development noted as "new and/or upgraded onshore sub stations directly linked to electricity transmission cabling of or in excess of 132 kilovolts':

3.9 Pre Application Consultation: As required by the terms of The Town and Country Planning (Development Management Procedure) (Scotland) Regulations 20l3, a Proposal of Application Notice (PAN) was issued to THC on the 6th November 2018. The PAN confirmed that a public consultation event was to be held in Reay Village Hall on 5th December 2018, and a report of public consultation setting out details of that event, the views of attendees and how these have been considered, is included in support of the Planning Application.

3.10 Supporting Information:

Voluntary Environmental Assessment

The applicant also submitted a detailed justification for the design, form and external appearance of the building:

3.11 Variations: Colour of external cladding amended to anthracite and merlin grey

4. SITE DESCRIPTION

4.1 The Proposed Development is located in Dounreay on the north coast of Caithness, approximately 1.2 kilometres (km) northeast of Reay and approximately 1.8 km southwest of Buldoo. The Site is located in a rural coastal area that is comprised of open largely improved grassland and established industrial activity, namely Dounreay and Vulcan nuclear sites. The area is predominately flat and low lying with elevations typically around 8m Above Ordnance Datum (AOD). There is limited vegetation in the vicinity with the majority of the area comprising grass, scrub and in patches, bare ground.

4.2 To the north, directly adjacent to the Site, is the Vulcan Naval Reactor Test Establishment (VNRTE). It is understood that The VNRTE was decommissioned in 2015 although the buildings still remain. To the east of the Site is the Dounreay nuclear site which is in the process of being decommissioned by the Nuclear Decommissioning Authority. There is also existing electricity and transmission infrastructure in the surrounding area. To the south, east and west of the Site are a series of overhead lines with steel lattice towers. Directly adjacent to the Site, to the north east, is the existing Dounreay substation.

4.3 In time the majority of buildings on the Dounreay Nuclear site will be demolished. It is proposed at the Interim End State the only remaining buildings will be stores along with the infrastructure to service their safe operation. The Council's expectation is that the interim end state will be land decontaminated to a point where it is possible to identify and optimise the amount of land suitable for reuse and an industrial/business site. The long term plans for decommissioning of the Vulcan site and associated demolitions are not currently known.

5. PLANNING HISTORY

5.1	17/05164/SCRE Erection of High Voltage Direct Current (HVDC) converter station as part of a new high voltage electricity link between mainland Scotland and Shetland to secure Shetland's electricity supply by means of connection to the Great Britain electricity network	EIA Not Required	1 December 2017
	17/05166/PAN Erection of High Voltage direct Current (HVDC) converter station as part of a new high voltage electricity link between Dounreay and Shetland		7 November 2017
	18/02264/SCRE Construction of Substation and ancillary development including construction access track, landscaping and drainage	EIA not required	23 May 2018

6. PUBLIC PARTICIPATION

6.1 Advertised: Unknown neighbour and Schedule 3 Development

Date Advertised: 29 March 2019

Representation deadline: 27 August 2018

Timeous representations: 0

Late representations: 0

7. CONSULTATIONS

7.1 **Caithness West Community Council**: No response

7.2 **Landscape Officer**: No objection. Engaged in discussions with the applicant over the design of the buildings and the external finishing materials and colours. Of the colour options discussed, the anthracite and merlin grey colour scheme is considered to be the most suited to the site in both its current and likely future state of development. While the substation form is somewhat in keeping with buildings likely to be retained on the site, the Landscape Officer is still of the view that the location is deserving of a higher quality of design as was pursued at the Meygen site on the north coast, and will be expected for the Spaceport.

7.3 **Contaminated Land**: No objection. Records indicate that part of the site has a historic/current use as Dounreay Nuclear Facility which may have resulted in land contamination. From the information provided as part of the application, the proposed development would not appear to materially change the risk of potential contamination, and a contaminated land condition which requires further investigation is not recommended for this application. Recommend that an informative be attached.

7.4 **Environmental Health**: Having considered the Noise Impact Assessment Report (Dated January 2018), Environmental Health is satisfied with the methodology used within the assessment and the report findings. The assessment concludes that the proposed substation would not result in an adverse impact at nearby receptors, principally Isauld House. The report further indicates that no specific mitigation measures are required above those which are embedded within the development, namely the requirement for equipment to be located within buildings. The only recommendation within the report would be that the impact assessment be reassessed when more accurate manufacturer's data for the equipment being installed becomes available.

7.5 **Flood Risk Management Team**: No objection. Original objection on flood risk and drainage resolved on provision of further information from the applicant and subject to a condition about buffer zones. SEPA's Flood Map (indicates that part of the lies within 1 in 200 year (0.5% annual exceedance probability) pluvial flood extents; the site could therefore be at risk of surface water flooding in a severe weather event. We anticipate that surface water flooding on site can be managed by an appropriately-designed site drainage system. Based on Drainage Impact Assessment the Flood Team are satisfied with the proposals to redirect the existing small watercourses around the platform. The channel and any new crossings should be designed to convey a 1 in 200 year flow to ensure that the risk of flood at the site remains low. In accordance with The Highland Council's Supplementary Guidance: Flood Risk and Drainage Impact Assessment the Flood Team require that a buffer zone of a minimum of 6m is left free of development between the top of bank of any small watercourse/drain and any new development. Within this zone there should be no construction of any kind or changes to ground levels.

7.6 **Historic Environment Team**: No objection. Proposals to protect Knock Urray Broch during construction are welcomed. The application lies within an area of archaeological potential. It is considered that there remains the potential for buried features or finds to be impacted by this development. While the risk of encountering buried deposits is not such as to warrant a full excavation, it is important that the nature and extent of any features is identified and recorded before destruction. Site clearance work should be done under archaeological supervision so that if necessary any recording can be done without causing undue delay or inconvenience for the development. Recommend a condition be attached requiring a Watching Brief.

7.7 **Transport Planning**: No objection subject to a number of conditions and informatives. However, given the limited level of transport information submitted to support the application it is not agreed that the traffic impact on the local community and road network during the construction and demolition phases is insignificant (contrary to the statement in the EA).

7.8 **SNH**: No objection. There are natural heritage interests of international importance (Caithness Lochs SPA, North Caithness Cliffs SPA, Caithness and Sutherland Peatlands SPA) which could be affected by the proposal, but in SNH's view, these will not be adversely affected by the proposal.

7.9 **Office of Nuclear Regulation**: No objection or comments

7.10 **Historic Environment Scotland**: No objection, recommend condition for the protection of the Scheduled Monument of Knock Urray, broch. HES welcome the mitigation measures. It is unlikely that HES would grant SMC for works which would physically impact on the edge of the scheduled area of the monument, such as widening the temporary access track on to it or constructing fencing through it. It is, therefore, important that the extent of the scheduled area is appropriately marked out on the site and any plans before any works take place. It is also essential that all working on the site are made aware of its location and legally protected status and that accidental damage to a scheduled monument would constitute an offence under the Ancient Monuments and Archaeological Areas Act 1979.

7.11 **SEPA**: No objection subject to condition regarding drainage. Originally objected due to lack of information on radiological contamination and substation drainage. No concerns over impact on GWDTEs or flood risk subject to a buffer strip being left between the field drains and development.

8. DEVELOPMENT PLAN POLICY

The following policies are relevant to the assessment of the application

8.1 **Highland Wide Local Development Plan 2012**

24 - Dounreay
28 - Sustainable Design
29 - Design Quality and Place-making
30 - Physical Constraints
31 - Developer Contributions

41 - Business and Industrial Land
42 - Previously Used Land
49 - Coastal Development
55 - Peat and Soils
56 - Travel
57 - Natural, Built and Cultural Heritage
58 - Protected Species
59 - Other important Species
60 - Other Importance Habitats
61 - Landscape
63 - Water Environment
64 - Flood Risk
65 - Waste Water Treatment
66 - Surface Water Drainage
69 - Electricity Transmission Infrastructure
72 - Pollution
77 - Public Access

8.2 **Caithness and Sutherland Local Development Plan 2018**

CaSPlan notes a focus on Employment and at paragraph 9 provides clear support for high voltage energy transmission as identified in NPF3:

"Supporting and enabling a High Voltage Energy Transmission Network (as identified in NPF3), recognising the strategic need and where relevant national priority of some schemes, whilst carefully considering route options and detail of proposals, promoting optimisation of the network to achieve significant benefits with limited impacts through a co-ordinated approach and smart solutions. "

8.3 **Highland Council Supplementary Planning Policy Guidance**

Dounreay Planning Framework (DPF2) April 2015. Provides guidance on proposals relating to the decommissioning, restoration and after use (site is outwith but adjacent to, but relevant in terms of co-location without impacting on future opportunities at the DPF 2 site)

Construction Environmental Management Process for Large Scale Projects (August 2010)
Developer Contributions (March 2013)
Flood Risk and Drainage Impact Assessment (Jan 2013)
Highland Historic Environment Strategy (Jan 2013)
Highland's Statutorily Protected Species (March 2013)

9. OTHER MATERIAL POLICY CONSIDERATIONS

9.1 **Scottish Government Planning Policy and Guidance**

9.2 **National Planning Framework 3**

NPF3 supports the maintenance and enhancement of the electricity grid network. Paragraph 3.28 states that: "Electricity grid enhancements will facilitate increased renewable electricity generation across Scotland. An updated national development focusing on enhancing the high voltage transmission

network supports this, and will help to facilitate offshore renewable energy developments... This will be vital, particularly for enabling areas that are remote from the main grid to realise their renewable energy potential. "

9.3 Scottish Energy Strategy: The Future of Energy in Scotland

10. PLANNING APPRAISAL

10.1 Section 25 of the Town and Country Planning (Scotland) Act 1997 requires planning applications to be determined in accordance with the development plan unless material considerations indicate otherwise.

Determining Issues

10.2 This means that the application requires to be assessed against all policies of the Development Plan relevant to the application, all national and local policy guidance and all other material considerations relevant to the application.

Planning Considerations

10.3 The key considerations in this case are:

a) compliance with the development plan and other planning policy

b) any other material considerations.

Development plan/other planning policy

10.4 The development plan comprises both the adopted Highland wide Local Development Plan (HwLDP) and the Caithness and Sutherland Local Development Plan (CAS Plan). The site lies in an area identified as Wider Countryside in terms of the development plan. It is beyond the boundary identified for the Dounreay Nuclear Establishment which is subject to specific development plan policy. The development plan must be read as a whole, with applications then assessed against of the policies relevant to the proposed development and its location. There are no site specific policies affecting the application site. The Dounreay nuclear site has site specific policies concerning its restoration and future use but the application site is beyond the boundary of this. The adopted HwLDP, with its subject specific policies is relevant to the assessment of the application.

10.5 The principal HwLDP policy on which the application needs to be determined is Policy 69 - Electricity Transmission Infrastructure. Other policies listed at 6.2 of this report are also relevant and the application must be assessed against these. These matters are assessed in full within a number of material considerations examined within this report.

10.6 The Development Plan supports the broad principle of energy development. Policy 69 specifically highlights that the “Council will have regard to their level of strategic significance in transmitting electricity from areas of generation to areas of consumption.” “It will support proposals which are assessed as not having unacceptable impact on the environment including natural, built and cultural

heritage features." Where development is assessed as not having unacceptable significant impact on the environment, then the proposal would accord with the Development Plan.

National Policy

10.7 Scotland's Third National Planning Framework (NPF- 3) sets out the government's thoughts on how best to achieve a more successful country through increasing sustainable economic growth. It includes plans for infrastructural investment including a high voltage electricity transmission network deemed vital in meeting national targets for electricity generation, statutory climate change targets and security of energy supplies. The current application falls into the category of National Development. Whist this establishes a need for the project all necessary assessments and consents are still required for such development. Appropriate levels of mitigation would still be expected to help avoid or reduce environmental effects and demonstrate "no adverse effect" on the integrity of European protected sites.

10.8 An aim of the planning system is to achieve the right development in the right place; not to allow development at any cost. SPP introduces a presumption in favour of development that contributes to sustainable development. The connection of approved renewable energy projects to the grid, which would be enhanced by this project, advances its sustainable development credentials. The expansion of the grid transmission network in the north of Scotland not only is a short term economic construction boost, but also a long term infrastructural benefit to the area. A priority of the Scottish Energy Strategy (2107) is to champion Scotland's renewable energy potential, creating new jobs and supply chain opportunities.

10.9 Further advice is provided in SPP in respect of potential impacts on the natural environment and the need to protect and enhance Scotland's key natural resources including landscape, ecology, habitats and biodiversity. The impacts on these resources have been presented within the supporting information and are considered in more detail within this assessment. The policies and content of Scottish Planning Policy is a material consideration that carries significant weight, but it is for the decision maker to determine the appropriate weight in each case. If there are no significant impacts on valued resources the development can be supported.

Layout and Design

10.10 The proposed substation electrical infrastructure and buildings will be located on a platform within an area approximately 245 m by 145 m (although the site is not rectangular). There are 5 individual buildings which will vary in height between approximately 5.5 m and 16 m to the apex. The buildings are of steel clad design. These all have a utilitarian industrial/agricultural shed appearance with rectangular footprints and dual pitched roofs. The compound will be enclosed by fencing.

10.11 The design of the buildings has been discussed in detail with the applicant. The applicant was encouraged to consider a more innovative design solution rather than large sheds. The design proposed fits with the current industrial landscape,

however, it is expected that these buildings will remain in place following the removal of buildings on the Dounreay site and possibly the Vulcan site. The applicant was encouraged to approach the design solution with a long term vision and with the view to setting the tone and standard for any future re-development at Dounreay. Regrettably, the applicant declined to re-design the buildings, but did engage in discussions with the Planning Service over the colour of the cladding in order to help integrate the buildings into the their setting. A mixed grey colour scheme has been agreed – anthracite and merlin grey (refer to visualisations, fig 5.3-5.8A).

10.12 The applicant provided a detailed justification as to why the design of the buildings are as proposed:

10.13
- The fundamental philosophy of the substation building design is to achieve the necessary level of technical functionality for safe and reliable operation of the network using the most cost-effective approach. As Transmission licence holders, SHE-T has a duty to deliver and maintain the network with minimal cost to the UK consumer.

10.14
- Key design selections, which includes sizing of buildings, construction design and material selection, are developed with both capital costs and long-term operational costs in mind. A key factor for housing equipment within an indoor layout is to protect the installed assets from the harsh saline environment. However, additional considerations for building design have also included the general landscape, with the final outcome intended to propose structures which are able to integrate into the local surroundings as much as is practical for high-voltage substation infrastructure. This approach produces the basic building assemblies that are used in the final planning proposal.

10.15
- Standard square steel portal frame buildings are the most cost effective buildings in terms of construction and maintenance for unmanned substations. Their inherent squareness provides maximum clearance for equipment, access and maintenance. Lower profile or shaped profile buildings will not only cost more in terms of design and materials (increase in carbon footprint) but will more than likely impose internal space constraints that will impact on height, size, access and maintenance.

10.16 The substation building functions and heights are dictated by the following:

Super Grid Transformer (SGT)
- This is a high voltage (220/132kV) transformer, that converts the circuit voltage from 220kV at the subsea cable to 132kV at the substation.
- The height of the building is dictated by the overhead crane clearance required to vertically remove the internal component of the transformer circuit breaker out of its structure.

Shunt Reactors (Reactive Compensation)
- These are electrical devices similar to transformers, but used to improve the power quality of the circuit, which are needed due to the long length of power cable connecting the island to the mainland.

- The height of the buildings are dictated by the roof clearance required to vertically remove the internal component of the reactor tap changer out of its structure.

Control Building

- This building houses the batteries, low voltage power, control and circuit protection systems, as well as welfare facilities.
- The height of the building is dictated by the height of the control and circuit protection systems cubicles.

Harmonic Filter

- This consists of high voltage capacitor and air cooled reactors, configured to reduce the harmonic voltage distortion levels introduced by the long length of high voltage subsea cable.
- The height of the buildings are dictated by the crane clearance required to vertically remove the internal component of the harmonic filter out of its structure.

10.17 Taking into account discussions with the applicant and the agreed colour scheme, the siting, design and the external appearance of the buildings are considered to be acceptable in this location.

Landscaping and Visual Impact

10.18 The site does not lie within a designated landscape, it lies adjacent to the Dounreay and Vulcan Nuclear sites. Currently the existing buildings dominate the local skyline due to their massing and concentration, forming the character and perception of a large scale industrial complex located in an open landscape. The existing sites are bounded by steel palisade security fencing.

10.19 The applicant's Landscape and Visual Impact Assessment identifies receptors within 2km of the site. 11 residential receptors are identified in the local communities of Achvarasdal, Shebster, Reay and Sandside Bay. The Assessment concludes that the proposal would have a moderate or moderate to minor effect on the visual amenity of 6 of the closest residential receptors with the impact being most significant on views from Isauld House.

10.20 The proposal would also be visible from the A836 (also a National Cycle Route) and recreational users of core paths by Sandside Bay and visitors to Cnoc Freiceadain's chambered cairns. The proposed development would increase the extent of development in the view however at this point in time it would not change the nature of the view, located in the context of Dounreay and Vulcan.

10.21 The proposal requires to be considered in the context of the character and visual perception of the wider industrial area with an already extensive presence in the landscape. In this regard, the proposal is not considered to be significantly detrimental to individual or community amenity. It can be accommodated in the landscape without resulting in significant adverse effects due to topography and the context in which the site lies. The grey tones of the external cladding agreed in consultation with the Planning Service help to assimilate the building into the land, sea and sky backdrop.

Access and Traffic Impact

10.22 Once operational, the development will not be a travel generating use as the site will not be manned. It will only be visited for maintenance purposes. Therefore the potential for impacts are solely during construction. Construction access will be taken from the existing access track off the A836. A bellmouth will be created at the intersection with the A836. Transport Planning have provided a detailed consultation response and have recommended conditions be attached. It is considered that the construction traffic and be appropriately managed and will not result in any significant impacts.

Water, Drainage and Flood Risk

10.23 The drainage strategy proposed utilises sustainable urban drainage systems. The EA does not identify any adverse impact on the water environment. SHE Transmission's set of General Environmental Management Plans (GEMPs) includes for a Site Water Management Plan which will be developed to manage potential risks to the water environment including silt mitigation and its locations, dewatering of excavations inclusive of pump locations, monitoring points, cut off drains, and SUDS (incl. compound).

10.24 SEPA's Flood Map indicates that part of the lies within 1 in 200 year (0.5% annual exceedance probability) pluvial flood extents; the site could therefore be at risk of surface water flooding in a severe weather event. Surface water on site can be managed by an appropriately-designed site drainage system. The Proposed Development will be designed to be protected from fluvial flooding in the event of a 1 in 200-year flooding event. The site is also to be protected from pluvial flooding with the implementation of perimeter cut-off drains.

10.25 SEPA and the Council's Flood Risk Management Team have provided detailed consultation responses. It is considered that water, drainage and flood risk will be appropriately.

Ecology/Nature Conservation

10.26 A number of nature conservation sites designated for their ecological or ornithological importance are situated within the study area identified in the submitted Environmental Assessment. SNH have been consulted and have provided a detailed response.

10.27 There is potential for impacts on the conservation objectives of the Caithness Lochs Special Protection Area. Potential effects are disturbance of foraging geese and swans during construction and the temporary and permanent loss of foraging habitat during construction and operation. However, these are not considered significant due to the availability of extensive areas of alternative foraging habitat on agricultural land throughout Caithness.

10.28 The assessment identifies potential impacts on habitats. No impacts were identified on groundwater dependent terrestrial ecosystems (GWDTE). Habitats of conservation interest are localised to the coastline north of the site. As such, there will be no direct negative impacts during construction or operation of the development. All works will be confined to the site, further inland. Indirect

impacts on priority habitats as a result of pollution during construction will be mitigated through implementation of a Construction Environmental Management Plan (CEMP).

10.29 The Proposed Development is not expected to impact on protected species subject to the mitigation proposed in the form of pre-construction surveys and relevant SHE Transmission Species Protection Plans for otter, water vole, reptile, and bats. There is the risk of disturbance and loss of habitat to breeding birds during construction, however this will be managed via the Bird SPP. Similarly, for wintering birds there is potential for disturbance and loss of foraging habitat. However, as these birds are mobile, disturbance is inherently less significant than breeding birds. Due to the small area of habitat affected and the wide availability of alternative habitat type, impacts will not be significant. A Habitats Regulation Appraisal (HRA) Stage 1 Screening Assessment has been undertaken to investigate the potential effects of the Proposed Development on the Caithness Lochs SPA and North Caithness Cliffs SPA. Potential effects are not anticipated to be significant.

10.30 It is considered that the proposal will not result in any unacceptable impacts on the natural environment.

Noise

A Noise Impact Assessment was undertaken by the applicant which concludes there is no potential for adverse noise effects on the closest receptors. Environmental Health have provided a consultation response stating they are satisfied with the methodology, assessment and findings of the assessment.

Built Heritage

10.31 The only designated built environment feature present within the Site is Knock Urray, broch (SM564), which is a Scheduled Ancient Monument. Dounreay Castle Scheduled Monument has also been identified as having potential to be affected by the proposed development. Due to the intervening topography and industrial buildings between the Proposed Development and Dounreay Castle, it is unlikely that the development will have a significant effect on the setting of the asset during both construction and operation. With regard Knock Urray broch, there is some potential for construction related impacts during construction from vibration and construction traffic. No construction work is planned within the curtilage of the site and appropriate mitigation in the form of semi-permanent fencing is proposed to protect the asset. Construction works have the potential to impact unknown buried archaeological remains that may be present. The appraisal concludes that there is likely to be a direct, permanent, potential effect on unknown archaeological deposits of slight adverse significance during construction. Recommendations have been made by the Council's Historic Environment Team to ensure an appropriate method of assessment, reporting and recording is undertaken. A Written Scheme of Mitigation will be produced prior to commencement of construction and a watching brief will be undertaken during construction. Given the identified mitigation, it is not considered that the proposal will have any significant impacts on built and cultural heritage assets.

Construction Impacts

10.32 The development of a project of this scale will have considerable “temporary” impacts including for example construction traffic but also construction noise, dust, waste, etc associated with all new developments of this scale. Such impacts are expected intermittently through the construction period. It is for these reasons that the applicant has a commitment toward a project specific Construction and Environmental Management Plan approach, the finalised details of which, following appointment of the project contractor, would require approval of the planning authority in consultation relevant consultees. In addition such an approach recognises the value of the appointment of an Ecological Clerk of Works (ECOW) post is made. This can usefully dovetail with a Planning Monitoring Officer role to monitor compliance with the conditions attached to any consent. Other controls including Dust Management Plans, Pollution Prevention Plans, Waste Management Plans, Surface Water Management, etc. would also be expected within a project specific Construction and Environmental Management Plan. The Proposed Development will incorporate a 'dark site' approach with no lighting in normal use. Lighting for safety or security purposes may be required but will be minimised where possible. The proposal is not considered to result in significant pollution risk due to identified mitigation measures.

Economic Impact

10.33 The development of grid infrastructure has been identified as a national priority together within investment in renewable energy. The development of substation projects as presented within this application not only are beneficial in strengthening the robustness of the country’s grid network, further job and investment opportunities are created through the development of associated supply chains. The development is required to facilitate the connection of renewable schemes to the national grid, which will allow the export of electricity generated to consumers. The relationship of the development to the economic and social benefits of renewable energy developments is therefore relevant, in a positive way. The Highland has experienced a construction boom, with significant construction activity in the transmission network. The approval of the current application will have similar short term construction economic impact, although significantly less impact at the operational stage. This weighs in favour of the development. The siting, design and external appearance and limited visual impact of the development in this location means the impacts of the development are not anticipated to have adverse impact on the local economy, particularly tourism.

Other Material Considerations

10.34 There are no other material considerations.

Non-material considerations

10.35 There are no non-material considerations.

Matters to Be Secured by Legal Agreement

10.26 A wear and tear agreement covering use of the local road network during all construction periods associated with this development is required. The applicant has four months from the date that the Council's solicitor writes to the Applicant / Applicant's solicitor indicating the terms of the legal agreement, to deliver to the Council a signed legal agreement. Should an agreement not be delivered within four months, the application shall be refused under delegated powers.

Conclusion

10.27 The Scottish Government and the Council each have policies in support of projects which increase the capacity of the grid network to serve the community and in particular the significant level of investment in renewable energy. NPF3 justifies the need for such investment highlighting such development as of national importance.

10.28 Highland has been successful in attracting inward investment in renewables, enabled in part by a matching level of investment in the improvement of the grid transmission system. This success has lead to the Highlands having a good understanding of this type of project and this Council having appropriate policies and guidance to assist in its assessment and to effectively manage their implementation on the ground. For example, the use of Construction and Environmental Management Documents “CEMD”, a particular approach to assist with the implementation / management of such largescale projects with a focus on environmental protection. There are investment benefits too that favour these projects, not just from the short term construction but a continued stream of investment assisting with apprenticeships schemes and partnership networks with local companies.

10.29 Statutory and other consultees responding to this application are generally supportive. No significant adverse impacts have been identified with this project following assessment by statutory consultees. Some have requested planning conditions to be attached to any grant of planning permission to effectively ensure that their specific interests are secured.

10.30 Construction impacts can be managed through best practice construction management techniques to ensure surrounding interests, particularly road access and the amenity of local housing are safeguarded from the key impacts of the development, by planning conditions to strengthen and clarify the plans and supporting information as submitted by the applicant.

10.31 The application can be supported in the context of the Council’s Development Plan and in particular it’s Policy 69 on Electricity Transmission Infrastructure and the underlying support for renewable energy development which is consented in this area. All relevant matters have been taken into account when appraising this application. It is considered that the proposal accords with the principles and policies contained within the Development Plan and on balance is acceptable in terms of all other applicable material considerations.

12. IMPLICATIONS

12.1 Resource: Not applicable.

12.2 Legal: Not applicable.

12.3 Community (Equality, Poverty and Rural): Not applicable.

12.4 Climate Change/Carbon Clever: Not applicable.

12.5 Risk: Not applicable.

12.6 Gaelic: Not applicable.

13. RECOMMENDATION

Action required before decision issued	Y	
Notification to Scottish Ministers	N	
Conclusion of Legal Agreement	Y	Roads wear and tear agreement
Revocation of previous permission	N	

Subject to the above, it is recommended that planning permission be **GRANTED,** subject to the following **conditions and reasons**

1. The development hereby approved shall be carried out in accordance with the approved plans; as set out in the application's supporting information; the submitted schedule of mitigation unless otherwise agreed in writing with the planning authority and in compliance with the conditions attached to this planning permission.

Reason: To identify the extent and terms of the development consent.

2. No development or work (including site clearance) shall commence until proposals for an archaeological watching brief to be carried out during site clearance and excavation works, has been submitted to, and approved in writing by, the Planning Authority. Thereafter, the watching brief shall be implemented as approved.

Reason: In order to protect the archaeological and historic interest of the site.

3. No development shall commence until a detailed specification for all external finishing materials, including colours, shall be submitted to and approved in writing by the Planning Authority. Thereafter the development shall be completed in accordance with the approved details.

Reason: In the interests of visual amenity.

4. No development shall commence until a Transport Statement has been submitted to and approved in writing by the Planning Authority in consultation with the Roads Authority. This statement should follow the methodology appended to this decision notice and shall in particular address the vehicular traffic impacts and mitigation required for;

- Abnormal loads
- HGV traffic
- Workforce vehicles including the relationship with the adjacent Dounreay junction which is at capacity during the morning peak.
- Cumulative impacts with the adjacent Dounreay Phase 3 site including liaison with the developer and co-ordination of the CTMPs.

The developer shall also liaise with the adjacent Dounreay Phase 3 site to co-ordinate Traffic Management Proposals.

Reason: In the interests of road safety.

5. No development shall commence until detailed drawings showing the design of the proposed access junction onto the A836 have been submitted to and agreed in writing by the Council as Planning Authority, in consultation with the Roads Authority. Details shall include the following:

- The junction design together with any traffic management proposals shall demonstrate that there is appropriate capacity for the proposed traffic flows at peak times and during the busiest construction periods.
- Suitably detailed drawings on an accurate topographical survey showing the swept paths of the design rigid and articulated HGVs using the proposed access shall be submitted as part of the design.
- The access shall be constructed in accordance with the Council's 'Roads and Development Guidelines for New Developments' and shall be a minimum of 5.5m wide over a minimum length of 13m. The access shall be surfaced for a minimum distance of 10m. The bell mouth radii shall be a minimum of 10m with splays as required to prevent over-run of the adjacent verge. The vertical alignment shall be designed to prevent discharge of surface water onto the public road. The design shall include appropriate provision for the original surface water drainage ditch with a minimum 300mm diameter of any culvert required. The design shall demonstrate junction visibility splays of 4.5x215m can be practically achieved and are available within the applicants control in both directions. These visibility splays shall be provided and maintained when the access is in use. Confirmation of the long term proposals for the use and retention or amendment and removal of the access shall be confirmed.

Reason: In the interests of road safety.

6. No development shall commence until details of temporary parking areas and turning provision for construction vehicles have been submitted to and approved in writing by the Planning Authority in consultation with the Roads Authority.

Reason: Reason: In the interests of road safety to ensure parking is appropriately accommodated within the site during construction.

7. No development shall commence until a an updated Construction Traffic Management Plan (CTMP) has been submitted to and approved in writing by the Planning Authority in consultation with the Roads Authority and Transport Scotland including the following:

- The developer shall confirm the volume of construction materials and earthworks required and shall submit for approval a programme showing the type and total number of HGV movements to and from the site over the construction period and the construction routes to be used. The programme shall detail periods of above average HGV traffic flows such as concrete pours which require continuous HGV movements over a concentrated period.
- The plan shall identify any time periods when workforce and/or HGV traffic shall not use the agreed routes (for example where the routes pass schools during school drop off and pick up periods or when there is congestion at the adjacent Dounreay junction).
- A wear and tear agreement including an agreement with the Council to cover the cost of any damage or extra-ordinary maintenance requirements caused by construction traffic related to the development on the local road network.
- The developer shall submit Road Assessment Condition Surveys for agreement in writing by the Council of the agreed construction traffic routes from point of origin to the site before commencement, at monthly periods during construction (or other regular intervals as agreed in writing with the Council) and within three months of completion of the development. Where reasonably practicable the surveys shall be undertaken jointly with the Council and at least 5 working days notice shall be given to the Council to arrange attendance.

The submitted CTMP (Table 4-1) of the EA shall be updated to include the following additional information.

- Confirmation of the proposed construction traffic route for access to the Site including clearly identified HGV vehicle delivery routes for bulk items (such as fill and concrete and other construction materials) these shall cover the full extent of the route on the local road network i.e. beyond the trunk road network.
- Confirmation that temporary signage advising drivers of any abnormal loads and construction traffic operating in the area to be erected on relevant sections of the route will be in accordance with Chapter 8 of the Traffic Signs Manual.
- Confirmation that road vacuum brushes will be deployed to keep the agreed construction traffic routes and roads as clean as reasonably practicable when required or when reasonably requested by the Council as Roads Authority; alternatively wheel wash facilities shall be provided within the site.

In addition, the submitted CTMP (referenced GE3 Table 2-3)shall be updated the include additional Good Practice Measures as they relate to the traffic impact on the local community and road network:

- GE10 the Driver induction – Confirmation that a driver induction will be undertaken to include a safety induction, speed control and the relevant requirements of the Construction Traffic Management Plan including the identification of specified access routes and any restrictions.
- GE13 - Road condition – confirmation that the contractor will be required to undertake road condition surveys throughout the construction works and carry out any remedial road works (as considered appropriate) resulting from the construction traffic as agreed with Roads Authority, using site won material where possible. Prior to the use of site won material on the public road appropriate testing shall be carried out to the satisfaction of the Council as Roads Authority to ensure it meets the requirements of the Specification for Highway Works.
- GE14- Weight restrictions – confirmation that SHE Transmission will identify and ensure that HGV's adhere to weight restrictions on roads in the area.

Reason: In the interests of road safety.

8. No development shall commence until full details of the finalised substation drainage has been submitted to and approved in writing by the Planning Authority in consultation with SEPA and the Council's Flood Risk Management Team. This shall be submitted at least 2 months prior to the commencement of development.

Reason: To ensure that the site is properly drained.

9. No development shall commence until a plan for the establishment and management of a Community Liaison Group (CLG) has been submitted to and approved in writing by the Planning Authority. The purpose of the CLG shall be to discuss the progress of the construction of the development and in its initial years of operation following energisation. The CLG shall sustain an open invitation to representatives of the Community Council and resident's within 1km of the development site. The approved plan shall thereafter be implemented as agreed, including a general timetable to ensure meetings are held in advance of critical periods of construction activity or on a reasonably regular basis to facilitate purposeful community engagement.

Reason: To provide for effective community consultation on the development and operation of the substation in its early years.

10. No development shall commence until a finalised Construction and Environmental Management Document (CEMD) has been submitted to and approved in writing by the Planning Authority, in consultation with SEPA. The CEMD must as a minimum provide for the following: -

- The employment of a suitably qualified and experienced Ecological Clerk of Works, or equivalent, for the construction project, with specific responsibility for environmental management and the authority to take action when required,

including advising operations to be stopped and implementing mitigation measures as set out in the Environmental Assessment – Schedule of Mitigation or as otherwise agreed in writing with the Planning Authority.

- The employment of a suitably qualified and experienced professional as a Planning Monitoring Officer, to discharge and to monitor compliance with the conditions attached to this consent, including provision of a quarterly compliance report to the Council.

- A programme for environmental auditing and monitoring in and around the Site, before and during construction and for 18 months after the development completion date, to include the establishment of an environmental checklist, to monitor and input into the planning of construction activities and ensure implementation of all environmental mitigation measures.

- Finalised Environmental Plans detailing measures to manage, control and monitor key impacts. It is expected this will take the form of site plans highlighting all measures particularly buffers : -

    - Construction Noise and Vibration Management Plan.
    - Construction Dust Management Plan.
    - Construction Waste Management Plan.
    - Construction Pollution Prevention Plan (including managing the handling storage and use of hazardous chemicals and fuels).
    - Construction Surface Water Management Plan
    - Construction Soil Management Plan
    - Protected species and habitat management Plan, including pre-commencement surveys to finalise all proposed mitigation.
    - Construction Outdoor Access Management Plan.

Reason: To ensure protection of surrounding environmental interests and general amenity.

11. No development shall commence until a reinstatement plan for any temporary works have been submitted to and approved in writing by the Planning Authority. This shall also include an agreed timescale for restoration works. Thereafter this shall be completed in accordance with the approved details.

Reason: In the interests of amenity.

No development shall commence until the extent, location, design and height of all fencing and boundary treatments have been submitted to and approved in writing by the Planning Authority. Thereafter the development shall be completed in accordance with the approved details.

Reason: In the interest of visual amenity.

12. No development shall commence until the Scheduled Monument of Knock Urray, broch (HA 1) (SM564) has been fenced off with semi-permanent fencing to protect the asset through the duration of the construction work. Fencing work

shall not physically impact or fall within and ground contained within the Scheduled Monument curtilage. If any ground-breaking work has to be undertaken, formal agreement must be sought from the Scottish Ministers through Scheduled Monument Consent [SMC] with Historic Environment Scotland.

Reason: In order to protect the archaeological and historic interest of the site.

13. No development shall commence until an updated Noise Impact Assessment (NIA) has been submitted to and approved in writing by the Planning Authority in consultation with Environmental Health. The updated NIA shall be reassessed when manufacturer's noise level data becomes available for the equipment to be installed within the development site. Where the re-assessment identifies additional noise mitigation, the agreed measures shall be implemented in full to the satisfaction of the Planning Authority prior to commencement of the operation of the development hereby approved. Thereafter the development shall be operated in accordance with the approved details.

Reason: In the interests of ensuring that sufficient mitigation is provided to avoid adverse impacts on residential amenity.

14. Within a period of 6 weeks of the sub-station becoming operational, a noise assessment shall be carried out to verify compliance with the agreed predicted levels. A copy of this noise assessment shall be submitted to and approved in writing by the Planning Authority. If the noise assessment shows that the sub-station exceeds the predicted noise levels and results in an adverse impact at any noise sensitive properties, a scheme of mitigation, including timescales for the implementation of the mitigation, shall be submitted to the Planning Authority within 8 weeks from the date of submission of the noise assessment. Thereafter the mitigation shall be implemented in accordance with the approved scheme and timescales.

Reason: In the interests of ensuring that sufficient mitigation is provided to avoid adverse impacts on residential amenity.

15 A buffer zone of a minimum of 6m shall be left free of development between the top of the bank of any small watercourse/drain and any new development. Within this zone there should be no construction of any kind or changes to ground levels.

Reason: In accordance with The Highland Council's Supplementary Guidance: Flood Risk and Drainage Impact Assessment.

REASON FOR DECISION

The proposals accord with the provisions of the Development Plan and there are no material considerations which would warrant refusal of the application.

TIME LIMIT FOR THE IMPLEMENTATION OF THIS PLANNING PERMISSION

In accordance with Section 58 of the Town and Country Planning (Scotland) Act 1997 (as amended), the development to which this planning permission relates must commence within FIVE YEARS of the date of this decision notice. If development has not commenced within this period, then this planning permission shall lapse.

FOOTNOTE TO APPLICANT

Initiation and Completion Notices

The Town and Country Planning (Scotland) Act 1997 (as amended) requires all developers to submit notices to the Planning Authority prior to, and upon completion of, development. These are in addition to any other similar requirements (such as Building Warrant completion notices) and failure to comply represents a breach of planning control and may result in formal enforcement action.

1. The developer must submit a Notice of Initiation of Development in accordance with Section 27A of the Act to the Planning Authority prior to work commencing on site.

2. On completion of the development, the developer must submit a Notice of Completion in accordance with Section 27B of the Act to the Planning Authority.

Copies of the notices referred to are attached to this decision notice for your convenience.

Accordance with Approved Plans and Conditions

You are advised that development must progress in accordance with the plans approved under, and any conditions attached to, this permission. You must not deviate from this permission without consent from the Planning Authority (irrespective of any changes that may separately be requested at the Building Warrant stage or by any other Statutory Authority). Any pre-conditions (those requiring certain works, submissions etc. prior to commencement of development) must be fulfilled prior to work starting on site. Failure to adhere to this permission and meet the requirements of all conditions may invalidate your permission or result in formal enforcement action

Flood Risk

It is important to note that the granting of planning permission does not imply there is an unconditional absence of flood risk relating to (or emanating from) the application site. As per Scottish Planning Policy (paragraph 259), planning permission does not remove the liability position of developers or owners in relation to flood risk.

Scottish Water

You are advised that a supply and connection to Scottish Water infrastructure is dependent on sufficient spare capacity at the time of the application for connection to Scottish Water. The granting of planning permission does not guarantee a connection. Any enquiries with regards to sewerage connection and/or water supply should be directed to Scottish Water on 0845 601 8855.

Local Roads Authority Consent

A 'Road Opening Permit' is required by the Roads Scotland Act (Section 56) in addition to Planning Permission in order to construct the access improvements and application should be made to the Council as Roads Authority at least 28 days in advance of construction. Information on how to apply is given at:

https://www.highland.gov.uk/info/20005/roads_and_pavements/101/permits_for_working_on_public_roads/2

Failure to comply with access, parking and drainage infrastructure requirements may endanger road users, affect the safety and free-flow of traffic and is likely to result in enforcement action being taken against you under both the Town and Country Planning (Scotland) Act 1997 and the Roads (Scotland) Act 1984.

Further information on the Council's roads standards can be found at: http://www.highland.gov.uk/yourenvironment/roadsandtransport

Application forms and guidance notes for access-related consents can be downloaded from:

http://www.highland.gov.uk/info/20005/roads_and_pavements/101/permits_for_working_on_public_roads/2

Mud and Debris on Road

Please note that it an offence under Section 95 of the Roads (Scotland) Act 1984 to allow mud or any other material to be deposited, and thereafter remain, on a public road from any vehicle or development site. You must, therefore, put in place a strategy for dealing with any material deposited on the public road network and maintain this until development is complete.

Damage to the Public Road

Please note that the Council, under Section 96 of the Roads (Scotland) Act 1984, reserves the right to recover all costs for repairing any damage to the public road (and/or pavement) which can be attributed to construction works for this development.

Construction Hours and Noise-Generating Activities: You are advised that construction work associated with the approved development (incl. the loading/unloading of delivery vehicles, plant or other machinery), for which noise is audible at the boundary of the application site, should not normally take place outwith the hours of 08:00 and 19:00 Monday to Friday, 08:00 and 13:00 on

Saturdays or at any time on a Sunday or Bank Holiday in Scotland, as prescribed in Schedule 1 of the Banking and Financial Dealings Act 1971 (as amended).

Work falling outwith these hours which gives rise to amenity concerns, or noise at any time which exceeds acceptable levels, may result in the service of a notice under Section 60 of the Control of Pollution Act 1974 (as amended). Breaching a Section 60 notice constitutes an offence and is likely to result in court action.

If you wish formal consent to work at specific times or on specific days, you may apply to the Council's Environmental Health Officer under Section 61 of the 1974 Act. Any such application should be submitted after you have obtained your Building Warrant, if required, and will be considered on its merits. Any decision taken will reflect the nature of the development, the site's location and the proximity of noise sensitive premises. Please contact env.health@highland.gov.uk for more information.

Protected Species – Halting of Work

You are advised that work on site must stop immediately, and Scottish Natural Heritage must be contacted, if evidence of any protected species or nesting/breeding sites, not previously detected during the course of the application and provided for in this permission, are found on site. For the avoidance of doubt, it is an offence to deliberately or recklessly kill, injure or disturb protected species or to damage or destroy the breeding site of a protected species. These sites are protected even if the animal is not there at the time of discovery. Further information regarding protected species and developer responsibilities is available from SNH: www.snh.gov.uk/protecting-scotlands-nature/protected-species

Contaminated Land

There is the potential for contamination at this site due to its former use as Dounreay Nuclear Facility. As the proposed development would not appear to materially change the risk of potential contamination at the site an investigation is not required at this stage. However, be advised that all sites with a former industrial/commercial use have been prioritised by the Highland Council under duties conferred by Part IIA of the Environmental Protection Act 1990, and may require investigation in the future. In addition land contamination issues may affect property value. Should you wish to discuss potential contamination issues or commission your own investigation, please contact Community Services -, Contaminated Land for advice.

Archaeology

Further to condition 2 A controlled topsoil strip will ensure that that any features uncovered will be adequately recorded, while causing minimum delay to the development. The applicant will need to engage the services of a professional archaeologist. The work will result in a report which will be lodged in the Highland Historic Environment Record (HER), where it may be consulted for research. Archaeological contractors are asked to send copies of such reports direct to the Council's Historic Environment Team.

SEPA

The applicant is advised to make early contact with SEPA's Regulatory Team to discuss specific requirements for SEPA authorisation and pollution prevention. SEPA, Strathbeg House, Clarence Street, Thurso, Caithness, KW14 7 JS Tel: 0187894422

Historic Environment Scotland

It is unlikely that HES would grant SMC for works which would physically impact on the edge of the scheduled area of the monument, such as widening the temporary access track on to it or constructing fencing through it. It is, therefore, important that the extent of the scheduled area is appropriately marked out on the site and any plans before any works take place. It is also essential that all working on the site are made aware of its location and legally protected status and that accidental damage to a scheduled monument would constitute an offence under the Ancient Monuments and Archaeological Areas Act 1979.

Transport Addendum (further to condition 4)

Transport Statement/Assessment Methodology for Public Roads for which Highland Council is the Roads Authority

1. Identify all public roads affected by the development. In addition to transportation of all abnormal loads and vehicles (delivery of components) this should also include routes to be used by local suppliers and staff. It is expected that the developer submits a preferred access route for the development. All other access route options should be provided, having been investigated in order to establish their feasibility. This should clearly identify the pros and cons of all the route options and therefore provide a logical selection process to arrive at a preferred route.

2. Establish current condition of the roads. This work which should be undertaken by a consulting engineer acceptable to the Council and will involve an engineering appraisal of the routes including the following:

- Assessment of structural strength of carriageway including construction depths and road formation where this is likely to be significant in respect of proposed impacts, including non-destructive testing and sampling as required.
- Road surface condition and profile
- Assessment of structures and any weight restrictions
- Road widths, vertical and horizontal alignment and provision of passing places
- Details of adjacent communities

3. Determine the traffic generation and distribution of the proposals throughout the construction and operation periods to provide accurate data resulting from the proposed development including

- Nos. of light and heavy vehicles including staff travel
- Abnormal loads
- Duration of works

4. Current traffic flows including use by public transport services, school buses, refuse vehicles, commercial users, pedestrians, cyclists and equestrians.

5. Impacts of proposed traffic including

- Impacts on carriageway, structures, verges etc.

- Impacts on other road users
- Impacts on adjacent communities
- Swept path and gradient analysis where it is envisaged that transportation of traffic could be problematic
- Provision of Trial Runs to be carried out in order to prove the route is achievable and/or to establish the extent of works required to facilitate transportation

6. Cumulative impacts with other developments in progress and committed developments including the adjacent Dounreay Phase 3 project.

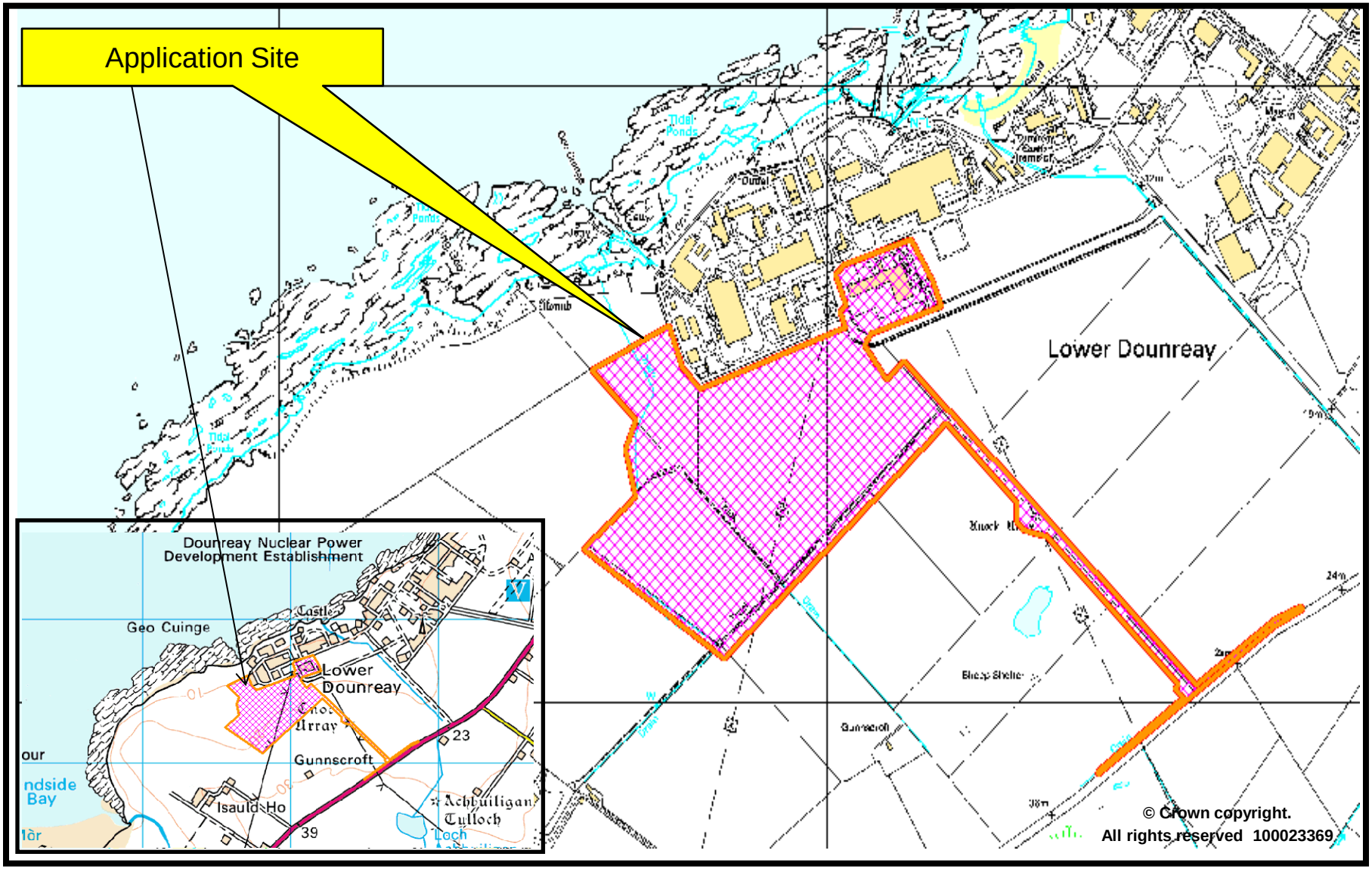
7. Proposed mitigation measures to address impacts identified in 5 above, including

- Carriageway strengthening
- Strengthening of bridges and culverts
- Carriageway widening and/or edge strengthening
- Provision of passing places
- Road safety measures
- Traffic management including measures to be taken to ensure that development traffic does not use routes other than the approved routes.

8. Details of residual effects.

Transport Planning, Development and Infrastructure, HQ, Glenurquhart Road, Inverness, IV3 5NX Phone: 01463 702965 Email: transport.planning@highland.gov.uk

Designation:	Acting Head of Development Management – Highland
Author:	Emma Forbes
Background Papers:	Documents referred to in report and in case file.
Relevant Plans:	Plan 1 - Figure 1.1 Location Plan
	Plan 2 - G85221-176.99.82-Y1-P024 Rev E – Access Layout Plan
	Plan 3 - G85221-178.99.82-Y1-P054 Rev E - Site Section
	Plan 4 - G85221-178.99.82-Y1- P022 Rev E – Drainage Layout
	Plan 5 - Figure 2.1 Site Plan
	Plan 6 - Figure 2.3 Building Elevations
	Plan 7 - G85221-178.99.82-Y1-P044 Rev A– Standard Security Fence
	Plan 8 - Figure 2.2 Platform Plan



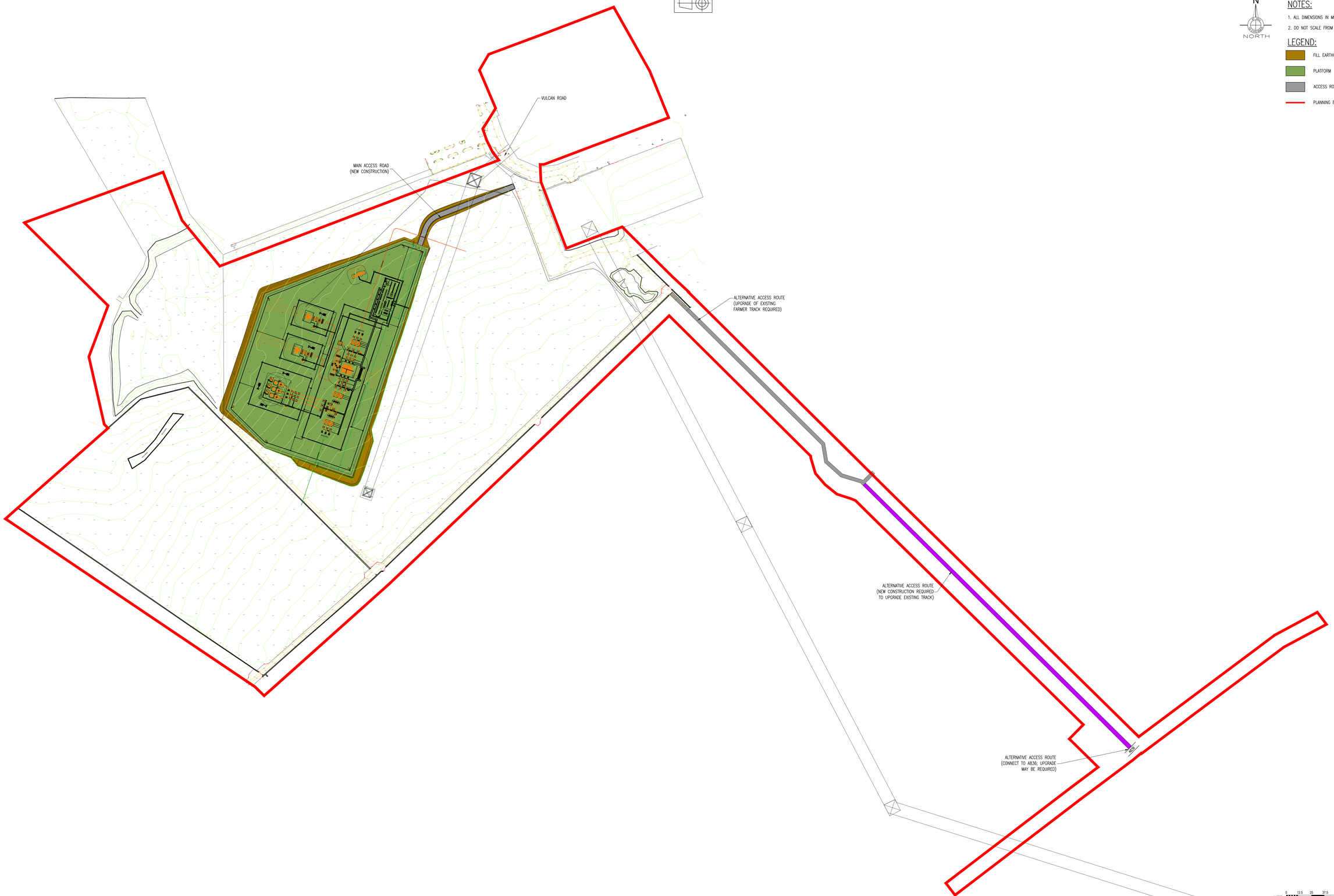
The Highland Council
Comhairle na Gàidhealtachd

Planning and Development Service

19/01092/FUL

Erection of 275/220 kV electricity substation comprising platform area, electrical infrastructure and buildings, associated plant, ancillary infrastructure and temporary site compound

N



NOTES:

1. ALL DIMENSIONS IN MILLIMETERS UNLESS NOTED OTHERWISE.
2. DO NOT SCALE FROM THIS DRAWING. IF IN DOUBT ASK.

LEGEND:

- FILL EARTHWORKS
- PLATFORM
- ACCESS ROAD
- PLANNING BOUNDARY

1:1250 Scale in m. 0 12.5 25 37.5 50 62.5 75 87.5 100 112.5 125

FOR PLANNING

ACCESS LAYOUT – PLAN

1:1250

THIS DRAWING HAS BEEN CHECKED TO DESIGN CHECK LEVEL (DCL) IN ACCORDANCE WITH BT BELL STRUCTURAL CHECKING PROCEDURE.

CDM REGULATIONS:
SIGNIFICANT OR UNUSUAL RESIDUAL HAZARDS HIGHLIGHTED BELOW:
THERE ARE NO RISKS UNFAMILIAR TO A COMPETENT CONTRACTOR.
SAFE METHODS OF WORK ARE THE RESPONSIBILITY OF THE CONTRACTOR AND ARE TO BE IDENTIFIED IN THE HEALTH AND SAFETY PLAN.

BT Bell consulting engineers

Customer: SHE Transmission plc

Contractor: SIEMENS ❖ bam Joint Venture
Substation Delivery Framework

Subcon. Drawing No.:

Site: DOUNREAY WEST 275/220/33kV SUBSTATION

Title: ACCESS LAYOUT - PLAN

DOUNREAY WEST 275/220/33kV SUBSTATION

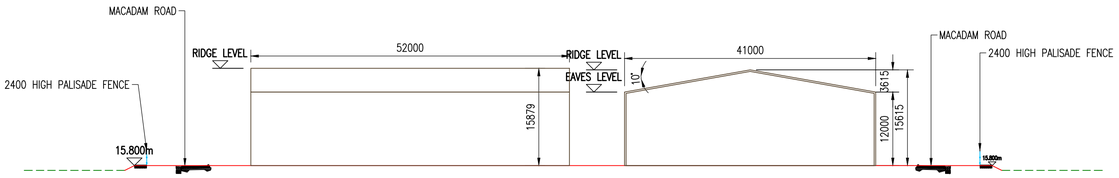
Contractor Drawing No.: GB6221-176.99.82-Y1-P024

Customer Drawing No.:

Designed	Drawn	Checked	Approved	Date	Scale	Size	Sheet	Revision
ADL	ADL	SMW	BTB	15/03/18	1:1250	A0	001 of 001	E

REVISION:	A		B		C		D		E	
DRAWN:	ADL	15/03/18	ADL	06/06/18	MTP	25/10/18	MTP	16/11/18	ADL	01/02/19
CHECKED:	SMW	15/03/18	SMW	06/06/18	ADL	25/10/18	ADL	16/11/18	SMW	01/02/19
APPROVED:	BTB	15/03/18	BTB	06/06/18	BTB	25/10/18	BTB	16/11/18	BTB	01/02/19
	LOD PROJECT REF.	FOR PLANNING	LOD PROJECT REF.	AMENDED TO NEW LAYOUT. ISSUE FOR PLANNING.	LOD PROJECT REF.	AMENDED TO NEW LAYOUT. ISSUE FOR PLANNING.	LOD PROJECT REF.	AMENDED TO NEW LAYOUT. ISSUE FOR PLANNING.	LOD PROJECT REF.	AMENDED TO NEW LAYOUT. ISSUE FOR PLANNING.

NOTE:
DUE TO SCALE OF SECTION, SOME DETAILS HAVE BEEN OMITTED FOR CLARITY.



A SECTION
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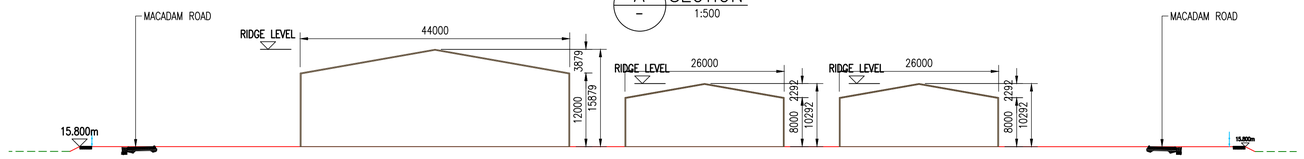

B SECTION
1:500

NOTES:

1. ALL DIMENSIONS IN MILLIMETERS UNLESS NOTED OTHERWISE.
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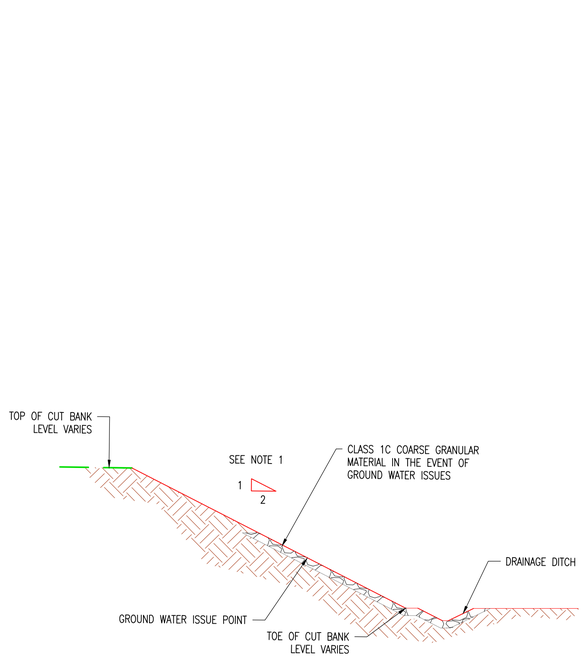
LEGEND:

EXISTING GROUND LEVEL

PROPOSED GROUND/PLATFORM LEVEL



TYPICAL SECTION THROUGH PLATFORM
1:25

KEY PLAN
1:1000

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1:1000 Scale in m. 0 10 20 30 40 50 60 70 80 90 100

FOR PLANNING

THIS DRAWING HAS BEEN CHECKED TO DESIGN CHECK LEVEL (DCL) 2 IN ACCORDANCE WITH BT BELL STRUCTURAL CHECKING PROCEDURE.

CDM REGULATIONS:
SIGNIFICANT OR UNUSUAL RESIDUAL HAZARDS HIGHLIGHTED BELOW:

THERE ARE NO RISKS UNFAMILIAR TO A COMPETENT CONTRACTOR

SAFE METHODS OF WORK ARE THE RESPONSIBILITY OF THE CONTRACTOR AND ARE TO BE IDENTIFIED IN THE HEALTH AND SAFETY PLAN.

BT Bell consulting engineers

REVISION:	A			B				C				D				E			
DRAWN:	ADL	15/03/18	LCP PROJECT REF.	ADL	08/06/18	LCP PROJECT REF.	AMENDED TO NEW LAYOUT. ISSUE FOR PLANNING.	MTP	25/10/18	LCP PROJECT REF.	AMENDED TO NEW LAYOUT. ISSUE FOR PLANNING.	MTP	14/11/18	LCP PROJECT REF.	AMENDED TO NEW LAYOUT. ISSUE FOR PLANNING.	ADL	01/02/19	LCP PROJECT REF.	AMENDED TO NEW LAYOUT. ISSUE FOR PLANNING.
CHECKED:	SMW	15/03/18	FOR PLANNING	SMW	08/06/18			ADL	25/10/18			ADL	14/11/18			SMW	01/02/19		
APPROVED:	BTB	15/03/18		BTB	08/06/18			BTB	25/10/18			BTB	14/11/18			BTB	01/02/19		

Customer	SHE Transmission plc
Contractor	SIEMENS bam Joint Venture
	Substation Delivery Framework
Subcon. Drawing No.	
Site	DOUNREAY WEST 275/220/33kV SUBSTATION
Title	SITE SECTION
	DOUNREAY WEST 275/220/33kV SUBSTATION
Contractor Drawing No.	G85221-178.99.82-Y1-P054
Customer Drawing No.	

Designed	Drawn	Checked	Approved	Date	Scale	Size	Sheet	Revision
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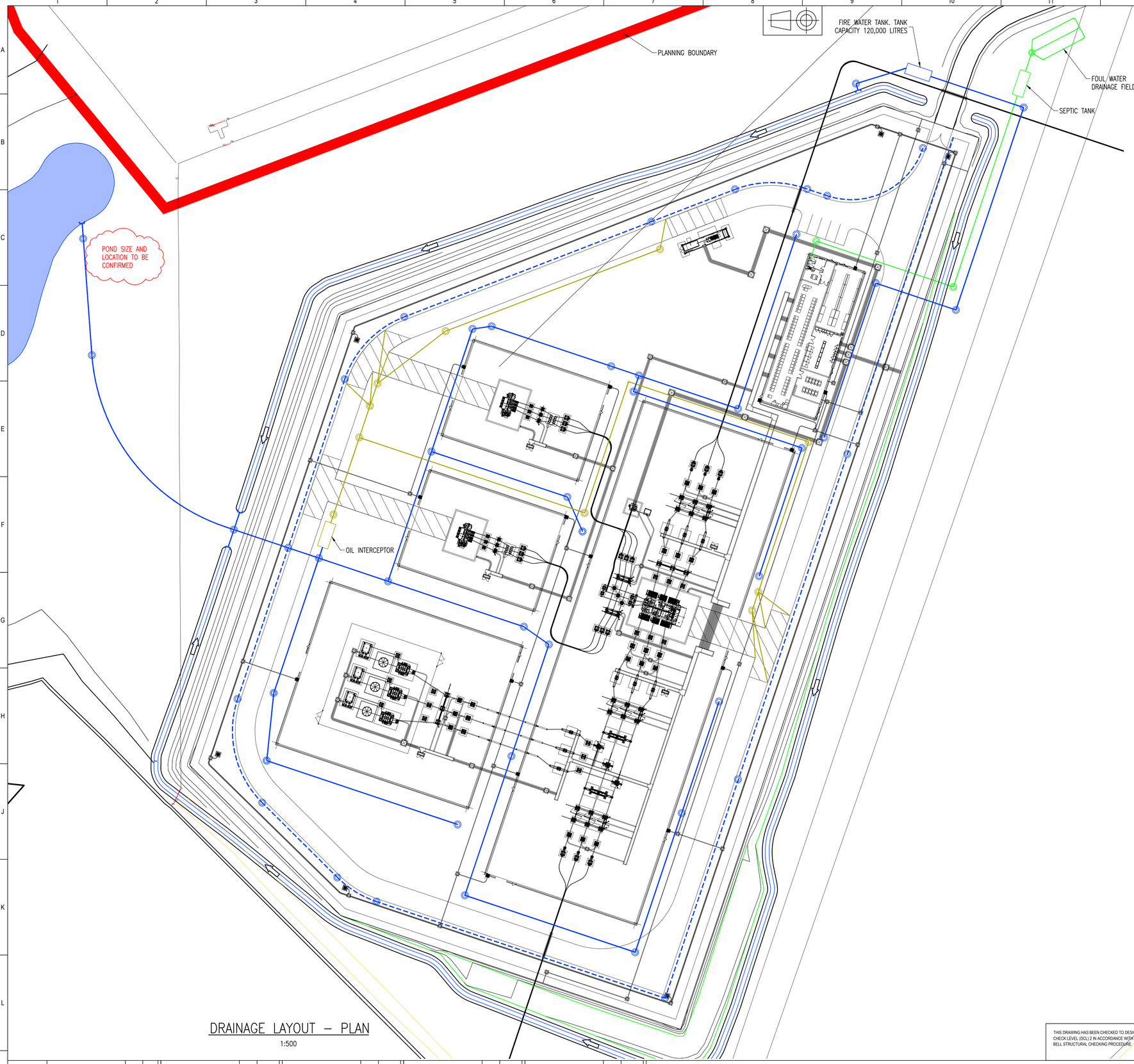
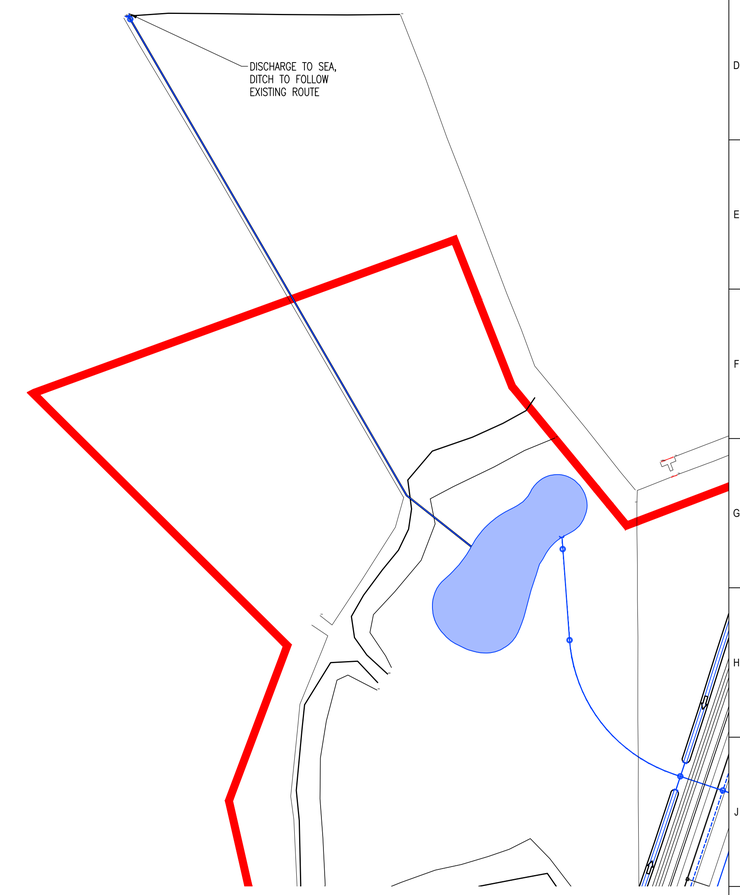


DRAINAGE LAYOUT – PLAN

1:500



DRAINAGE LAYOUT – PART PLAN

1:1000

N

NORTH

NOTES:

1. ALL DIMENSIONS IN MILLIMETERS UNLESS NOTED OTHERWISE.
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LEGEND:

- SURFACE WATER — CATCH PIT
- FOUL WATER — MANHOLE
- OILY WATER — MANHOLE

DRAINAGE NOTES:

1) DRAINAGE HAS BEEN DESIGNED TO SUIT SEPA REQUIREMENTS, WITH GREEN FIELD RUN OFF RATES.

2) DRAINAGE SUBJECT TO RE–DESIGN, PENDING FINAL LAYOUT.

3) ALL BUNDS, EXCEPT FOR SGT, TO HAVE DRAW OFF PIPES.

4) RAINWATER PIPES AND CONNECTIONS NOT SHOWN.

5) YARD GULLEY CONNECTIONS NOTED AS "YG".

FOR PLANNING

REVISION:	A		B		C		D		E	
DRAWN:	ADL	14/03/18	ADL	16/03/18	ADL	06/06/18	MTP	05/12/18	ADL	01/02/19
CHECKED:	SMW	14/03/18	SMW	16/03/18	SMW	06/06/18	ADL	05/12/18	SMW	01/02/19
APPROVED:	BTB	14/03/18	BTB	16/03/18	BTB	06/06/18	BTB	05/12/18	BTB	01/02/19
	LCP PROJECT REF:		LCP PROJECT REF:		LCP PROJECT REF:		LCP PROJECT REF:		LCP PROJECT REF:	
	FOR PLANNING		NOTES ADDED FOR DRAINAGE. LEGEND ADDED.		AMENDED TO NEW LAYOUT. ISSUE FOR PLANNING.		AMENDED TO NEW LAYOUT. ISSUE FOR PLANNING.		AMENDED TO NEW LAYOUT. ISSUE FOR PLANNING.	

THIS DRAWING HAS BEEN CHECKED TO DESIGN CHECK LEVEL (DCL) 2 IN ACCORDANCE WITH BT BELL STRUCTURAL CHECKING PROCEDURE.

CDM REGULATIONS:
SIGNIFICANT OR UNUSUAL RESIDUAL HAZARDS HIGHLIGHTED BELOW:

THERE ARE NO RISKS UNFAMILIAR TO A COMPETENT CONTRACTOR

SAFE METHODS OF WORK ARE THE RESPONSIBILITY OF THE CONTRACTOR AND ARE TO BE IDENTIFIED IN THE HEALTH AND SAFETY PLAN.

BT Bell consulting engineers

Customer: SHE Transmission plc

Contractor: SIEMENS + bam Joint Venture

Substation Delivery Framework

Site: DOUNREAY WEST 275/220/33kV SUBSTATION

Title: DRAINAGE LAYOUT

DOUNREAY WEST 275/220/33kV SUBSTATION

Contractor Drawing No.: G85221-176.99.82-Y2-P022

Subcon. Drawing No.:

Customer Drawing No.:

Designed	Drawn	Checked	Approved	Date	Scale	Size	Sheet	Revision
ADL	ADL	SMW	BTB	14/03/18	1:500	A1	001 of 001	E

Date Saved: 07/03/2019

Document Path: \\uk.wspgroup.com\central data\Projects\700411xx\70041126 - SSE Orkney UGC SS EIAE Models Drawings\GIS\MXD\Dounreay EIA\Figure 2.1 Site Plan.mxd

Tidal
Vulcan Naval Reactor
Test Establishment

NTL

Geo Cuinge

Tk

Outfall

Jetty

Jetty

Dounreay
Castle
(rems of)

Nuclear Power
Development
Establishment

Mast

N

12m

19m

13m

Airfield

Mound

Drain

Lower Dounreay

11m

Track

Knock Urray

19m

Drain

Track

12m

Drain

24m

28m

Sheep Shelter

W

Track

Drain

Gunnscroft

Drain

36m

Isauld
House

Achbuiligan
Tulloch

38m

Loch

Key

- Application Boundary
- Land Ownership Boundary (surrounded by post and wire fence - see Note)
- 275kV Cable
- Existing Dounreay GIS Building
- Platform Plan
- Area of Made Ground
- Proposed Access Road
- Proposed Area Allocated for SUDs
- Proposed Contractors Compound
- Proposed Construction Access to Avoid Use of Private Road to Vulcan NRTE

Note:
Post and wire fence will tie in to the Vulcan Naval Reactor Test Establishment fence along the northern site boundary.

0 100 200 300 Meters

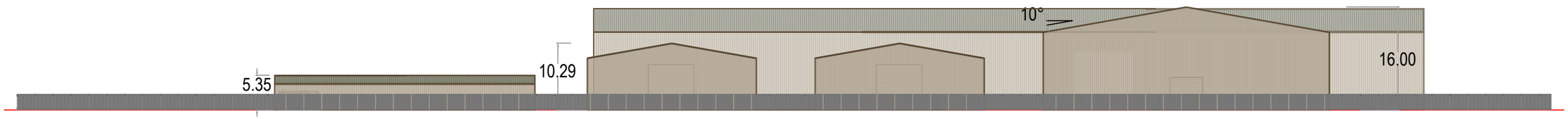
Client: Scottish & Southern Electricity Networks

Project: Dounreay West Substation Environmental Appraisal

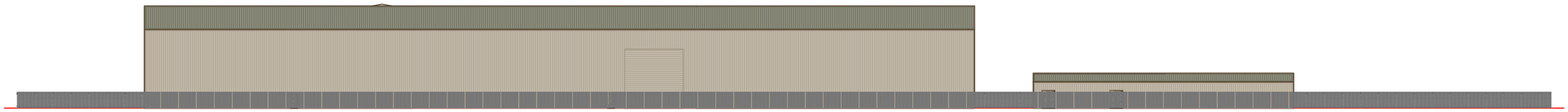
Title: Figure 2.1 Site Plan

Date: 07 March 2019 Scale: 5,000 @ A3

Drawn: CE Checked: CM Approved: SMcM

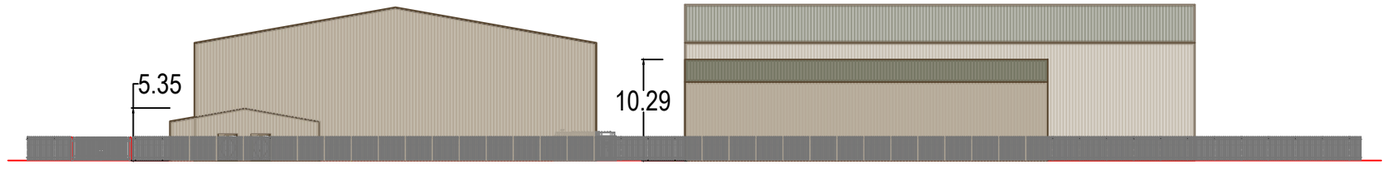


View from west



View from east
(tip of Harmonic Filter Building shows behind)

View from south



View from north

Note, views are perpendicular to the building orientation. References to north, south, east and west are indicative. Dimensions are in metres.

Client: Scottish & Southern Electricity Networks

Project: Dounreay West Substation Environmental Appraisal

Title: Figure 2.3 Building Elevations

Date: 26/02/2019 Scale: Not to Scale
Drawn: AJF Checked: SM Approved: AJF

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N
NORTH

NOTES:

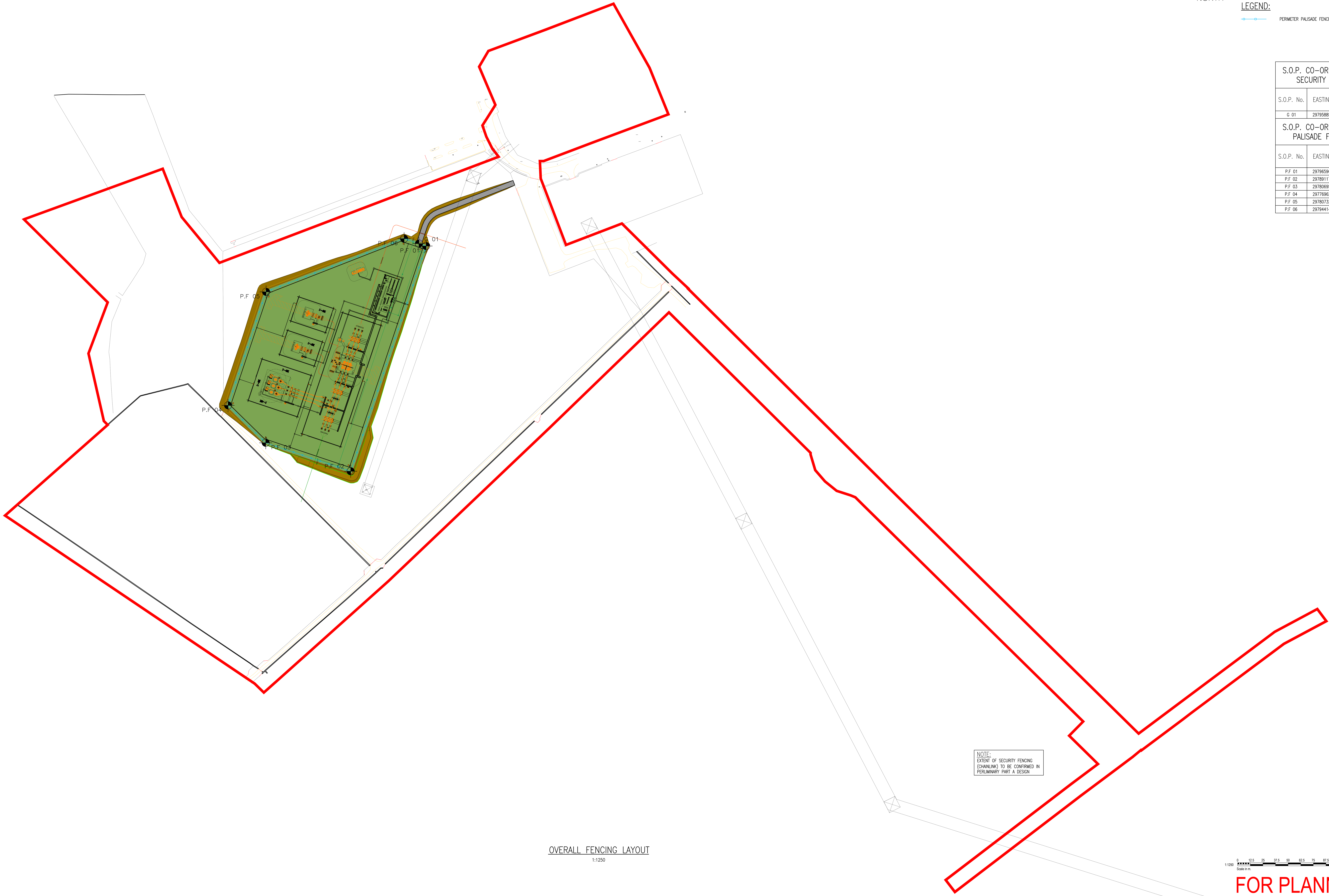
1. ALL DIMENSIONS IN MILLIMETERS UNLESS NOTED OTHERWISE.
2. DO NOT SCALE FROM THIS DRAWING. IF IN DOUBT ASK.

LEGEND:

PERIMETER PALISADE FENCE

S.O.P. CO–ORDINATES – SECURITY GATES		
S.O.P. No.	EASTING	NORTHING
G 01	297958850	966516003

S.O.P. CO–ORDINATES – PALISADE FENCING		
S.O.P. No.	EASTING	NORTHING
P.F 01	297965962	966513621
P.F 02	297891175	966290312
P.F 03	297806952	966318518
P.F 04	297769629	966355639
P.F 05	297807320	966468180
P.F 06	297944145	966520928



NOTE:
EXTENT OF SECURITY FENCING (CHAINLINK) TO BE CONFIRMED IN PERLIMINARY PART A DESIGN

OVERALL FENCING LAYOUT
1:1250

1:1250 — Scale in m. (0, 12.5, 25, 37.5, 50, 62.5, 75, 87.5, 100, 112.5, 125)

FOR PLANNING

THIS DRAWING HAS BEEN CHECKED TO DESIGN CHECK LEVEL (DCL) 2 IN ACCORDANCE WITH BT BELL STRUCTURAL CHECKING PROCEDURE.

CDM REGULATIONS:
SIGNIFICANT OR UNUSUAL RESIDUAL HAZARDS HIGHLIGHTED BELOW:
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BT Bell consulting engineers

Customer: SHE Transmission plc
Contractor: SIEMENS + bam Joint Venture
Substation Delivery Framework
Subcon. Drawing No.

Site: DOUNREAY WEST 275/220/33kV SUBSTATION
Title: OVERALL FENCING LAYOUT
DOUNREAY WEST 275/220/33kV SUBSTATION
Contractor Drawing No.: G85221-176.99.82-Y1-P056
Customer Drawing No.

Designed	Drawn	Checked	Approved	Date	Scale	Size	Sheet 001 of 001	Revision
ADL	ADL	SMW	BTB	16/03/18	1:1250	A0	001 of 001	E

REVISION:	A			B			C			D			E		
DRAWN:	ADL 16/03/18	LCP PROJECT REF.	FOR PLANNING	ADL 06/06/18	LCP PROJECT REF.	AMENDED TO NEW LAYOUT. ISSUE FOR PLANNING.	MTP 25/10/18	LCP PROJECT REF.	AMENDED TO NEW LAYOUT. ISSUE FOR PLANNING.	MTP 08/11/18	LCP PROJECT REF.	AMENDED TO NEW LAYOUT. ISSUE FOR PLANNING.	ADL 01/02/19	LCP PROJECT REF.	AMENDED TO NEW LAYOUT. ISSUE FOR PLANNING.
CHECKED:	SMW 16/03/18			SMW 06/06/18			ADL 25/10/18			ADL 08/11/18			SMW 01/02/19		
APPROVED:	BTB 16/03/18			BTB 06/06/18			BTB 25/10/18			BTB 08/11/18			BTB 01/02/19		

Platform edge

Security fence

Generator

Control Building (max. 5.4m high)

Reactive Compensation Equipment Building (max. 10.3 m high)

Reactive Compensation Equipment Building (max. 10.3 m high)

Harmonic Filter Building (max. 16 m high)

SGT Building (max. 16 m high)

Existing Pylon

Client: Scottish & Southern Electricity Networks

Project: Dounreay West Substation Environmental Appraisal

Title: Figure 2.2 Platform Plan

Date: 26/02/2019 Scale: 1:1000 @ A3

Drawn: AJF Checked: SM Approved: AJF

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