

Agenda Item	6.10
Report No	PLS 075/17

## HIGHLAND COUNCIL

**Committee:** South Planning Applications Committee

**Date:** 12 December 2017

**Report Title:** 17/03830/FUL: Scottish Hydro Electric Transmission Plc.  
Land 2,910M NW of 1 Garvamore, Laggan

**Report By:** Area Planning Manager – South/Major Developments

### **Purpose/Executive Summary**

**Description:** Amendments to the 400kV/132kV GIS electrical substation as approved to allow for an extension of the platform and installation of voltage regulation equipment.

**Ward:** 20 - Badenoch and Strathspey

**Development category:** Major application.

**Reason referred to Committee:** Major application.

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.

### **Recommendation**

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

## **1. PROPOSED DEVELOPMENT**

1.1 The proposal seeks to amend the 400kV/132kV GIS Melgarve substation, which is presently under construction (Planning permission 15/02124/FUL). This application proposes to extend the substation layout eastwards. The additional area is to accommodate voltage regulation equipment to regulate the connection of Stronelairst wind farm to the main grid line.

1.2 The development has the following key components: -

- Lengthening of the approved platform by 10m along its eastern edge to accommodate two new “statcom” transformers replacing a small building which formed part of the approved development.
- A new section of substation platform approximately 102m long x 70m wide, to the east of the approved development platform and forming a continuation of its southern edge. This would accommodate the following infrastructure:
  - A new fenced compound containing six new statcom reactors up to 5.75m in height;
  - A new building approximately 31m x 22.5m and 6.8m tall housing switching equipment to match the approved substation buildings (Van Dyke Brown);
  - Two coolers around 2.5m in height; and
  - Various above ground steel structures to connect the above equipment.
- Variations to the approved drainage, landscape scheme and access road to accommodate the above works.

1.3 Pre-Application Consultation: Submitted 28.11.2014 (14/04493/PAN).

1.4 Supporting Information: -

- A Supporting Statement
- Environmental Appraisal - review.

1.5 Variations: None

## **2. SITE DESCRIPTION**

2.1 The substation site, currently under construction, lies on moorland, 2km west of Garva Bridge, set on gently rising ground between General Wade’s Military Road and the River Spey to the south and the Beauldy Denny (B/D) construction access track and 400kv overhead line lies to the immediate north.

2.2 The access to the substation is via the retained track from the B/D construction project from the A86(T) road that leads to and passes this site towards the Corrieyairack Pass. It is located on an area of low conservation value, with limited soil depths. The site is located approximately 2.8 km from the nearest property. The substation sits at a height of 370 - 380m AOD. To the north side of the site, the ground climbs steeply to the hilltop Meall a Ghiubhais (599m) which is to the

east of Creag Mhor (764m).

- 2.3 The area of the substation carries no site specific landscape designation, although there are valued sites in the surrounding area. For example the Cairngorm National Park Authority (CNPA) falls to the east of Garva Bridge some 3km short of the proposed substation. The access to the site originates from within the CNPA area, and the already approved works on the track remain unchanged by this application. The site is outwith the “Braeroy-Glenshirra-Creag Meagaidh” area of wild land (AWL), whose north eastern boundary is over a kilometre to the south west. The Monadhliath AWL lies approximately 7km to the north east and “Rannoch-Nevis-Mamores-Alder” AWL is over 10km to the south east.
- 2.4 The scheduled monument known as Garva Bridge over the River Spey (Index No. 2948) and the category A listed Garva Bridge Barracks (HB Number 6899) are the key historic interests located in the vicinity of the proposal.

### 3. PLANNING HISTORY

- |     |            |  |              |
|-----|------------|--|--------------|
| 3.1 | 16.08.2016 | 15/02124/FUL Construction of a 400 / 132 kV GIS electrical substation including substation platform, control buildings, temporary construction compound, landscaping area and upgraded access to site from the A86 road. | Granted.     |
|     | 29.05.2015 | 15/01604/SCRE Melgarve 400 / 132 kV substation, near Garva Bridge.   | Not Required |

### 4. PUBLIC PARTICIPATION

- 4.1 Advertised: Unknown Neighbour

Date Advertised: 14.09.2017

Representation deadline: None

Timeous representations: 0

Late representations: 0

### 5. CONSULTATIONS

- 5.1 Cairngorm National Park Authority (CNPA) has no objection to the application.

### 6. DEVELOPMENT PLAN POLICY

The following policies are relevant to the assessment of the application

- 6.1 **Highland Wide Local Development Plan 2012**

28 - Sustainable Design

29 - Design Quality & Place-making

- 30 - Physical Constraints
- 55 - Peat and Soils
- 57 - Natural, Built & Cultural Heritage
- 58 - Protected Species
- 59 - Other important Species
- 60 - Other Importance Habitats
- 61 - Landscape
- 64 - Flood Risk
- 65 - Waste Water Treatment
- 66 - Surface Water Drainage
- 69 - Electricity Transmission Infrastructure
- 72 - Pollution
- 73 - Air Quality
- 77 - Public Access
- 78 - Long Distance Routes

**6.2 West Highland and Islands Proposed Local Development Plan (July 2017).**

None

**7. OTHER MATERIAL POLICY CONSIDERATIONS**

**7.1 Highland Council Supplementary Planning Policy Guidance**

- Construction Environmental Management Process for Large Scale Projects (August 2010)

**7.2 Scottish Government Planning Policy and Guidance**

- Scottish Government Planning Policy (June 2014)

**8. PLANNING APPRAISAL**

8.1 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

8.2 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

8.3 The key considerations in this case are:

- Development Plan Policy.
- Scottish Planning Policy
- Planning History.

- Design.
- Landscape and Visual Impact.

#### Development Plan Policy

- 8.4 There are no site specific policies affecting this site within the Development Plan. The application needs to be assessed within the general policies (listed at para 6.1) as applied by the Highland wide Local Development Plan which seeks to advance sustainable development whilst safeguarding the environment including all natural, built and cultural heritage features.
- 8.5 The principal HwLDP policy on which the application needs to be determined is Policy 69 - Electricity Transmission Infrastructure. Other policies listed are also relevant and the application must be assessed against these also for example Policy 61 - Landscape. The Council will support proposals where it is satisfied they are located, sited and designed such as they will not be significantly detrimental.
- 8.6 All material considerations are examined within this report. If there will be no unacceptable impact on the environment, affected by the development then the application will accord with the Development Plan.

#### Scottish Planning Policy

- 8.7 The Scottish Government's policy and advice is set out in its National Planning Framework 3 (NPF 3) and Scottish Planning Policy, which advances policies for example on Sustainability; Low Carbon; Connectivity; etc. Policy is supportive of renewable energy development and the necessary supporting infrastructure.
- 8.8 SPP highlights that the Development Plan is the starting point of decision making on planning applications. The content of SPP is a material consideration that carries significant weight, although it is for the decision maker to determine the appropriate weight to be afforded to it in each case.

#### Planning History

- 8.9 The Council granted planning permission for a substation on this site and works have commenced. The development will see the provision of a substantive electrical facility to provide for grid connection of the Stronelairg wind farm (under construction), which lies to the north. The amendments will see the platform area increase by approximately one third.
- 8.10 The approved project presented a significant development, but one which had gas insulated electrical gear being internalised within a large substation building. In this manner the footprint of the development was minimised and equipment was protected from extreme weather events. This also assisted with reducing and managing its landscape and visual impact. The development was supported with a considerable landscape mitigation including bunding and tree planting to the west, east and southern sides.

- 8.11 The grant of planning permission for the initial substation is a significant consideration in the handling of the current application. However it will be important to ensure that previously agreed mitigation by design and layout is not undone.

### Design

- 8.12 The existing substation provides a level platform approximately 172m x 120m contained by a 2.4m palisade fence. The platform accommodates one control building approximately 12m high and two smaller buildings approximately 8m in height accommodating shunt reactors. Other external electrical infrastructure includes super grid transformers, with gantries 17m high controlling the downleads from the grid connection into the platform area.
- 8.13 The proposed extension on the eastern side of the existing layout will utilise the existing site access (slightly modified) and allow for a continuation of site security. The components to be located on the extended platform are as listed in Para 1.2 of this report. The key impact from the earlier planning permission is that the extended platform will sit within land that was to be raised and planted for screening purposes. The current application will now require a greater reinstatement of land currently disturbed for construction purposes, to fulfil a high level of screening (mounding) and tree planting. Tree planting would include native woodland including birch, rowan and willow and native scrub planting where restrictions (e.g. buffers from electrical equipment) limit the use of trees.
- 8.14 It is noteworthy that rock material from this construction site has been used to form the temporary access tracks related to the Stronelairg Wind Farm cable connection project. The material is to be returned to the substation site to assist with the profiling of the area around the substation. The submitted revised landscape mitigation plan remains indicative at this stage. The applicant has requested for this to be confirmed later in the build out process. In view of this it would be necessary to secure by condition approval of the finalised scheme which needs to deliver the offered mitigation. This will include stock proof fencing to ensure landscaping can be fully established without pressure from grazing deer.

### Landscape and Visual Impact.

- 8.15 The approved development on this site is currently under construction and the proposed extension to the substation as set out in the current application would be built concurrently. The initial substation development has already been accepted following assessment of the surrounding landscape character types, the Cairngorm National Park to the east and areas of wild land to the south.
- 8.16 The supporting landscape assessment review as submitted by the applicant concluded that no significant additional effects would be likely to occur as a result of this current application. Following assessment of the submission contained within this application this viewpoint is not contested. It is noteworthy that the Cairngorm National Park Authority has raised no objection to the application.

- 8.17 No significant additional visual effects are anticipated to occur in relation to the proposed development. It is not considered that the greater size of the substation would be significantly more perceptible. That said it will be important to ensure the proposed landscape mitigation (screening through mounding and tree plantings) are delivered in full.

Other material considerations

- 8.18 There are no other material considerations.

**9. CONCLUSION**

- 9.1 The application presents an enlargement to an approved development which is under construction. The application has raised no significant material planning issues of concern from consultees and or the local community.
- 9.2 The application is consistent with the supportive HwLDP Policy 69 in favour of electricity transmission infrastructure and the related Policy 67 renewable energy. With regard to all other policies of the Development Plan the application raises no unacceptable significant impacts on the environment and therefore can be supported.
- 9.3 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.

**10. IMPLICATIONS**

- 10.1 Resource: Not applicable
- 10.2 Legal: Not applicable
- 10.3 Community (Equality, Poverty and Rural): Not applicable
- 10.4 Climate Change/Carbon Clever: Not applicable
- 10.5 Risk: Not applicable
- 10.6 Gaelic: Not applicable

**11. RECOMMENDATION**

<b>Action required before decision issued</b>	N
Notification to Scottish Ministers	N
Conclusion of Section 75 Obligation	N
Revocation of previous permission	N

**Subject to the above**, it is recommended that planning permission be **GRANTED**, subject to the conditions as set out below.

### **Conditions and Reasons**

1. For the avoidance of doubt the development shall be constructed and operated in line with the provisions of the application, the submitted plans, and the approaches set out in the supporting Environmental Appraisal dated May 2015 and Review dated August 2017 highlighting the Schedule of Mitigation Measures, Traffic Management; Noise Compliance, Working Hours, Landscaping, Outdoor Access Management, Drainage Strategy, Flood Risk, etc. unless otherwise amended by the further conditions as set out in this decision notice.

**Reason:** To clarify the terms of the planning permission hereby granted.

2. The development shall also be executed within the terms of the Melgarve substation planning reference as approved 15/02124/FUL unless otherwise approved in writing by the Planning Authority. In this regard the specific provisions as set out in the following conditions attached to planning permission 15/02124/FUL will apply in full to the extended substation development including:

Condition 2	The Construction and Environmental Management Document provisions.
Condition 5	Operational Noise Levels.
Condition 6	Surface Water operational provisions.
Condition 7	Security Fence design / colour provisions.

**Reason:** To ensure that the works granted under this planning permission shall be executed in an entirely consistent way with the earlier consent and its planning conditions as already satisfied in order to protect local environmental interests including protected species, peat and the water environment in an appropriate and consistent manner.

3. Within six months from the date of this planning permission a finalised Landscape Mitigation plan shall be submitted for the approval of the Planning Authority. For the avoidance of any doubt the proposed landscaping must be retained as a permanent feature and not as suggested in the supporting documents as attached to application 15/02124/FUL to be felled for commercial purposes. The approved plans shall then be implemented as agreed, with a minimum of 5 years maintenance from the submission of the Completion Notice (see informatives).

**Reason:** To ensure a robust landscape plan is developed and implemented to screen the development from recreational walkers and befitting to the landscape and local biodiversity / woodland interests.



## **REASON FOR DECISION**

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.

## **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 THREE 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.

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.

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 & 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.

### **Septic Tanks & Soakaways**

Where a private foul drainage solution is proposed, you will require separate consent from the Scottish Environment Protection Agency (SEPA). Planning permission does not guarantee that approval will be given by SEPA and as such you are advised to contact them direct to discuss the matter (01349 862021).

### **Local Roads Authority Consent**

In addition to planning permission, you may require one or more separate consents (such as road construction consent, dropped kerb consent, a road openings permit, occupation of the road permit etc.) from the Area Roads Team prior to work commencing. These consents may require additional work and/or introduce additional specifications and you are therefore advised to contact your local Area Roads office for further guidance at the earliest opportunity.

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

### **Mud & Debris on Road**

Please note that it is 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.

**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

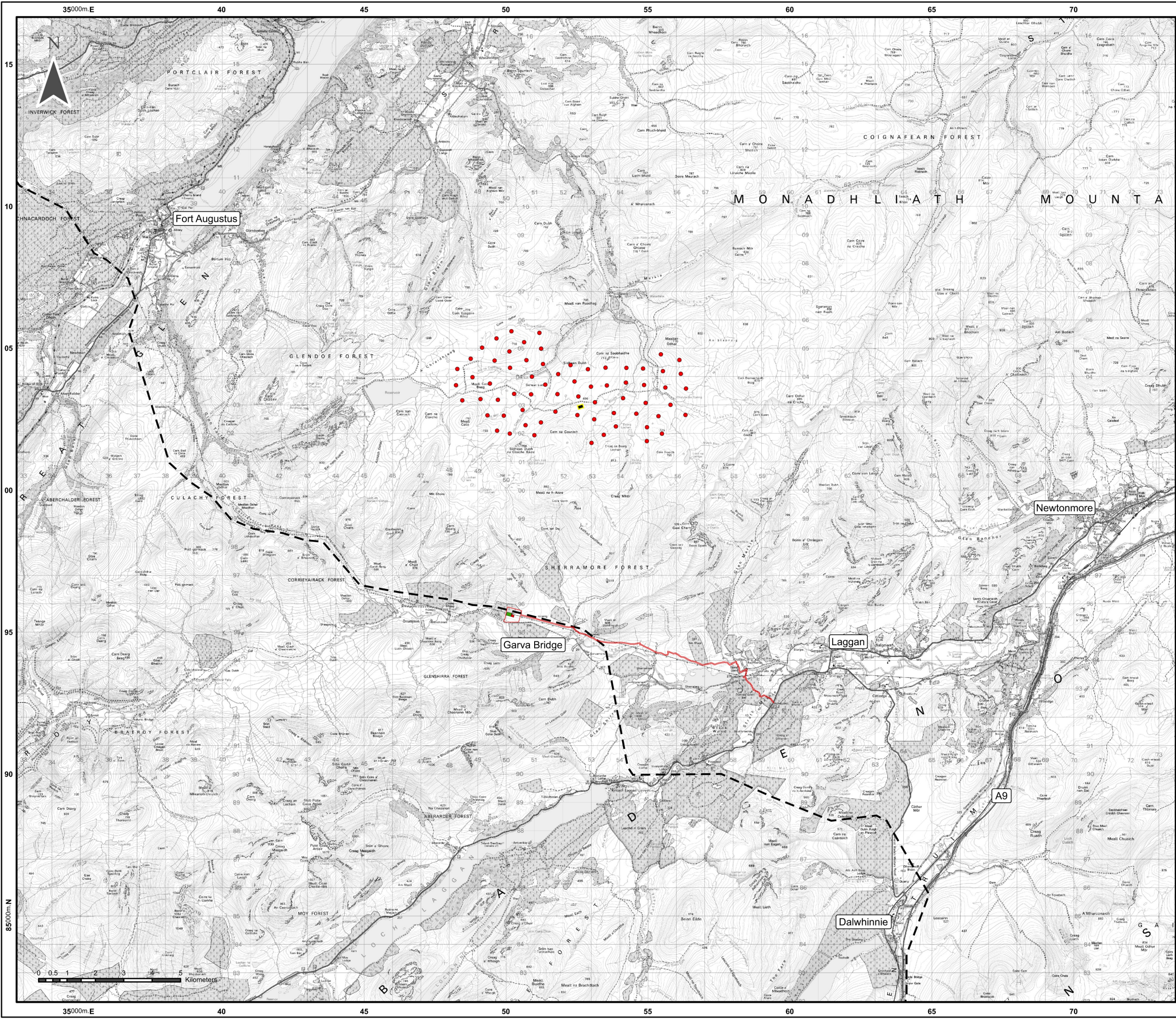
Section 60 notice constitutes an offence and is likely to result in court action. If you wish formal consent to work at specific times or on specific days, you may apply to the Council's Environmental Health Officer under Section 61 of the 1974 Act. Any such application should be submitted after you 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](mailto: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](http://www.snh.gov.uk/protecting-scotlands-nature/protected-species)

Signature: Nicola Drummond  
Designation: Area Planning Manager – South/Major Developments  
Author: Ken McCorquodale - Principal Planning Officer  
Background Papers: Documents referred to in report and in case file 17/03830/FUL.  
Relevant Plans: For approval: -

1. Location / Site Plan 117025-D-ER4-01-1.0.0
2. Layout Plan 117025-D-ER3-01-2.0.0
3. General arrangements G85221-176.99.69-C1-V903 REV C
4. Sections G85221-176.99.69-C1-V905 REV B
5. Additional Statcom Building Elevations G85221-176.99.69-Y1-P1800 REV3
6. Enabling Works & Drainage Arrangements G85221-176.99.69-Y1-P006 REV P1
7. Landscape Plan (indicative) 117025-D-LP-01-1.0.0



- Key**
- Wind Turbine (Stronelairg Wind Farm)
  - Stronelairg Wind Farm On-Site Substation Location
  - Preliminary Red Line Boundary
  - Revised Proposal Area
  - Existing Melgarve Substation (under construction)
  - Beaulie - Denny Overhead Line



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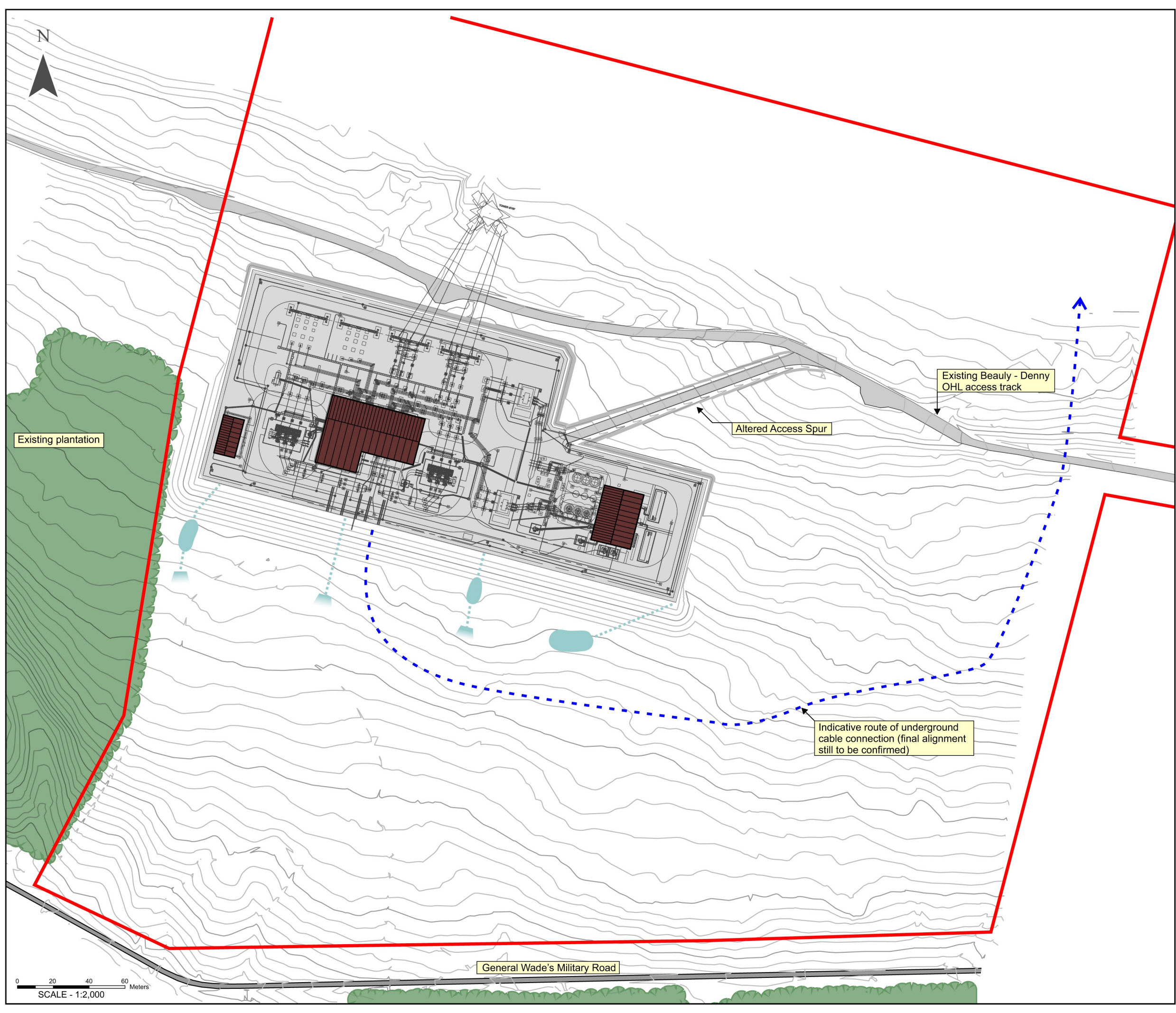
Project No: LT000142 Scale @ A3: 1:125,000






Project: MELGARVE SUBSTATION (REVISED PROPOSAL)

Title: Figure 1.1 - Location Plan and Site Context

Drawn: BL/TW Date: 16/08/2017

117025-D-ER4-01-1.0.0



- Key**
-  Planning boundary
  -  Indicative corridor for 132 kV buried cable connection
  -  Indicative route of proposed land drain (see drainage strategy)
  -  Indicative location of attenuation pond (see drainage strategy)
  -  Indicative location of soakaway (see drainage strategy)

Existing plantation

Altered Access Spur

Existing Beauty - Denny OHL access track

Indicative route of underground cable connection (final alignment still to be confirmed)

General Wade's Military Road

0 20 40 60 Meters  
SCALE - 1:2,000



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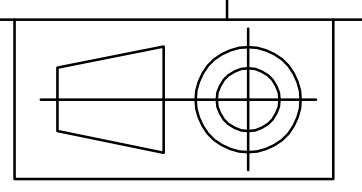
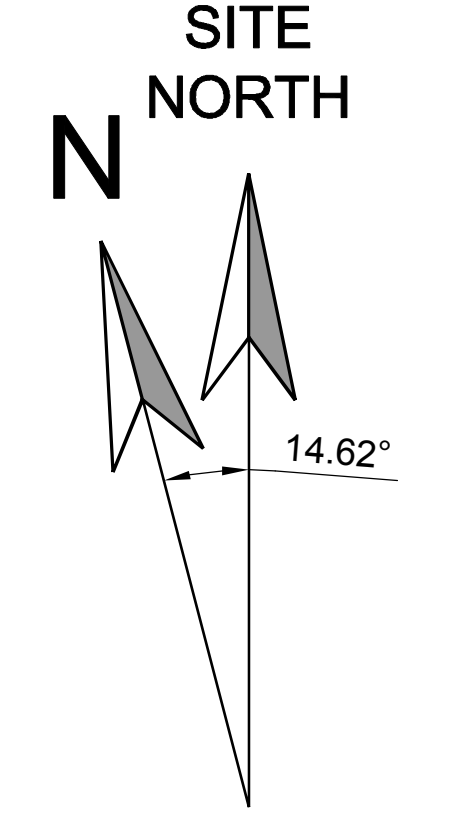
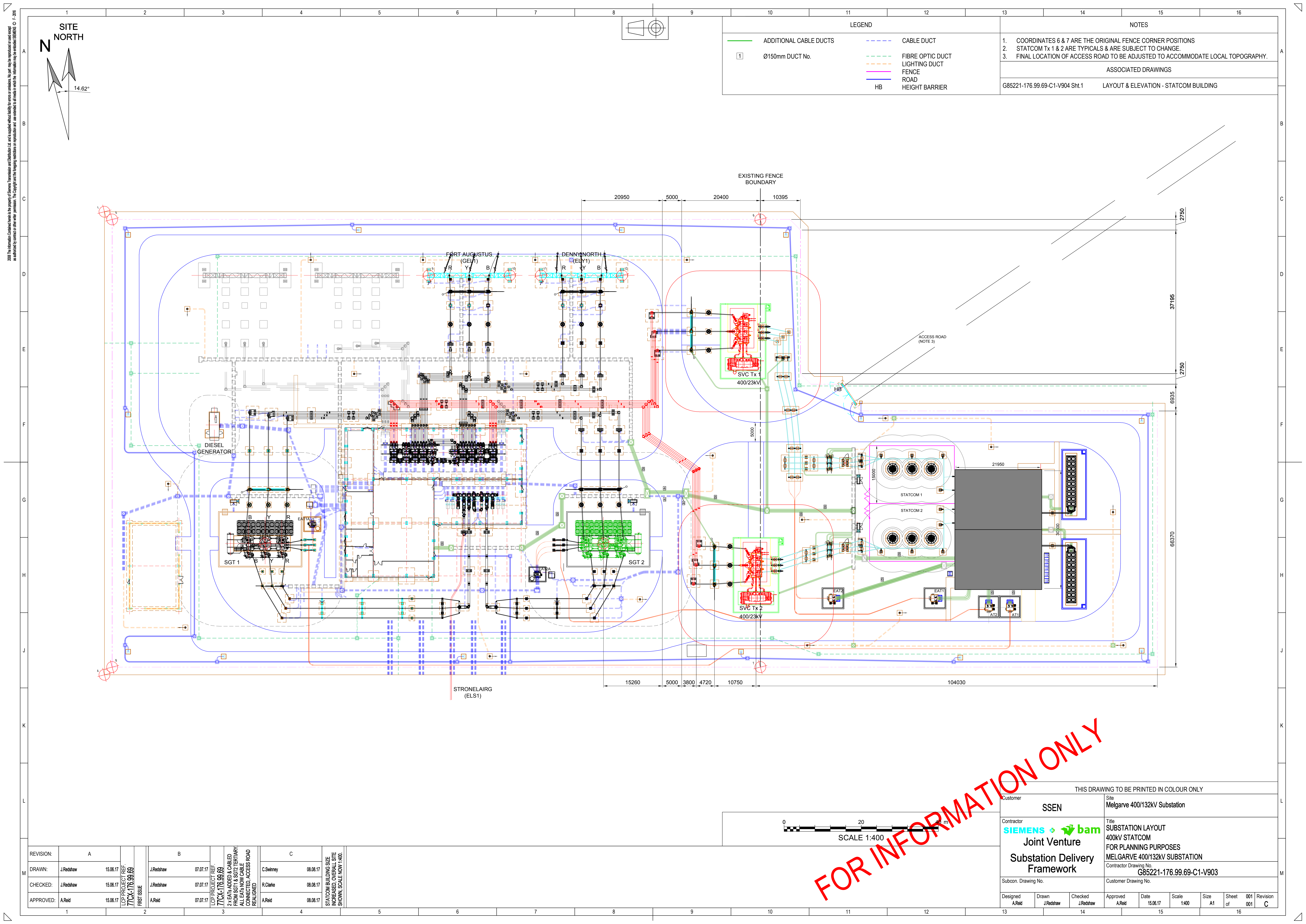
Project No: LT000142 Scale @ A3: 1:2,000

Project: MELGARVE SUBSTATION (REVISED PROPOSAL)

Title: Figure 2.1a - Layout Plan

Drawn: EM Date: 15/08/2017

117025-D-ER3-01-2.0.0



LEGEND	
<span style="color: green;">—</span>	ADDITIONAL CABLE DUCTS
<span style="color: blue;">---</span>	CABLE DUCT
<span style="color: green;">- - -</span>	FIBRE OPTIC DUCT
<span style="color: orange;">- - -</span>	LIGHTING DUCT
<span style="color: purple;">---</span>	FENCE
<span style="color: blue;">---</span>	ROAD
<span style="color: blue;">—</span>	HB
<span style="color: blue;">—</span>	HEIGHT BARRIER

NOTES	
1.	COORDINATES 6 & 7 ARE THE ORIGINAL FENCE CORNER POSITIONS
2.	STATCOM Tx 1 & 2 ARE TYPICALS & ARE SUBJECT TO CHANGE.
3.	FINAL LOCATION OF ACCESS ROAD TO BE ADJUSTED TO ACCOMMODATE LOCAL TOPOGRAPHY.
ASSOCIATED DRAWINGS	
G85221-176.99.69-C1-V904 Sht.1	LAYOUT & ELEVATION - STATCOM BUILDING

REVISION:	A	B	C
DRAWN:	J.Redshaw 15.06.17	J.Redshaw 07.07.17	C.Swinney 08.08.17
CHECKED:	J.Redshaw 15.06.17	J.Redshaw 07.07.17	R.Clark 08.08.17
APPROVED:	A.Reid 15.06.17	A.Reid 07.07.17	A.Reid 08.08.17

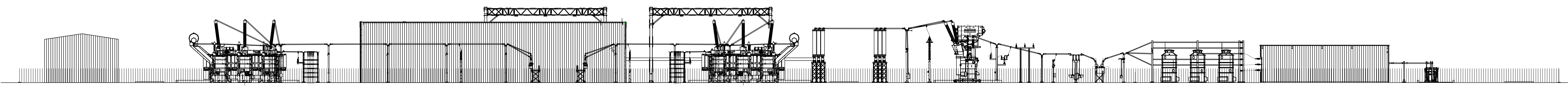
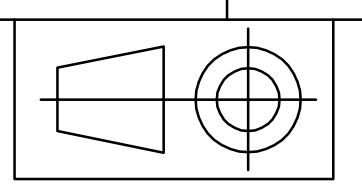
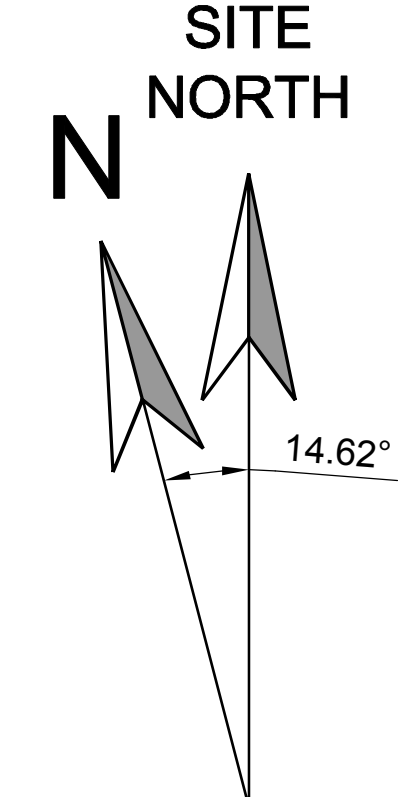
STATCOM BUILDING SIZE INCREASED OVERALL SITE SHOWN. SCALE NOW 1:400.

LCP PROJECT REF. 77CX-176.99.69  
2 x EATs ADDED & CABLED FROM SGT1 & SGT2 TERTIARY ALL EATs NOW CABLE CONNECTED. ACCESS ROAD REALIGNED

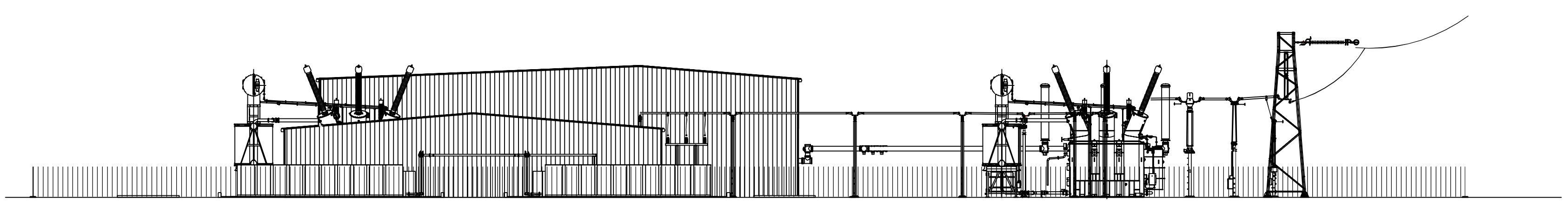


FOR INFORMATION ONLY

Customer		Site	
SSEN		Melgarve 400/132kV Substation	
Contractor		Title	
SIEMENS + bam Joint Venture		SUBSTATION LAYOUT 400kV STATCOM FOR PLANNING PURPOSES MELGARVE 400/132kV SUBSTATION	
Subcon. Drawing No.		Customer Drawing No.	
G85221-176.99.69-C1-V903		G85221-176.99.69-C1-V903	
Designed	Drawn	Checked	Approved
A.Reid	J.Redshaw	J.Redshaw	A.Reid
Date	Scale	Size	Sheet of
15.06.17	1:400	A1	001 of 001
Revision	C		



SUBSTATION ELEVATION NORTH



SUBSTATION ELEVATION WEST



FOR INFORMATION ONLY

REVISION:	A	
DRAWN:	A.Wade	12.07.17
CHECKED:	J.Redshaw	12.07.17
APPROVED:	A.Reid	12.07.17

	B	
	C.Swirney	08.08.17
	R.Clark	08.08.17
	A.Reid	08.08.17

LAYOUT NOW SHOW ON DRAWING 903. ELEVATIONS NORTH & WEST ADDED. SCALE MODIFIED.

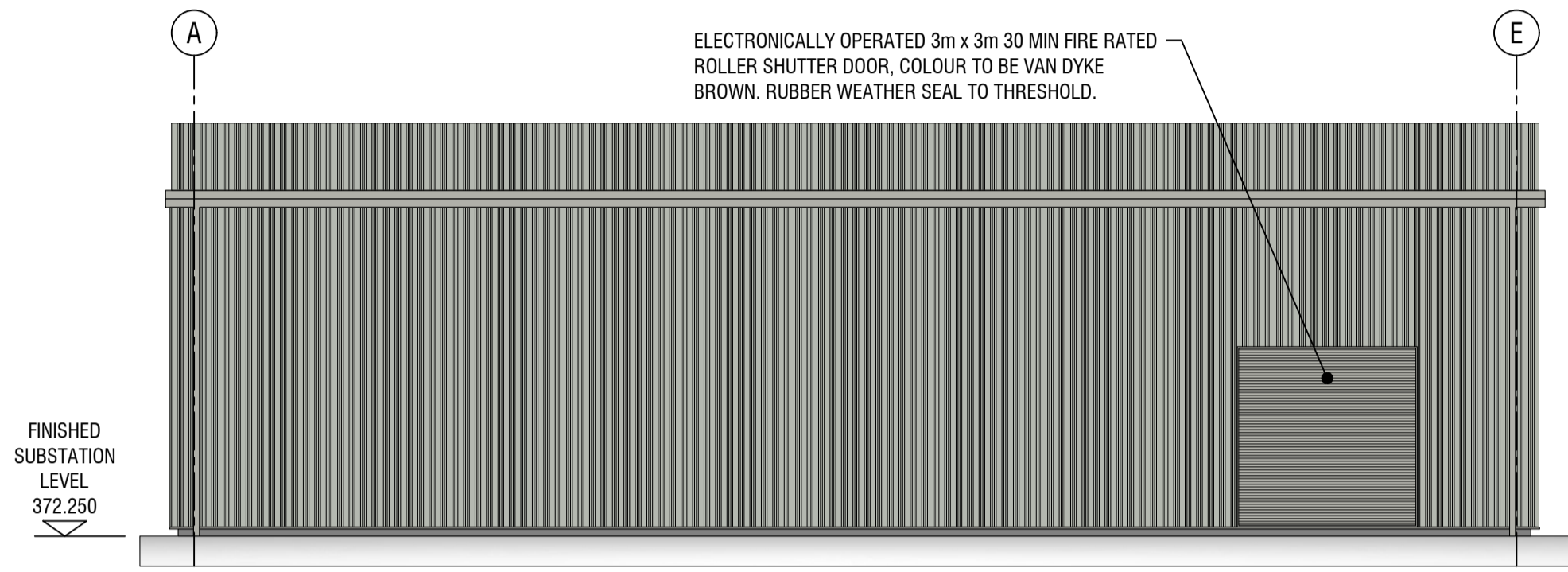
LCP PROJECT REF. 77CX-176.99.69  
FIRST ISSUE

THIS DRAWING TO BE PRINTED IN COLOUR ONLY									
Customer	SSEN			Site	Melgarve 400/132kV Substation				
Contractor	SIEMENS + bam Joint Venture			Title	ELEVATIONS 400kV STATCOM FOR PLANNING PURPOSES MELGARVE 400/132kV SUBSTATION				
Subcon. Drawing No.				Contractor Drawing No.	G85221-176.99.69-C1-V905				
Designed	Drawn	Checked	Approved	Date	Scale	Size	Sheet	001	Revision
A.Reid	A.Wade	J.Redshaw	A.Reid	08.08.17	1:400	A1	of	001	B

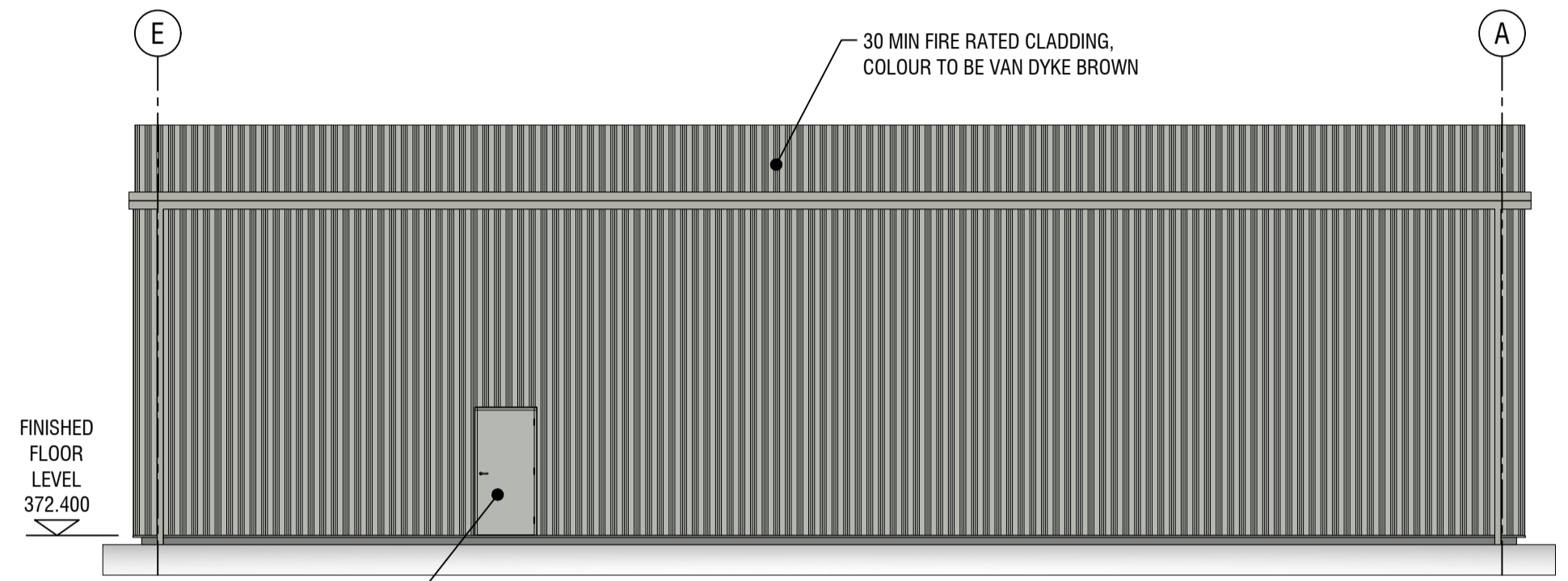
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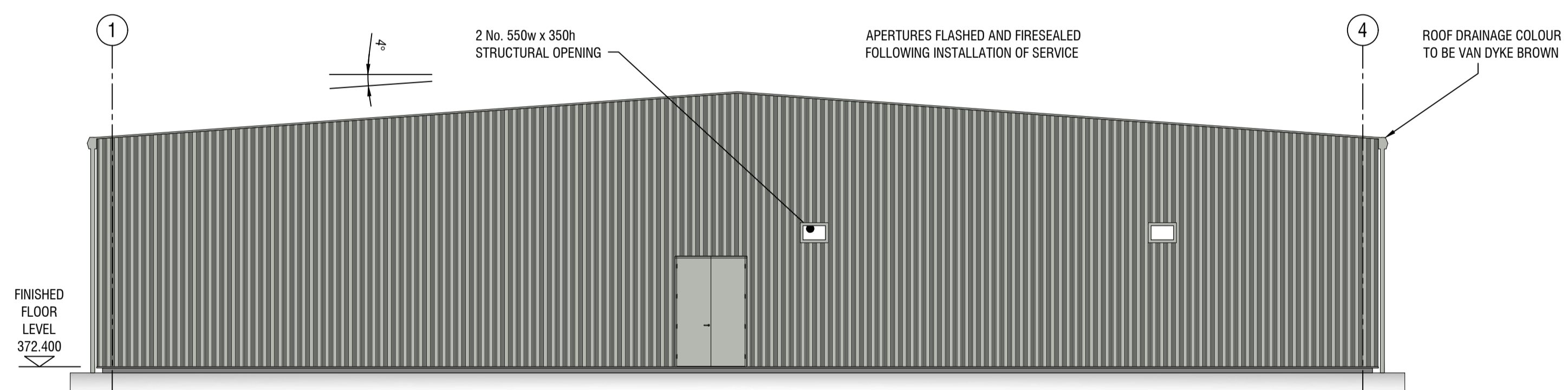
- DO NOT SCALE, WORK TO DIMENSIONS SHOWN. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS SHOWN OTHERWISE AND ARE TO BE CHECKED ON SITE PRIOR TO COMMENCEMENT OF THE WORKS.
- THE CONTRACTOR IS RESPONSIBLE FOR THE LOCATION OF ALL EXISTING SERVICES WITHIN THE WORKS AREA AND FOR THE STRUCTURAL STABILITY THROUGHOUT THE CONSTRUCTION WORKS.
- FOR FURTHER MANDATORY CONSTRUCTION NOTES REFER TO DRAWING G85221-176.99.69-Y1-P1804



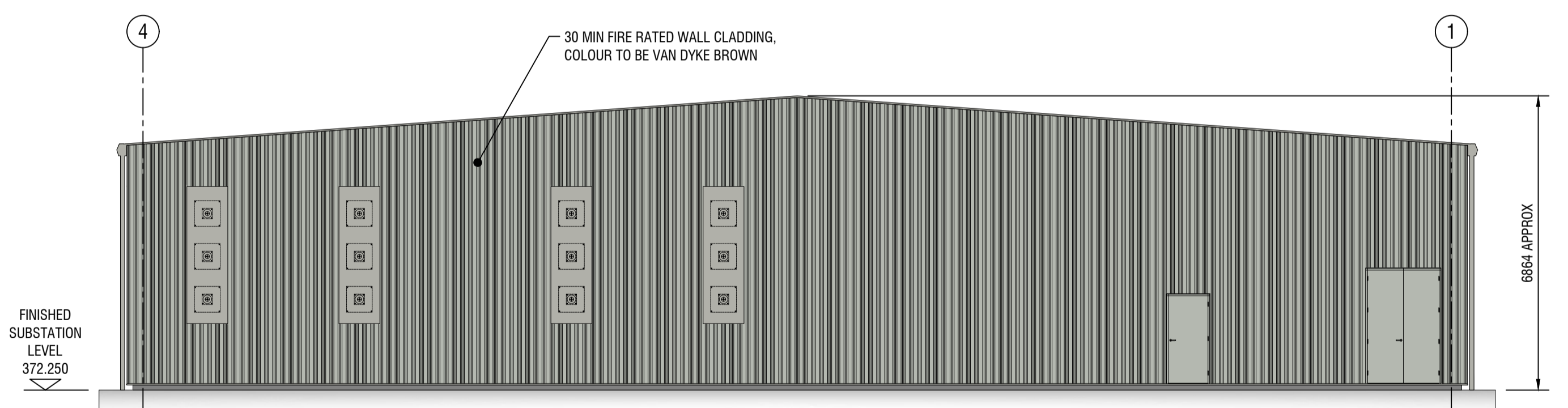
ELEVATION ON GRIDLINE 1



ELEVATION ON GRIDLINE 4



ELEVATION ON GRIDLINE E



ELEVATION ON GRIDLINE A

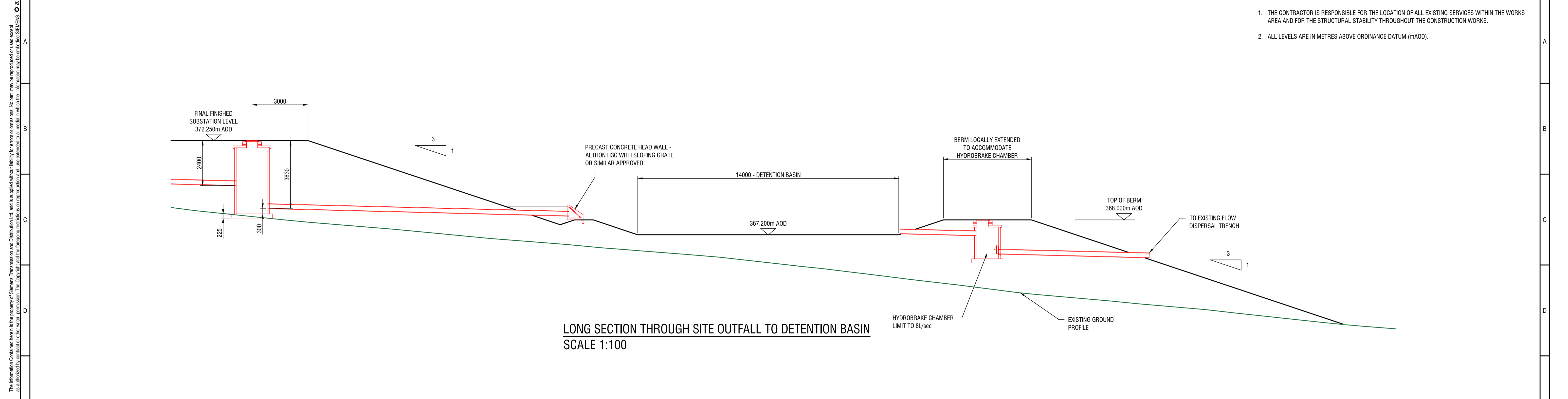
DOORS & APERTURES SHOWN ARE PRELIMINARY, TO BE CONFIRMED AT DETAILED DESIGN STAGE

REVISION:	P1	P2	P3
DRAWN:	A.Godding July 2017	A.Godding Aug 2017	A.Godding 18.08.2017
CHECKED:	G.Hooper July 2017	G.Hooper Aug 2017	G.Hooper 18.08.2017
APPROVED:	N.Patterson July 2017	N.Patterson Aug 2017	N.Patterson 18.08.2017

DRAWING TITLE  
CORRECTED

Customer	SHE Transmission plc		Project	MELGARVE 400/132KV SUBSTATION			
Contractor	SIEMENS + bam Joint Venture		Title	LAYOUT STATCOM BUILDING 400KV STATCOM EXTENSION MELGARVE 400/132KV SUBSTATION			
Subcontractor	Patterson Reeves & Partners		Subcon. Drawing No.	G85221-176.99.69-Y1-P1800			
Designed	M.Patterson	Drawn	A.Godding	Checked	G.Hooper	Approved	N.Patterson
Date	Jul 2017	Scale	1:100	Size	A1	Sheet	1 of 1
Revision	1	Revision	1	Revision	1	Revision	P3





LONG SECTION THROUGH SITE OUTFALL TO DETENTION BASIN  
SCALE 1:100

1. THE CONTRACTOR IS RESPONSIBLE FOR THE LOCATION OF ALL EXISTING SERVICES WITHIN THE WORKS AREA AND FOR THE STRUCTURAL STABILITY THROUGHOUT THE CONSTRUCTION WORKS.
2. ALL LEVELS ARE IN METRES ABOVE ORDINANCE DATUM (mAOD).

SURFACE WATER SCHEDULE						
REF.	COVER LEVEL	I.L.	TYPE	COVER TYPE	SCHEMATIC	CENTRE COORDINATE
SWCP 01	372.250	371.425 (2250 IN & OUT)	600 Ø POLYPIPE	B125		E=250211.329 N=795670.523
SWCP 02	372.250	371.415 (2250 IN & OUT)	900 Ø POLYPIPE	B125		E=250213.714 N=795666.453
SWCP 03	372.250	371.340 (2250 IN & OUT)	900 Ø POLYPIPE	B125		E=250204.325 N=795630.463
SWCP 04	372.250	371.300 (2250 IN & OUT)	900 Ø POLYPIPE	B125		E=250220.837 N=795616.751
SWCP 05	372.250	371.150 (2250 IN & OUT)	900 Ø POLYPIPE	B125		E=250291.539 N=795598.306
SWCP 06	372.250	xxxxx (2250 SITE IN) 371.00 (2250 IN) 368.620 (2250 OUT)	900 Ø POLYPIPE	B125		E=250273.775 N=795530.215
SWCP 07	372.250	371.150 (2250 IN & OUT)	900 Ø POLYPIPE	B125		E=250177.050 N=795555.450
HEADWALL		368.220 (225 IN)				E=250264.083 N=795514.659

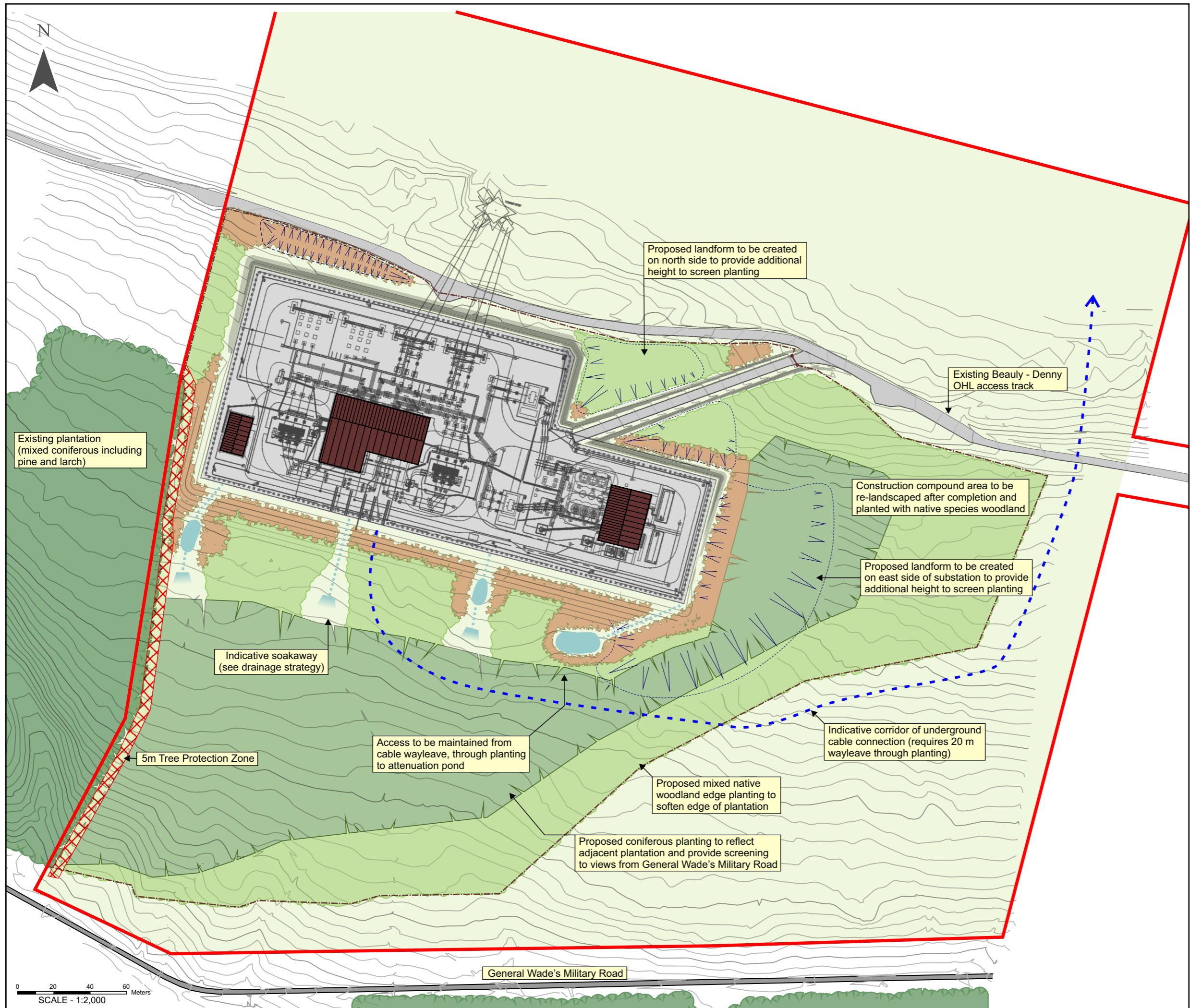
REVISION:	P1
DRAWN:	G.Hooper 21.07.17
CHECKED:	A.Godding 21.07.17
APPROVED:	N.Patterson 21.07.17

FIRST ISSUE		

**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.

Customer	SSEN	Project	MELGARVE 400/132kV SUBSTATION
Contractor	<b>SIEMENS + bam</b> Joint Venture	Title	ENABLING WORKS - DRAINAGE DETAILS EXTENDED SUBSTATION 2017 400kV SVC EXTENSION MELGARVE 400/132kV SUBSTATION
Subcontractor	<b>Patterson Reeves &amp; Partners</b>	Subcon. Drawing No.	
		Contractor Drawing No.	G85221-176.99.69-Y1-P006
		Customer Drawing No.	
Designed	M.Patterson	Drawn	G.Hooper
Checked	A.Godding	Approved	N.Patterson
Date	July 2017	Scale	SHOWN
Size	A1	Sheet	1 of 1
Revision	P1		

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- Key**
- Planning boundary
  - Reinstated / existing vegetation types
  - Existing coniferous plantation
  - Proposed coniferous planting (inc. Scots Pine)
  - Proposed native woodland edge planting (inc. Birch, Rowan and Willow)
  - Proposed native scrub planting (inc. Willow and Hazel)
  - Vegetation encouraged to grow on rock cuttings
  - Indicative route of proposed land drain (see drainage strategy)
  - Indicative location of attenuation pond (see drainage strategy)
  - Indicative location of soakaway (see drainage strategy)
  - Indicative proposed landform
  - Proposed 2.4m steel palisade fence
  - Proposed 1.8m deer fence
  - Indicative corridor for 132 kV buried cable connection\*

\* A 20m corridor is required free of planting to accommodate the buried cable for access and maintenance purposes. This would be created and maintained with irregular edges to reduce the landscape effect.

Planting to be carried out in accordance with methods outlined in Appendix 2.2 - Best Practise Procedures for Site Restoration

Existing plantation (mixed coniferous including pine and larch)

Proposed landform to be created on north side to provide additional height to screen planting

Existing Beauty - Denny OHL access track

Construction compound area to be re-landscaped after completion and planted with native species woodland

Proposed landform to be created on east side of substation to provide additional height to screen planting

Indicative soakaway (see drainage strategy)

5m Tree Protection Zone

Access to be maintained from cable wayleave, through planting to attenuation pond

Indicative corridor of underground cable connection (requires 20 m wayleave through planting)

Proposed mixed native woodland edge planting to soften edge of plantation

Proposed coniferous planting to reflect adjacent plantation and provide screening to views from General Wade's Military Road

General Wade's Military Road

SCALE - 1:2,000



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Project No: LT000142 Scale @ A3: 1:2,000

Project: MELGARVE SUBSTATION (REVISED PROPOSAL)

Title: Figure 2.2 - Indicative Landscape Proposals

Drawn: EM Date: 15/08/2017

117025-D-LP-01-1.0.0