

# CFA Archaeology Ltd

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**Proposed 400KV Series Capacitor Bank  
Compound,  
Land East of Eccles Substation,  
Eccles, Scottish Borders**

**Archaeological Evaluation**

**Report No. 3086**

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### **Proposed 400KV Series Capacitor Bank Compound, Land East of Eccles Substation, Eccles, Scottish Borders**

#### **Archaeological Evaluation**

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## **1. INTRODUCTION**

### **1.1 General**

This report presents the results of a archaeological evaluation undertaken by CFA Archaeology Ltd (CFA) in October 2013 on the site of an extension to the existing Eccles Substation, near Coldstream, Scottish Borders (NGR: NT 796 418, Fig. 1). The work was commissioned by Iberdrola Engineering & Construction.

A Written Scheme of Investigation (WSI) dated 28 August 2013 was produced by CFA and agreed by Dr Christopher Bowles, Scottish Borders Council Archaeologist.

### **1.2 Background**

Planning permission (13/00247/FUL) for two 400KV series capacitor bank compounds has been granted for land to the east of the existing Eccles Substation. The site is adjacent to the A697, 2 miles NW of Coldstream.

A number of archaeological sites are present in the surrounding area and it was considered that unknown archaeological remains may have been present within the development area.

### **1.3 Objectives**

The project's aims and objectives were:

- To establish the presence/absence, extent, condition, character, quality and date of any archaeological features or deposits within the proposed development area through trial trenching evaluation;
- To establish the vulnerability of any archaeological features to the proposed development;
- To propose mitigation measures.

## **2. WORKING METHODS**

### **2.1 General**

CFA Archaeology Ltd follows the Institute for Archaeologists' Code of Conduct, Standards and Guidance for Archaeological Watching Briefs.

### **2.2 Archaeological Evaluation**

The WSI assumed that the area available for evaluation totalled 30582m<sup>2</sup> and that a 10% trenching sample would therefore cover 3058m<sup>2</sup>. However, on-site constraints such as overhead lines and underground cables reduced the area available for evaluation to 28300m<sup>2</sup>. The presence of otters along the stream to the north of the site necessitated a 30m exclusion zone along the stream, further reducing the available area. These exclusion zones are shown on Fig. 1.

Thirty-four trial trenches were excavated. Their locations were determined on site once the exact location of existing services and other constraints (eg access tracks) were ascertained. In the event, trenching totalled 2808m<sup>2</sup>.

All trenches were excavated by machine under direct archaeological supervision to remove topsoil and modern deposits down to subsoil or the first significant archaeological horizon, whichever was reached first. Any further excavation required to fulfil the objectives of the evaluation was carried out by hand.

The stratification of all excavated areas was recorded, whether or not significant archaeological deposits have been identified.

The location of all trenches was recorded using industry standard electronic surveying equipment.

Trenches were backfilled on completion of excavation.

### **3. ARCHAEOLOGICAL RESULTS**

#### **3.1 General**

The site was undulating (Fig. 2) with the southern part (Trenches 1-22, Fig. 3) being on a gentle north facing slope. The central part, mostly within the southern pylon exclusion zone (Trenches 23-26) was low-lying and frequently waterlogged. The northern area (Trenches 27-34) included a low East to West ridge.

A stone track ran through the site from the A697, ending at a point under the southern pylons. Two underground power lines through the site had recently been diverted around the proposed compound platforms but at the instruction of Iberdrola the old lines were treated as live as no evidence could be provided to indicate that they had been depowered. No dig zones were observed when working around these cable routes. An unrecorded cable was also detected running east-west to the west of Trench 17 and was similarly avoided.

No archaeological features, deposits or artefacts were found in any of the trenches. General descriptions of the areas evaluated are provided below and individual trench descriptions are provided in Appendix 1.

#### **3.2 Evaluation**

##### *Bund Area, Trenches 1-8*

Topsoil was a uniform 0.35m deep and this overlay a mottled pink/red/orange sandy clay-silt natural subsoil containing mostly small greywacke cobbles. Clay-piped and stone filled field drains were present. Fig. 4 shows Trench 1 and the area of the bund.

##### *Southern Compound Platform, Trenches 9-22*

Due to previous work on site the topsoil had been heavily compacted and rutted close to both the pylons and the access track (Fig. 3) but was, in general, 0.35m deep and this overlay a motled pink/red/orange sandy clay-silt natural subsoil containing mostly small greywacke cobbles. Trench 16 is shown in Fig. 5. Deeper deposits were present in the northern end of Trenches 12, 18 and 20. This appeared to be a result of material from nearby excavations carried out during the re-routing of the pylon line being spread over the adjacent land. Clay-piped and stone filled field drains were present.

##### *Northern Compound Platform, Trenches 23-32*

Due to previous work on site the topsoil had been heavily compacted and rutted in the area of Trenches 23 and 26. A general depth of 0.35m was recorded. Deeper deposits were present in the eastern end of Trench 23 and southern end of Trenches 29-31. Again, this appeared to be a result of material from nearby pylon-related excavations being spread over the adjacent land. The natural subsoil consisted of heavy yellow-orange clay in the area of Trenches 23-26, with more gravelly and better drained deposits on the slightly elevated ground to the west. Clay-piped and stone filled field drains (Fig. 6) were present.

*Drain and pond area to north of Compound Platforms, Trenches 33-34*

A general view of these trenches from the west is shown in Fig. 7. Topsoil with a depth of 0.35m overlay a more varied natural subsoil, with patches of orange silty sand alongside areas of more clayey and stony deposits. Clay-piped field drains were present.

#### **4. CONCLUSION**

The evaluation of the development site to the east of the existing Eccles Substation was successfully completed. A total of thirty-four trenches covering 2808m<sup>2</sup> were excavated. No archaeological deposits or features were found during the evaluation and no further work is recommended. However, it is understood that the final decision lies with Scottish Borders Council.

A summary statement of the results of this evaluation will be submitted for publication in *Discovery and Excavation in Scotland* (Appendix 3).

The project archive, comprising all CFA record sheets, maps and reports, will be deposited with the Royal Commission on the Ancient and Historic Monuments of Scotland (RCAHMS) and copies of reports will be lodged with the Scottish Borders Council Sites and Monuments Record.

## APPENDIX 1: Summary of Evaluation Trenches

Trench no.	Size (m)	Depth of topsoil	Description
1	50 x 1.8	0.35m topsoil	No Archaeological remains
2	50 x 1.8	0.35m topsoil	No Archaeological remains
3	50 x 1.8	0.35m topsoil	No Archaeological remains
4	30 x 1.8	0.35m topsoil	No Archaeological remains
5	50 x 1.8	0.35m topsoil	No Archaeological remains
6	50 x 1.8	0.35m topsoil	No Archaeological remains
7	50 x 1.8	0.35m topsoil	No Archaeological remains
8	50 x 1.8	0.35m topsoil	No Archaeological remains
9	50 x 1.8	0.35m topsoil	No Archaeological remains
10	50 x 1.8	0.35m topsoil	No Archaeological remains
11	50 x 1.8	0.35m topsoil	No Archaeological remains
12	50 x 1.8	0.35m topsoil / 0.4m redeposited subsoil at S end	No Archaeological remains
13	50 x 1.8	0.35m topsoil	No Archaeological remains
14	50 x 1.8	0.35m topsoil	No Archaeological remains
15	50 x 1.8	0.35m topsoil	No Archaeological remains
16	50 x 1.8	0.35m topsoil	No Archaeological remains
17	50 x 1.8	0.35m topsoil	No Archaeological remains
18	50 x 1.8	0.35m topsoil / 0.3m redeposited subsoil at S end	No Archaeological remains
19	50 x 1.8	0.35m topsoil	No Archaeological remains
20	50 x 1.8	0.35m topsoil / 0.3m redeposited subsoil at S end	No Archaeological remains
21	25 x 1.8	0.35m topsoil	No Archaeological remains
22	25 x 1.8	0.35m topsoil	No Archaeological remains
23	50 x 1.8	0.5m topsoil / 0.1m redeposited subsoil at E end	No Archaeological remains
24	50 x 1.8	0.35m topsoil	No Archaeological remains
25	50 x 1.8	0.35m topsoil	No Archaeological remains
26	30 x 1.8	0.4m topsoil	No Archaeological remains
27	50 x 1.8	0.35m topsoil	No Archaeological remains
28	50 x 1.8	0.35-0.55m topsoil	No Archaeological remains
29	50 x 1.8	0.4m topsoil / 0.4m redeposited subsoil at S end	No Archaeological remains
30	50 x 1.8	0.35m topsoil / 0.4m redeposited subsoil at S end	No Archaeological remains
31	50 x 1.8	0.35m topsoil / 0.4m redeposited subsoil at S end	No Archaeological remains
32	30 x 1.8	0.35m topsoil	No Archaeological remains
33	35 x 1.8	0.35m topsoil	No Archaeological remains
34	35 x 1.8	0.35m topsoil	No Archaeological remains

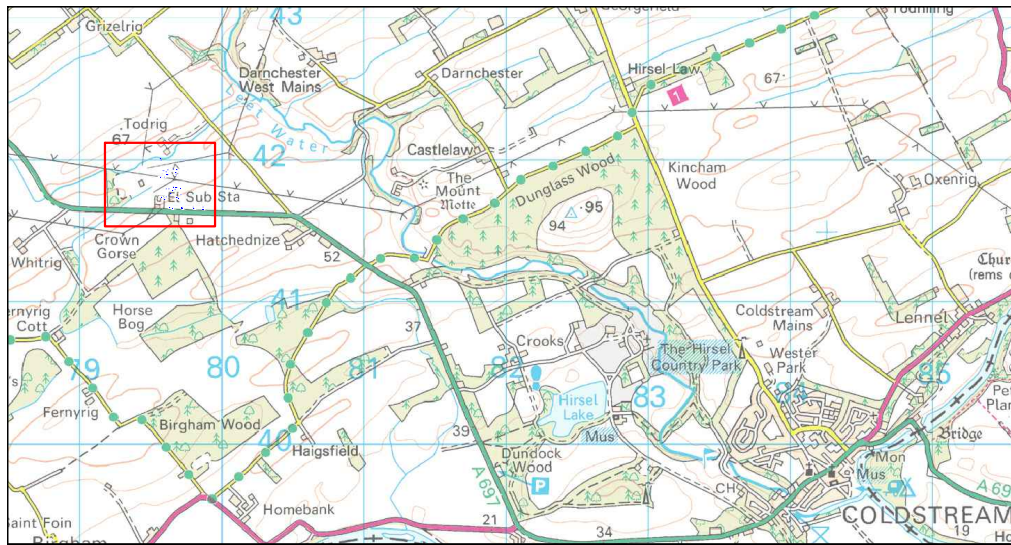


## APPENDIX 2: Photographic Register

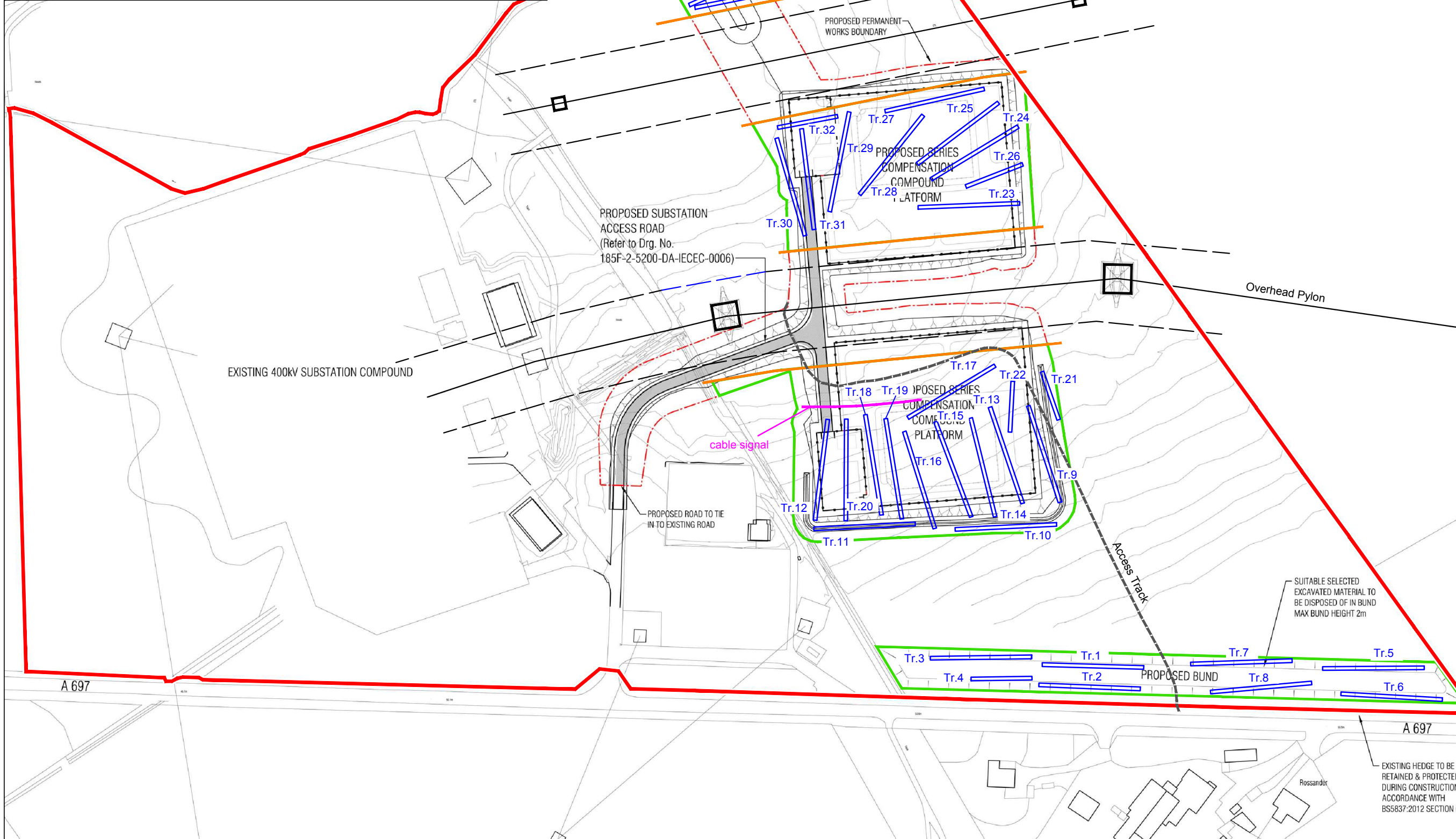
No.	Description	From	Conditions
1	Trench 1 general view	E	Overcast
2	Trench 2 general view	W	Overcast
3-5	General site views	Varied	Overcast
6-7	Trench 3 general view	W	Sun / Shade
8	Trench 4, stone filled field drain	ENE	Overcast
9	Trench 4 general view	E	Overcast
10	Trench 5 general view	W	Sun / Shade
11	Trench 6 general view	E	Overcast
12	Trench 6, stone filled field drain beginning in the trench	W	Overcast
13	Trench 7 general view	W	Sun / Shade
14	Trench 8 general view	E	Overcast
15-16	General views of the area to the south of the pylons	E	Sunny
17	Trench 9 general view	S	Sunny
18	Working shot	-	Sunny
19	Trench 10 general view	E	Sun / Shade
20	Trench 11 general view	E	Sun / Shade
21	Trench 12 general view	SSW	Sun / Shade
22	Trench 13 general view	N	Sun / Shade
23	Trench 12 from Trench 13 showing larger spoil heaps at N end	E	Sunny
24	Trench 14 general view	S	Sunny
25	Trench 15 general view	S	Bright
26	Trench 15 clay pipe field drain	SSW	Bright
27	Trench 16 general view	N	Sunny
28	Trench 17 general view	WSW	Bright
29	Trench 18 general view	N	Overcast
30	Trench 19 general view	S	Bright
31	Trench 20 general view	N	Bright
32	Trench 22 general view	NNE	Overcast
33	Trench 21 general view	S	Overcast
34-35	The area between the pylon lines pre-excavation	E	Overcast
36	Trench 23 general view	E	Overcast
37	Trench 24 general view	WSW	Overcast
38	Trench 25 general view	ENE	Overcast
39-40	Trench 26 general view	ENE	Overcast
41	Trench 27 general view	E	Overcast
42	Trench 27, stone filled field drains	E	Overcast
43	Trench 28 general view	NE	Overcast
44	Trench 28, soil section at N end	SE	Overcast
45	Trench 29 general view	SSW	Overcast
46	Trench 32 general view	W	Bright
47	Trench 31 general view	N	Bright
48	Trench 31 general view	S	Overcast
49	Trench 30 general view	S	Sunny
50	Trench 33 general view	W	Bright
51	Trench 34 general view	W	Bright
52	Trench 34 showing the sandy patches in the natural	W	Bright
53	Trenches 33-34 area general view	W	Sunny
54	Trenches 33-34 area general view	S	Sunny

### APPENDIX 3: Discovery and Excavation in Scotland Entry

<b>LOCAL AUTHORITY:</b>	Scottish Borders Council
<b>PROJECT TITLE/SITE NAME:</b>	Proposed 400KV Series Capacitor Bank Compound, Land East of Eccles Substation, Eccles, Scottish Borders
<b>PROJECT CODE:</b>	ECLE
<b>PARISH:</b>	Coldstream
<b>NAME OF CONTRIBUTOR:</b>	Ian Suddaby
<b>NAME OF ORGANISATION:</b>	CFA Archaeology Ltd
<b>TYPE(S) OF PROJECT:</b>	Archaeological Evaluation
<b>NMRS NO(S):</b>	N/A
<b>SITE/MONUMENT TYPE(S):</b>	N/A
<b>SIGNIFICANT FINDS:</b>	N/A
<b>NGR (2 letters, 10 figures)</b>	NT 79600 41800
<b>START DATE (this season)</b>	14 October 2013
<b>END DATE (this season)</b>	21 October 2013
<b>PREVIOUS WORK (incl. DES ref.)</b>	N/A
<b>MAIN (NARRATIVE) DESCRIPTION:</b> (May include information from other fields)	An evaluation was undertaken on the site of an extension to the existing Eccles Substation. A total of 34 Trenches were excavated, covering a total of 2808m <sup>2</sup> . No archaeological remains were recorded.
<b>PROPOSED FUTURE WORK:</b>	N/A
<b>CAPTION(S) FOR ILLUSTRS:</b>	N/A
<b>SPONSOR OR FUNDING BODY:</b>	Iberdrola Engineering & Construction
<b>ADDRESS OF MAIN CONTRIBUTOR:</b>	The Old Engine House, Eskmills Park, Musselburgh, EH21 7PQ
<b>EMAIL ADDRESS:</b>	cfa@cfa-archaeology.co.uk
<b>ARCHIVE LOCATION (intended/deposited)</b>	Royal Commission on the Ancient and Historic Monuments of Scotland Scottish Borders Council Sites and Monuments Record



- Key:
- Site Boundary
  - Evaluation Areas
  - Trenches
  - No Excavation Zone
  - 9m Buffers



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Fig. No: 1 Revision: A

Title: **Location Map**

Project: **Proposed 400kV series capacitor bank compound, land east of Eccles substation, Eccles, Scottish Borders: Archaeological Evaluation**

Client: **Iberdrola Engineering & Construction**

Scale at A3: **1:2000**

Drawn by: **TB** Checked: **BG** Report No: **3086**





*Fig. 2 - General view of the site from the south*



*Fig. 3 - General view of the area containing Trenches 9-22 pre-excavation*

Fig. No: <b>2-3</b>	Revision: <b>A</b>	Project: Proposed 400KV series capacitor bank compound, land east of Eccles substation, Eccles, Scottish Borders:
Drawn by: <b>TB</b>	Checked: <b>BG</b>	Report No: <b>3086</b>
		Client: <b>Iberdrola Engineering &amp; Construction</b>



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*Fig. 4 - Trench 1 from the east*



*Fig. 5 - Trench 16 from the south*

Fig. No: <b>4-5</b>		Revision: <b>A</b>	Project: Proposed 400KV series capacitor bank compound, land east of Eccles substation, Eccles, Scottish Borders:
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*Fig. 6 - Trench 27, stone-filled field drains*



*Fig. 7 - Trenches 33-34 from the west*

Fig. No: <b>6-7</b>		Revision: <b>A</b>	Project: Proposed 400KV series capacitor bank compound, land east of Eccles substation, Eccles, Scottish Borders:
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