ARCHAEOLOGICAL SOLUTIONS

CORNELIUS VERMUYDEN SCHOOL
CANVEY ISLAND, ESSEX

AN ARCHAEOLOGICAL EVALUATION

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NGR: TQ 78192 84090	Report No: 3520
District: Castle Point	Site Code: CACV10
Approved: Claire Halpin	Project No: 3706
Signed:	Date: April 2010

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OASIS SUMMARY SHEET

Project details			
Project name	*Archaeological Field Work at Cornelius Vermuyden School, Canvey Island, Essex*		
In April 2010, Archaeological Solutions Ltd (AS) conducted archaeological evaluation at The Cornelius Vermuyden School, Canvey Island, Essex (NGR TQ 78192 84090 Figs. 1-2). The evaluation was undertaken in compliance with a planning condition attached to a planning permission for the construction of new school buildings. *The area is particularly important for its occurrence of red hills derived from salt production dated to the late Iron Age and Roman periods. In the event three undated features (Ditch F1006, Pit F1008 and Gully F1010), and a post-medieval ditch (F1012) were recorded.*			
Project dates (fieldwork)	*6th-16th April 2010*		
Previous work (Y/N/?)	*N*	Future work (Y/N/?)	*TBC*
P. number	*3706*	Site code	*CAVC10*
Type of project	*Archaeological Evaluation*		
Site status	.		
Current land use	*School buildings, hard standing and playing fields*		
Planned development	*New school buildings*		
Main features (+dates)	*Post-medieval ditch, undated ditch, pit and gully*		
Significant finds(+dates)	*Post-medieval CBM*		
Project location			
County/ District/ Parish	*Essex*	*Castle Point*	*Canvey Island*
HER/ SMR for area	*Essex*		
Post code (if known)	-		
Area of site	*c.1000m2*		
NGR	*TQ 78192 84090*		
Height AOD (max/ min)	*c.1-3m AOD*		
Project creators			
Brief issued by	*Adrian Gascoyne (HEM)*		
Project supervisor/s (PO)	*Walter McCall*		
Funded by	*Skanska Education*		
Full title	*The Cornelius Vermuyden School, Canvey Island, Essex. An Archaeological Evaluation*		
Authors	*Walter McCall & Peter Thompson MA*		
Report no.	*3520*		
Date (of report)	*April 2010*		

THE CORNELIUS VERMUYDEN SCHOOL, CANVEY ISLAND, ESSEX AN ARCHAEOLOGICAL EVALUATION

SUMMARY

In April 2010, Archaeolog ical Solutions Ltd (AS) conducted ar chaeological evaluation at The Cornelius Ver muyden School, Canvey Island, Essex (NGR TQ 78192 84090 F igs. 1-2). The evaluatio n was undertaken in com pliance with a planning condition attached to a planning per mission for the construction of new school buildings.

A Roman red hill is situated c.100m north-west of the site (EHER 7074) wh ich is a Scheduled Monum ent. It is well -preserved and the only surviving monument of this type on Canvey Island.

The area is particularly im portant for it s occurrence of red hills derived fro m salt produc tion dated to the late Iron Age and Roman periods. In the event three undated features (Ditch F1006, Pit F1008 and Gully F1010), and a post-medieval ditch (F1012) were recorded.

1 INTRODUCTION

1.1 In April 2010, Archaeological Solutions Ltd (A S) conducted archaeological ev aluation at T he Cornelius Vermuyden Sch ool, Canvey Island, Es sex (NGR TQ 78192 84090 Figs. 1-2). The evaluation wa s commissioned by Skanska Education and was undertaken in compliance with a planning condition attached to a plann ing permission for the construction of new school buildings as par t of the Essex Building Schools for the Future project.

1.2 The evaluation was conducted in accordance with a brief issued by Essex County Counc il Archaeological Service (Adrian Gasc oyne, Hist oric Environment Management; dated Oct 2 009) and a written scheme of investigation compiled by AS (dat ed 11/11/09). The archaeological evaluation followed the procedures outlined in the Inst itute for Archaeologist s' *Code of Conduct* and *Standard and Guidance* and the IfA *Standard and Guidance for Archaeological F ield Evaluation* (revised 2001) and *Standards for Field Archaeology in the East of England* (Gurney 2003).

1.3 The evaluation aimed to determine the location, extent, date, character, condition, significance and quality of any surviving deposits as outlined in the Essex County Council brief.

Planning policy context

1.4 PPG16 (1990), the nati onal Planning Policy Guidance Note which applies to archaeology and PPG15 (19 94) the national Planning Policy Guidance Note which applies to conserva tion of the historic environment (by protecting the character and appearan ce of Conservation Areas and protecting listed buildings (of architec tural or historical interest) from demolition and unsym pathetic change and safeguarding t heir settings as far as is possible) have been replaced by Planning Policy Statement 5 (2010), the national Planning Policy Statement that applies to the historic environment

1.5 PPS5 (201 0) states t hat those parts of the hi storic environme nt that have signif icance bec ause of their histor ic, archaeological, architectural or artistic interest are heritage assets. T he Planning Polic y Statement aims to deliver sustainable developm ent by ensuring that polic ies and de cisions that concern the historic environment rec ognise that heritage assets are a non-renewable resource, take account of t he wider social, cultural, ec onomic an d environmental benef its of heritage cons ervation, and recognise that intelligently managed change may sometime s be necessary if heritage asset s are to be maintained for the long term. It aims to conserve England's heritage assets in a manner appropriate to their significance. It states that opportunities to capture evidenc e from the historic environment and to contribute to our knowledge and understanding of our past, and to make this publicly available, should be taken, particularly where a heritage asset is to be lost.

2 DESCRIPTION OF THE SITE

2. 1 Canvey Island is situated on the north side of the m outh of the Thames 4km south-west of Southend- on-Sea, and is separated from the Es sex mainland by a network of creek s. T he Ver muyden School is located on t he north-western edge of Canvey Island, accessed from Dinant Avenue.

2.2 The site c omprises the school bui ldings and areas of hardstanding, surrounded by playing fields. The ev aluation trenches were located in grassed areas of the site.

3 THE EVIDENCE

3.1 Topography, geology and soils

3.1.1 Canvey Island is a flat isl and formed during the Holocene period from marine and estuarine alluv ium deposited by the Thames. This overlies the London Clay Formation geology. The site lies at 1-3m AOD with the local soils classed as Wallasea I pelo-alluvial gleys.

3.2 Archaeolo gical and historical background

3.2.1 The area is particularly important for its occurrence of red hills derived from salt production dated to the late Iron Age and Roman periods. Red hills are created over time from the discard ing of ceramic salt cont ainers and heated soil left over from the evaporation process of trapped salt water. There are numerous red hills on Canv ey Island; one of the most important sites is located c.100m north-west of the evaluat ion site (EHER 7074). It is also a scheduled monument as it is the only known surviv ing red h ill on Canvey Island. Another red hill to the s outh, near the coast, contained Roman cremations (EHER 7129). A Roman co in hoard (EHER 7107) and a pottery hoard (EHER 7177) have also been found in the town, to the south.

3.2.2 Sc atters of medieval potte ry have been fou nd in the ar ea inc luding one from Burnell Av enue (EHER 7117). A medieval settlement and midden was found due south of the site (EHER 7128). The Oyster Fleet, a fairly recent building loc ated near the centre of Canv ey Island, is thought to stand on the site of a medieval precursor (EHER 7175).

3.2.3 Nu merous WWII pillbo xes and fo rtification s ites are loc ated aroun d Canvey Island.

4 METHODOLOGY

4.1 Four trenches, each measurin g between 40-70m, were excavated using a mechanical excavator fitted with a t oothless ditching buc ket (Fig. 2). The evaluation was carried out during the school Easter holidays.

4.2 Topsoil and undifferentiated over burden were mechanically-e xcavated under clos e archaeological supervision. Exposed s urfaces were cleaned b y hand and examined for archaeological features. Deposits were recorded using *pro forma* recording sheets, drawn to scale, and photographed as appropriate. Excavated spoil was s earched for finds and the trenches were sc anned by a metal detector. Trench locations were recorded by Total Station.

5 DESCRIPTION OF RESULTS

Individual trench descriptions are presented below:

Trench 1 Figs. 2 & 3

Sample Section 1: SW end, SE facing 0.00 = 1.89m AOD		
0.00 – 0.15m	L1000	Topsoil. Mid brown clayey silt.
0.15 - 0.31m	L1001	Light mid brown silty clay with occasional CBM
0.31m+	L1005	Natural. Light orange brown clay.

Sample Section 2: NE end, SE facing 0.00 = 1.86m AOD		
0.00 – 0.20m	L1000	Topsoil. As above
0.20 - 0.41m	L1001	Brown silty clay. As above
0.41m+	L1005	Natural. Light orange brown clay.

Description: Trench 1 contained no archaeological features or finds

Trench 2 Figs. 2 & 3

Sample Section 3: NW end, NE facing 0.00 = 1.63m AOD		
0.00 – 0.11m	L1000	Topsoil. As above, Tr.1
0.11 - 0.30m	L1001	Brown silty clay. As above, Tr.1
0.30m+	L1005	Natural. Light orange brown clay.

Description: Trench 2 contained no archaeological features or finds

Trench 3 Figs. 2 & 3

Sample Section 4: NE end, SE facing 0.00 = 1.17m AOD		
0.00 – 0.05m	L1000	Topsoil. As above, Tr.1
0.05 - 0.13m	L1001	Brown silty clay. As above, Tr.1
0.13m+	L1005	Natural. Light orange brown clay.

Sample Section 5: Centre, SE facing 0.00 = 1.46m AOD		
0.00 – 0.09m	L1000	Topsoil. As above, Tr.1
0.09 - 0.31m	L1001	Brown silty clay. As above, Tr.1
0.31m+	L1005	Natural. Light orange brown clay.

Sample Section 6: SW end, SE facing 0.00 = 1.75m AOD		
0.00 – 0.12m	L1000	Topsoil. As above, Tr.1
0.12 - 0.25m	L1001	Brown silty clay. As above, Tr.1
0.25 – 0.52m	L1004	Light yellowish grey sandy silt with occasional shell
0.52m+	L1005	Natural. Light orange brown clay.

Description:

Ditch F1006 (1.60+ x 1.08 x 0.08m) was linear in plan, orientated NW/SE. It had shallow sides and a flattish base. Its fill, L1007, was a mid orange brown silty clay with occasional small stones. It contained no finds. F1006 was cut by Pit F1008.

Pit F1008 (1.08+ x 1.70 x 0.14m) was circular in plan. It had moderately sloping sides and a flattish base. Its fill, L1009, was a mid orange brown silty clay with occasional small stones. It contained no finds. F1008 cut Ditch F1006.

Gully F1010 (1.50+ x 0.70+ x 0.44m) was linear in plan, orientated NW/SE. It had steep sides and a concave base. Its fill, L1011, was a mid greyish brown sandy clay with moderate shell near the base. It contained no finds. F1010 was cut by Ditch F1012, a possible re-cut.

Ditch F1012 (1.50+ x 1.20+ x 0.46m) was linear in plan, orientated NW/SE. It had moderately sloping sides and a flattish base. Its fill, L1013, was a mid brownish grey sandy clay with frequent small stones and occasional shell. It contained post-medieval CBM (81g). F1012 cut Gully F1010, and was truncated by a modern foundation cut.

Trench 4 Figs. 2 & 3

Sample Section 7: NW end, NE facing 0.00 = 2.10m AOD		
0.00 – 0.14m	L1000	Topsoil. As above, Tr.1
0.14 - 0.28m	L1001	Brown silty clay. As above, Tr.1
0.28 – 0.51m	L1004	Grey sandy silt. As above Tr.3
0.51m+	L1005	Natural. Light orange brown clay.

Sample Section 8: SE end, NE facing 0.00 = 1.64m AOD		
0.00 – 0.15m	L1000	Topsoil. As above, Tr.1
0.15 - 0.43m	L1001	Brown silty clay. As above, Tr.1
0.43 – 0.70m	L1002	Made Ground. Mid orange brown clay
0.70 – 0.72	L1003	Made Ground. Dark brownish black clay silt with small sub angular stones. Contains modern debris (plastic etc.)
0.72 – 0.77m	L1004	Grey sandy silt. As above Tr.3
0.77m+	L1005	Natural. Light orange brown clay.

Description: Trench 4 contained no archaeological features or finds

6 CONFIDENCE RATING

6.1 It is not felt that any factors inhibited the recognition of archaeological features and finds.

7 DEPOSIT MODEL

7.1 A simple stratigraphic sequence was observed for the majority of the trial trenches (Trenches 1 - 3) comprising topsoil (L1000) overlying a silty clay

(L1001), overlying the natural geological deposit (L1005). The topsoil, L1000, was a mid brown c layey silt. It was uniform across the site, ranging in thickness from 0.05 – 0.15m. Below the topsoil, L1001 was a light mid brown silty clay with occasional CBM (0.08 – 0.28m thick). Th e natural geologic al deposit comprised a light orange brown cl ay (0.13 – 0.77m below the current ground surface.

7.2 In the south-eastern corner of th e site (Trenches 3 – 4) Made Ground, L1002 and L1003, and a grey sandy silt were recorded below L1001, and overlying the natural, L1005.

8 DISCUSSI ON

8.1 Four archaeological features were recorded, and are tabulated:

Trench	Feature	Description	Spot Date
3	F1006	Ditch	-
3	F1008	Pit	-
3	F1010	Gully	-
3	F1012	Ditch	Post-medieval CBM

Summary of archaeological features

8.2 The features were all recorded in Trench 3. Only one feature contained finds; Ditch F1012 which contained post-medieval CBM.

8.3 The area is particularly important fo r its occurrence of red hills de rived from salt production dated to the late Iron Age and Roman periods. In the event three undated features (Ditch F1006, Pit F1008 and Gully F1010), and a post-medieval ditch (F1012) were recor ded. No finds of pre-modern date were present.

9 DEPOSTION OF ARCHIVE

Archive records, with an inv entory, will be d eposited, as well as any donated finds from the site, at the Southend Mu seum. The archive will be quantified, ordered, indexed, cross-refe renced and checked for internal consistency. In addition to the overall s ite summary , it will be necessary to produce a summary of the artefactual and ecofactual data.

10 ACKNOWLEDGEMENTS

Archaeological Solutions would like to thank Skanska Education for funding evaluation and for their assistance (in particular Messrs Trevor Lundgren, Ian Shinn and Trevor Simpson).

AS would also like to acknowledge the assistance of Cornelius Vermuyden School (in particular Mr Steve Willis).

AS is pleased to acknowledge the advice and input of Adrian Gascoyne of Essex County Council Historic Environment Management (HEM)

11 BIBLIOGRAPHY

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APPENDIX 1
FINDS CONCORDANCE

CACV10: Cornelius Vermuyden School, Canvey Island, Essex
Concordance of finds by feature

Feature	Context	Trench	Description	Spot Date	CBM (g)	
1012	1013	3	Ditch Fill	post-medieval	81	

APPENDIX 2
SPECIALIST REPORT

The Ceramic Building Materials
Andrew Peachey

Ditch F1012 (L1013) contai ned six fragments (81g) of post-medieval CBM. This CBM comprises small fragments fr om an unidentifiabl e post-medieval brick in an oxidised red, sand-tempered fabric. No diagnostic dimens ions, faces or other feature are extant.

PHOTOGRAPHIC INDEX

1
Trench 1. Looking North-West.

2
Trench 2. Looking South-East.

3
Trench 3: Ditches F1010, F1012 and cut of modern cement footing. Looking North.

4
Trench 3: Ditch F1010 (left) and F1012 (right). Looking South-West.

5
Trench 3: Ditch F1012 (left) and cement footing (right). Looking South-West.

6
Trenvch 4: Sample section, south-west end. Looking South-East.

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Fig. 1 Site location plan

Scale 1:25,000 at A4

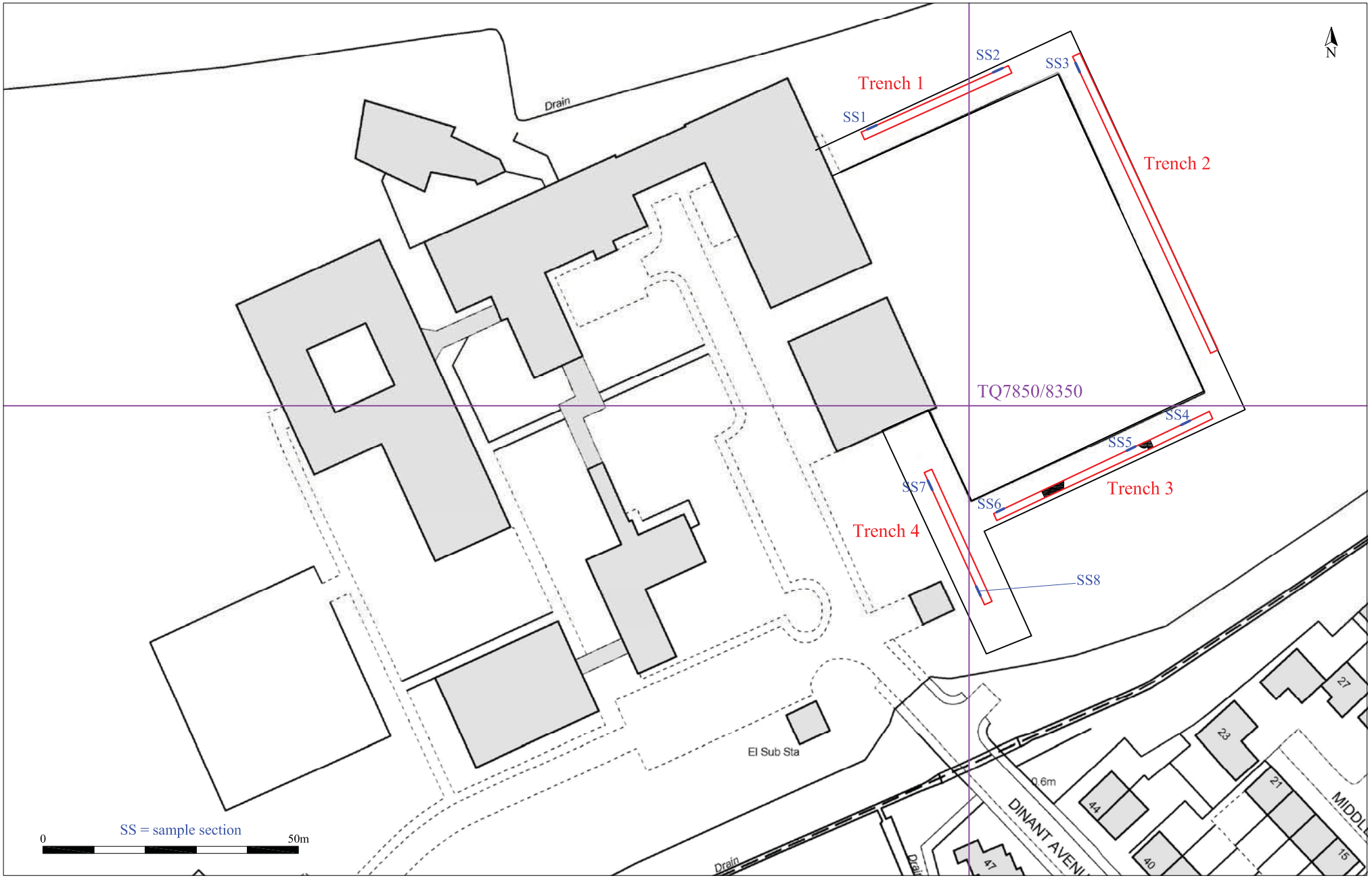

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Fig. 2 Trench location plan

Scale 1:1000 at A4

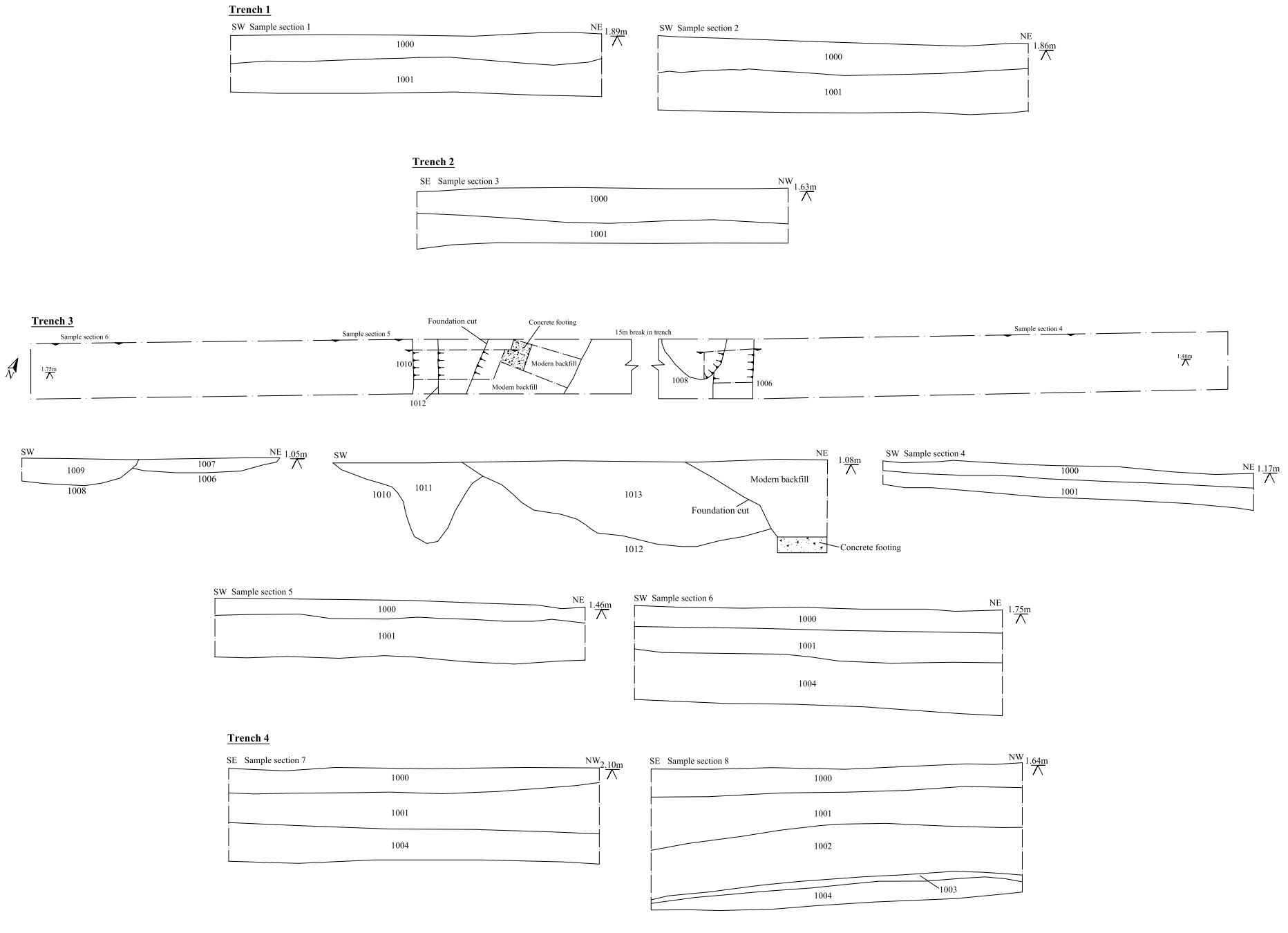

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Fig. 3 Trench plans and sections

Scale 1:100 and 1:20 at A3