

NORTHLIGHT HERITAGETownhead of GreenockREPORT: 105East AyrshirePROJECT ID: 4420161Archaeological Evaluation



Northlight Heritage

Studio 406 | South Block | 64 Osborne Street | Glasgow | G1 5QH web: www.northlight-heritage.co.uk | tel: 0845 901 1142 email: northlight@yorkat.co.uk

> Townhead of Greenock East Ayrshire NGR: NS 643 275

Data Structure Report on behalf of Hillhouse Quarry Group Ltd

Cover Plate: Trench 49, post-excavation

Report by: Andrew Gallacher Illustrations by: Charlotte Francoz Edited by: Alastair Becket Director: Andrew Gallacher Project Management: Alastair Becket Surveyor: Charlotte Francoz

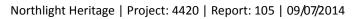
Approved by: Alastair Becket

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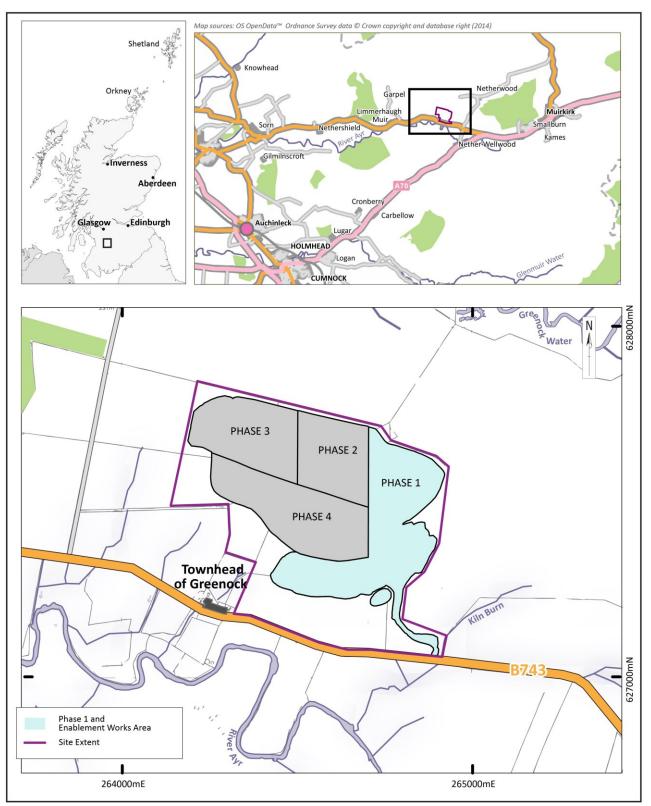


Figure 1: Site Location

Abstract

An archaeological evaluation was conducted on behalf of Hillhouse Quarry Group Ltd at Townhead of Greenock, East Ayrshire (NS 643 275). The evaluation was undertaken between the 16th and 27th of June, 2014 in advance of the development of the site for a quarry. Eighty six trenches were opened (totalling 7642 m²) within the evaluation area, one of which was also significantly extended. One feature of possible archaeological interest was investigated but was determined to represent remnants of a modern sheep fold. No other finds or features were uncovered.

1. Introduction

1.1

This report presents the results of an archaeological evaluation at Townhead of Greenock, East Ayrshire (Figure 1), conducted on behalf of the Hillhouse Quarry Group Ltd. The evaluation was undertaken in advance of site enabling and Phase 1 quarry works and sought to establish the presence or absence of archaeological features and to record known features within the Phase 1 and enablement development area. The evaluation was conducted between the 16th and 27th of June, 2014 in good conditions.

2. Location, Geology and Topography

2.1

The site generally comprises gently sloping scrub pasture on south facing slopes, changing to steeply sloping in the south east, to the north of Townhead of Greenock which is situated at NS 643 275 on the B943 between Mauchline and Muirkirk (Figure 1). The underlying geology consists of Kinneswood formation conglomerate bedrock with overlying superficial deposits of peat and glacial alluvium (1:50000, British Geological Survey).

3. Archaeological and Historical Context

3.1

The only known sites located within the development boundary are two drystone dykes and a low bank (sites 12, 14 and 17: see WSI - Appendix 2). According to the Environmental Statement (SLR Consulting 2012) these features are of low-negligible archaeological significance.

3.2

In the broader area there is evidence for prehistoric activity. At Nether Wellwood there are records of burial cairns, which have since been destroyed through excavation and development but contained collared urns and beakers of Neolithic/Bronze Age date (SMR 9087, 9091, 9102 and 9103). Stray finds, such as a bifacial chert implement (SMR 12853), also suggest prehistoric activity in the broader area. A sub-oval enclosure and possible mound at Battle Craigs (SMR 9098) may be of prehistoric date, although local tradition holds that the mound relates to burial following a battle and the site has never been tested archaeologically.

3.3

The majority of the known archaeology in the area around Townhead of Greenock is comprised of agricultural features relating to the post-Medieval period through to the present day. Of particular note for their proximity to the proposed development area are a concentration of features to the north at Aikencleugh (SMR 12114, 12115, 12116, 12117 & 12118) which suggest possible Medieval or later settlement in the area.

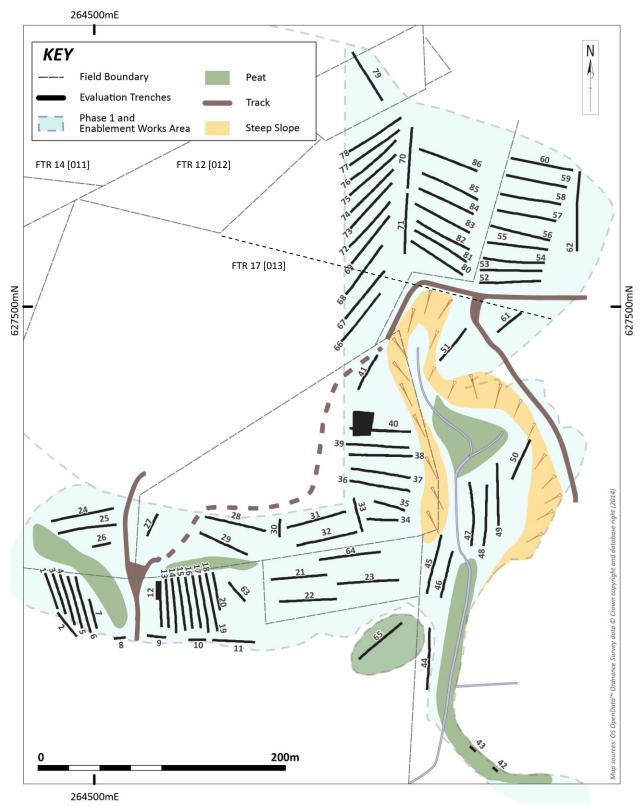


Figure 2: Trench location plan

4. Objectives

4.1

The aims and objectives of the evaluation were to:

- establish the presence or absence of archaeological remains within an 8% sample of the area
- determine the character, extent and significance of any archaeological remains encountered and, if necessary, provide sufficient information to develop a stage 2 mitigation strategy
- ensure preservation through record of two drystone dykes and a low bank

5. Methodology

5.1

The evaluation required an 8% archaeological evaluation of the entire development area to be achieved through trial trenching. The Phase 1 and enabling works areas total approximately 10.2 hectares, resulting in a requirement for 8160 m² of trenching. Upon assessment of the local topography, whilst on site, an area of approximately 1.1 hectares was deemed unsuitable for evaluation due to the ground either being too steep or areas of peat bog being too deep for the machine to safely access (Figure 2). This reduced the trial trenching requirement by 880 m².

5.2

Trenches were positioned to ensure good coverage of the area within the constraints of the nature of the local topography, field boundaries and trackways, and also to target those areas deemed more likely to contain archaeology(see Figure 2). Excavation was undertaken by a mechanical excavator using a toothless, 2 m wide ditching bucket under direct archaeological supervision. The topsoil, and any subsoil interfaces, were removed in spits to the level of the natural subsoil or the first archaeological horizon. Trenches were backfilled and reinstated at the end of each day and all trenches were surveyed in to the OS grid.

5.3

All trenches, archaeological features and artefacts were to be recorded, where appropriate, by written description on pro forma recording sheets, by high quality digital photography and by measured drawing.

6. Results

6.1

Eighty six trenches, each 2 m wide, were opened within the evaluation area totalling 7642 m². Topsoil (001) was broadly consistent across the site, a grey brown silty sand, varying in depth from 0.2m to 0.5 m. The natural subsoil was predominately an orange or mottled orange-grey brown silty sand (002). In lower lying areas which had or were close to overlying peat deposits the natural subsoil tended to change to a light grey or yellow grey silty clay (007) while in areas further up-slope there were pockets of yellow-grey sandy silt (008) and yellow to orange brown sand (009). In the southern and south eastern sections of the area were substantial deposits of red brown to black brown peat (003) from 0.1 m in depth up to 1.5 m deep (excavations were stopped at 1.5 m deep due to trench stability).

6.2

Only a single trench (Trench 40) contained any archaeological remains; a sub-rectangular feature [006], 9m long by 5.5m wide. Three 1 m wide slots were put through the feature which revealed it to be a area of trampling 0.5m - 1.0 m wide with irregular edges, shallow (0.1 - 0.15m) depth, and filled with a grey brown silty-sand (005) which appeared to be the result of trampling mixing the subsoil and topsoil. No finds or other features

were identified within or around the feature which, following discussions with the farmer, appears to have been the site of a sheep fold (see discussion).



Plate 1: Feature [006], pre-excavation viewed from the north

6.3

The three features noted in the previous walkover survey (12, 14 and 17, Appendix 2 and Fig 2) were recorded with photographs and written descriptions. They were recorded as contexts [012], [011] and [013] respectively.

6.4

Wall [011] (Fig 2, Feature 14) was a drystone dyke in poor condition, approximately 0.5 m wide and 0.5 m high which ran to the north but was entirely outside the current (Phase 1) evaluation area. Wall [012] (Fig 2, Feature 12, Plate 2) was a drystone dyke in good condition where extant, approximately 1 m high by 0.5 m wide, on the northern edge of the evaluation area. A considerable portion of both dykes (greater than 50 m) has already been removed (fairly recently) by the landowner where they run close to or within the Phase 1 evaluation area (Plate. 3).

6.5

Field boundary [013] (Fig 2, Feature 17) was a 2 m wide by 0.6 m high ditch and bank running (within the evaluation area) 40 m long on the west side of the modern road and fence line, and 80 m long on the east side (Fig 2). The field boundary was investigated within evaluation trenches (Plate 4), but no artefactual material was recovered.

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Plate 2: Intact section of [012], viewed from south



Plate 3: View of removed sections of [011] and [012]



Plate 4: View of [013] within evaluation trench 67

7. Discussion and Summary

7.1

The trenches were sited, as much as possible, to ensure even coverage across the area. This was constrained, particularly in the southern and south eastern sections, by the topography. Trenches 42 and 43 (Fig 2) had to be cut short at 5 m long as the peat bog, at 1.5 m deep, was proving unsafe for the machine. Trench 44 (Fig 2) was sited in the only accessible ground close to the proposed access track between a steep slope and running watercourse to the east and a fence line to the west. Trenches 1 - 20 (Fig 2) were located in an area of flat, dry level ground between areas of peat bog to the north and south, fence lines and a trackway (currently in use). Although this took the trenches somewhat outside the evaluation area it was judged to be a more likely location for potential archaeology than areas immediately surrounding but still within the broader development area.

7.2

The remains of a sheep fold were identified in Trench 40. Whilst these remains were initially enigmatic, excavation showed that the feature was not a cut feature, but the result of trampling. The farm manager advised that sheep folds had been built on this hillside but had later been removed, and such activity has left the trough worn into the ground by the animals as the only evidence that the sheep fold was positioned here.

7.3

The two stone dykes ([011] and [012]) had already seen substantial sections removed by the current land owner leaving only a 10 m section intact that was in any way close to the evaluation area. The third field boundary comprised a low bank and ditch, and appears to relate to an older field enclosure, parts of which remain in the current field system (Fig 2). All the field boundaries are of low archaeological importance and continue outside the development area.

8. Recommendations

8.1

Other than the sheep fold [006] no other archaeological finds and features were uncovered in any of the trenches. Due to the lack of archaeological features Northlight Heritage recommend that no further archaeological mitigation be required within the Phase 1/enabling works area. The remaining Phase areas will be investigated by trial trenching at a later date, in accordance with the WSI (Appendix 2). Any decisions regarding future archaeological work lie with East Ayrshire Council and WoSAS.

9. List of Sources

British Geological Survey, 1:50000, http://www.bgs.ac.uk/discoveringGeology/geologyOfBritain/viewer.html (accessed 04/07/2014).

SLR Consulting, 2012 Townhead of Greenock Cultural Heritage Environmental Statement Chapter 14

10. Appendices

APPENDIX 1: Tables / Concordances

Table 1: Trench Information

Trench	Length (m)	Width (m)	Depth (m)	Topsoil	Subsoil	Notes
001	31.0	2.0	0.4	Moderately compact grey brown silty sand	Light grey compact silty clay changing to mottled orange brown silty sand	Modern field drain
002	25.0	2.0	0.4	Moderately compact grey brown silty sand		
003	35.0	2.0	0.4	Moderately compact grey brown silty sand		
004	43.0	2.0	0.3 - 0.6	Moderately compact grey brown silty sand		
005	51.0	2.0	0.7	Moderately compact grey brown silty sand	Light grey compact silty clay changing to mottled orange brown silty sand	Up to 0.4m depth of peat 003 at S end
						Intact field drain
006	48.0	2.0	0.4 - 1.1	Moderately compact grey brown silty sand	Light grey compact silty clay changing to mottled orange brown silty sand	0.1 to 0.6m depth of peat 003
						No archaeological features present
007	25.0	2.0	0.5 – 0.7	Moderately compact grey brown silty sand	Light grey compact silty clay	0.2 to 0.4m depth of peat
						No archaeological features present
008	10.0	2.0	0.9 - 1.6	Moderately compact grey brown silty sand	Light grey compact silty clay	0.7 to 1.1m depth of peat 003. Was affecting trench stability so excavation was halted at 10m.
						No archaeological features present
009	16.0	2.0	0.6 – 0.7	Moderately compact grey brown silty sand	Light grey compact silty clay	0.2 to 0.4m depth of peat
						No archaeological features present
010	15.0	2.0	1.3 – 1.4	Moderately compact grey brown silty sand	Light grey compact silty clay	Up to 1m depth of peat 003
						No archaeological features present

011	35.0	2.0	0.2 – 0.5	Moderately compact grey brown silty	420 Report: 105 09/07/2014 Moderately compact orange brown silty	0.1 to 0.2m depth of peat 003, tapers out 3n
011	55.0	2.0	0.2 - 0.5	sand	sand	from W end.
						No archaeological features present
012	38.0	2.0 - 4.0	0.2 – 0.5	Moderately compact grey brown silty sand	Light grey compact silty clay changing to mottled orange brown silty sand	Trench was originally 38m x 2m. Was expanded opening an additional 16m x 2m area to investigate a possible feature. Possible feature was natural lens of sand in the natural.
						No archaeological features present
013	40.0	2.0	0.2 – 0.4	Moderately compact grey brown silty sand	Orange brown silty sand changing to yellow grey sandy silt changing to light grey compact silty clay	Modern field drain
014	45.0	2.0	0.2 - 0.4	Moderately compact grey brown silty sand	Orange brown silty sand changing to yellow grey sandy silt changing to light grey compact silty clay	No archaeological features present
015	45.0	2.0	0.2 - 0.4	Moderately compact grey brown silty sand	Orange brown silty sand changing to yellow grey sandy silt	No archaeological features present
016	43.0	2.0	0.4	Moderately compact grey brown silty sand	Light grey compact silty clay changing to mottled orange brown silty sand	No archaeological features present
017	44.0	2.0	0.4	Moderately compact grey brown silty sand	Light grey compact silty clay changing to mottled orange brown silty sand	No archaeological features present
018	48.0	2.0	0.5	Moderately compact grey brown silty sand	Orange brown silty sand changing to yellow grey sandy silt	Modern field drain
019	49.0	2.0	0.2 - 0.4	Moderately compact grey brown silty sand	Orange brown silty sand changing to yellow grey sandy silt changing to light grey compact silty clay	Modern field drain
020	30.0	2.0	0.2 – 0.5	Moderately compact grey brown silty sand	Light grey compact silty clay changing to mottled orange brown silty sand	No archaeological features present
021	50.0	2.0	0.4	Moderately compact grey brown silty sand	Moderately compact orange brown silty sand	No archaeological features present
022	50.0	2.0	0.3	Moderately compact grey brown silty sand	Moderately compact orange brown silty sand	No archaeological features present
023	50.0	2.0	0.3	Moderately compact grey brown silty sand	Moderately compact orange brown silty sand	No archaeological features present

024	50.0	2.0	0.2 – 0.5	Moderately compact grey brown silty	420 Report: 105 09/07/2014 Moderately compact orange brown silty	No archaeological features present
024	50.0	2.0	0.2 0.3	sand	sand	
025	50.0	2.0	0.2 - 0.3	Moderately compact grey brown silty sand	Moderately compact orange brown silty sand	No archaeological features present
026	16.0	2.0	0.3	Moderately compact grey brown silty sand	Moderately compact orange brown silty sand	Trench cut short as machine was running ou of fuel.
						No archaeological features present
027	20.0	2.0	0.4	Moderately compact grey brown silty sand		
028	50.0	2.0	0.4	Moderately compact grey brown silty sand		
029	43.0	2.0	0.4	Moderately compact grey brown silty sand	tely compact grey brown silty Mottled orange and grey brown sandy silt	
030	17.0	2.0	0.5	Moderately compact grey brown silty sand		
031	50.0	2.0	0.5	Moderately compact grey brown silty sand	Orange brown sand	Possible feature, identified as tree throw on investigation.
						No archaeological features present
032	50.0	2.0	0.5	Moderately compact grey brown silty sand	Orange brown sand changing to mixed dark/light grey sandy silt	No archaeological features present
033	30.0	2.0	0.4	Moderately compact grey brown silty sand	Orange brown silty sand	No archaeological features present
034	25.0	2.0	0.3	Light grey loose sand	Yellow sand changing to orange brown silty sand	No archaeological features present
035	25.0	2.0	0.4 - 0.8	Light grey loose sand	Yellow sand changing to orange brown silty sand	No archaeological features present
036	50.0	2.0	0.3	Light grey loose sand	Moderately compact orange brown silty sand	No archaeological features present
037	50.0	2.0	0.3	Light grey loose sand	Moderately compact orange brown silty sand	No archaeological features present
038	50.0	2.0	0.3	Moderately compact grey brown silty sand	Moderately compact orange brown silty sand	No archaeological features present

039	50.0	2.0	0.2	Moderately compact grey brown silty sand	1420 Report: 105 09/07/2014 Moderately compact orange brown silty	No archaeological features present
040	50.0	2.0	0.3	Moderately compact grey brown silty sand	sand Moderately compact orange brown silty sand	Sub-rectangular feature 005 identified. Additional 20m x 16m area opened to investigate it.
)41	32.0	2.0	0.3	Moderately compact grey brown silty sand		
)42	5.0	2.0	1.5	Moderately compact grey brown silty sand	/	Excavation halted at 1.5m depth of peat. Trench edges were unstable and machine was struggling to manoeuvre in peat.
043	5.0	2.0	1.5	Moderately compact grey brown silty sand		
044	50.0	2.0	0.3	Moderately compact grey brown silty sand	rately compact grey brown silty Yellow grey sandy silt changing to grey silt	
045	50.0	2.0	0.2 – 0.5	Moderately compact grey brown silty sand		
046	40.0	2.0	0.2 – 0.3	Moderately compact grey brown silty sand	Moderately compact orange brown silty sand	No archaeological features present
047	50.0	2.0	0.2 - 0.4	Moderately compact dark grey sandy silt	Light grey compact silty clay changing to mottled orange brown silty sand	No archaeological features present
048	50.0	2.0	0.3	Moderately compact dark grey sandy silt	Moderately compact orange brown silty sand	No archaeological features present
049	50.0	2.0	0.2 – 0.5	Moderately compact dark grey sandy silt	Moderately compact orange brown silty sand	No archaeological features present
050	37.0	2.0	0.2 - 0.4	Moderately compact dark grey sandy silt	Moderately compact orange brown silty sand	No archaeological features present
051	34.0	2.0	0.3	Moderately compact grey brown silty sand	Yellow sand with gravel lenses	No archaeological features present
052	50.0	2.0	0.3	Moderately compact grey brown silty sand	Yellow sand with gravel lenses	No archaeological features present
053	50.0	2.0	0.3	Moderately compact grey brown silty sand	Moderately compact orange brown silty sand	No archaeological features present
054	50.0	2.0	0.3	Moderately compact grey brown silty sand	Moderately compact orange brown silty sand	No archaeological features present

055	50.0	2.0	0.3	Moderately compact grey brown silty	Moderately compact orange brown silty	No archaeological features present
000	50.0	2.0	0.5	sand	sand	
056	50.0	2.0	0.3	Moderately compact grey brown silty sand	Moderately compact orange brown silty sand	No archaeological features present
057	50.0	2.0	0.3	Moderately compact grey brown silty sand	Moderately compact orange brown silty sand	No archaeological features present
058	50.0	2.0	0.3	Moderately compact grey brown silty sand		
059	50.0	2.0	0.3	Moderately compact grey brown silty sand		
060	50.0	2.0	0.2	Moderately compact grey brown silty sand	Pale yellow grey silty clay	No archaeological features present
061	25.0	2.0	0.5	Moderately compact grey brown silty sand	Yellow grey sandy silt	No archaeological features present
062	65.0	2.0	0.2	Moderately compact grey brown silty sand	Pale yellow grey silty clay	No archaeological features present
063	20.0	2.0	0.3	Moderately compact grey brown silty sand	Moderately compact orange brown silty sand	No archaeological features present
064	50.0	2.0	0.5	Moderately compact grey brown silty sand	Moderately compact orange brown silty sand	No archaeological features present
065	45.0	2.0	0.5	Moderately compact grey brown silty sand	Moderately compact orange brown silty sand	No archaeological features present
066	50.0	2.0	0.3	Moderately compact grey brown silty sand	Moderately compact orange brown silty sand	No archaeological features present
067	50.0	2.0	0.3	Moderately compact grey brown silty sand	Moderately compact orange brown silty sand	No archaeological features present
068	50.0	2.0	0.3	Moderately compact grey brown silty sand	Moderately compact orange brown silty sand	No archaeological features present
069	50.0	2.0	0.3	Moderately compact grey brown silty sand	Moderately compact orange brown silty sand	No archaeological features present
070	50.0	2.0	0.2	Moderately compact grey brown silty sand	Moderately compact orange brown silty sand	No archaeological features present
071	50.0	2.0	0.2	Moderately compact grey brown silty sand	Moderately compact orange brown silty sand	No archaeological features present

	I	1	I	c c i j	4420 Report: 105 09/07/2014	
072	50.0	2.0	0.2	Moderately compact grey brown silty sand	Moderately compact orange brown silty sand	No archaeological features present
073	50.0	2.0	0.2	Moderately compact grey brown silty sand	Moderately compact orange brown silty sand	No archaeological features present
074	50.0	2.0	0.2	Moderately compact grey brown silty sand	Moderately compact orange brown silty sand	No archaeological features present
075	50.0	2.0	0.2	Moderately compact grey brown silty sand	Moderately compact orange brown silty sand	No archaeological features present
076	50.0	2.0	0.2	Moderately compact grey brown silty sand	Moderately compact orange brown silty sand	No archaeological features present
077	50.0	2.0	0.2	Moderately compact grey brown silty sand	Moderately compact orange brown silty sand	No archaeological features present
078	50.0	2.0	0.2	Moderately compact grey brown silty sand	Moderately compact orange brown silty sand	No archaeological features present
079	45.0	2.0	0.5	Moderately compact grey brown silty sand	Yellow grey sandy silt	No archaeological features present
080	50.0	2.0	0.25	Moderately compact grey brown silty sand	Moderately compact orange brown silty sand	No archaeological features present
081	50.0	2.0	0.25	Moderately compact grey brown silty sand	Moderately compact orange brown silty sand	No archaeological features present
082	50.0	2.0	0.25	Moderately compact grey brown silty sand	Moderately compact orange brown silty sand	No archaeological features present
083	50.0	2.0	0.25	Moderately compact grey brown silty sand	Moderately compact orange brown silty sand	No archaeological features present
084	50.0	2.0	0.25	Moderately compact grey brown silty sand	Moderately compact orange brown silty sand	No archaeological features present
085	50.0	2.0	0.25	Moderately compact grey brown silty sand	Moderately compact orange brown silty sand	No archaeological features present
086	50.0	2.0	0.25	Moderately compact grey brown silty sand	Moderately compact orange brown silty sand	No archaeological features present

Table 2: Context Information

Context No.	Trench	Туре	Length (m)	Width (m)	Depth (m)	Compaction	Colour	Composition	Interpretation	Stratigraphy and/or phasing info
001	All	Topsoil	/	/	0.2 - 0.8	Moderate - Loose	Light grey to dark grey brown	Sandy silt to silty sand to sand	Topsoil present across whole site.	/
002	All	Natural	/	/	/	Moderate	Orange brown to Mottled orange and grey brown	Silty Sand	Natural, patches of sand & gravel	/
003	All	Subsoil	/	/	0.1-1.5	Moderate	Red to Black brown	Peat	Up to 1.5m depth of peat found in various areas across the site	/
004	1,3,4,5, 13,18,1 9	Fill	3.0 – 5.0 In trench	0.2	0.2-0.5	Moderate	Dark grey brown	Silty Sand	Fill of modern field drains. Most also had fragments or intact sections of modern ceramic pipe in them.	In cut [010], under (001)
005	40	Fill	9	0.5 – 1.0	0.1 – 0.15	Moderate	Grey brown	Silty Sand	Similar in nature to topsoil, fill of cut [006]	Fill of [006], under (001)
006	40	Cut	9	0.5 - 1.0	0.1 <i>-</i> 0.15	/	/		Cut of sub-rectangular feature, $9m L \ge 5.5m$ W, in Trench 40. Originally identified as a possible ditch, $0.5 - 1.0 \text{ m}$ wide, excavation revealed it to have irregular edges, no visible entrance way, shallow ($0.1 - 0.15m$) depth, a single topsoil like fill and no finds or other features within or around.	Overlays (002), filled by (005)
									The farm manager advised that sheep styles had been built on this hillside. These were simple enclosures with no entrance built out of whatever material was available. A sheep was thrown into the enclosure and goaded into running round and round the edges in order to tire it out.	
									This information fitted well with the archaeology present so the feature was identified as the remains of such an enclosure, likely not a ditch but the trough worn into the ground by the animals running around the edge of the enclosure.	

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007	12-20, 60, 62	Natural		/	/	Firm	Light grey – Yellow grey	Silty Clay	Variation in natural	/
008	13-15, 18-19, 44, 61, 79	Natural	/	/	/	Moderate	Yellow grey	Sandy silt	Variation in natural	/
009	31, 32, 34, 35, 51, 52	Natural	/	/	/	Moderate	Yellow to Orange brown	Sand	Variation in natural	/
010	1,3,4,5, 13,18,1 9	Cut	3.0 – 5.0 In trench	0.2	0.2-0.5	/	/	/	Cut of modern field drain	Overlays (002), filled by (004)
011	/	Structu re	/	0.5	0.5	/	/	/	Feature 14 in WSI. Drystone dyke in poor condition, approximately 0.5 m W by 0.5 m H. Substantial sections have been removed by landowner.	/
012	/	Structu re	/	0.5	1.2	/	/	/	Feature 12 in WSI. Drystone dyke in good condition, approximately 0.5 m W by 1.2 m H. Substantial sections have been removed by landowner.	/
13		Structu re		2.0	0.6				 Feature 17 in WSI 2 m wide by 0.6 m high bank and ditch running E-W across site. Within evaluation area – 40 m L on west side of current road and fence line, 80 m L on east side. Separates improved ground on the down-slope southern side from unimproved ground on the up-slope northern side. An evaluation trench cut through the bank and ditch revealed the bank to be 0.4 m high single topsoil like fill and the ditch to have only a thin covering of topsoil over the natural. The feature was therefore formed by stripping topsoil from the ditch and forming it into a bank on the southern side. It is likely a modern feature designed to catch water run off from up slope. 	

Table 3: Samples

Sample No.	Context No.	% of Deposit	Volume (l)	No./Size	Reason for sampling				Application /comments
				Bag/Bucket	Pot	Lithic	Bone	Botanics	
001	005	15	8	1xL				x	DISCARD

Table 4: Drawings

Drawing	Trench	Context	Subject	Scale
No.				
1	40	(005), [006]	S facing section of (005), [006].Slot 1, Trench 40.	1:10
2	40	(005), [006]	S facing section of (005), [006].Slot 1, Trench 40.	1:10
3	40	(005), [006]	W facing section of (005), [006].Slot 1, Trench 40.	1:10
4	40	005	Plan of feature (005)	1:50

Table 5: Digital Photographs

Photo No.	Context No.	Description	From (Compass)
1	-	Post-ex Trench 1	N
2	004	Field drain Trench 1	N
3	-	Post-ex Trench 1	S
4	-	Post-ex Trench 2	NW
5	-	Post-ex Trench 3	N
6	004	Field drain Trench 3	N
7		Post-ex Trench 3	S
8	-	Post-ex Trench 4	N
9	004	Field drain Trench 4	N
10	-	Post-ex Trench 4	S
11	-	Post-ex Trench 5	N
12	-	Post-ex Trench 5	S
13	-	Post-ex Trench 6	S
14	003	Trench 6 section showing peat 003	E
15	-	Post-ex Trench 6	N
16	-	Post-ex Trench 7	N
17	-	Post-ex Trench 8	W
18	003	Section Trench 8 showing peat 003	N
19	-	Post-ex Trench 9	NW
20	-	Post-ex Trench 10	W
21	003	Section Trench 10 showing peat 003	N
22	-	Post-ex Trench 11	E
23	-	Post-ex Trench 11	E
24	-	Post-ex Trench 20	N
25	-	Post-ex Trench 20	N
26	-	Post-ex Trench 19	N
27	-	Post-ex Trench 19	N
28	-	Post-ex Trench 18	N
29	004	Field drain line Trench 18	N
30	-	Post-ex Trench 17	N
31	-	Post-ex Trench 16	N
32	004	Field drain line Trench 16	N
33	-	Post-ex Trench 15	N
34	-	Post-ex Trench 14	N
35	-	Post-ex Trench 13	N
36	004	Field drain line Trench 13	N
37	-	Post-ex Trench 12	N
38	-	Post-ex Trench 12	N
39	-	Post-ex Trench 21	SW
40	-	Post-ex Trench 22	SW
41	-	Post-ex Trench 23	SE
42	-	Post-ex Trench 26	NE

Post-ex Trench 25 43 NE 44 Post-ex Trench 24 NE 45 Pre-ex of possible feature Trench 31 ENE 46 Tree throw, Trench 31 Ν 47 Post-ex Trench 37 W 48 Post-ex Trench 36 W 49 Post-ex Trench 35 WNW 50 Post-ex Trench 34 NW 51 Post-ex Trench 33 Ν 52 Post-ex Trench 32 ENE 53 Post-ex Trench 31 ENE 54 Post-ex Trench 30 Ν 55 Post-ex Trench 29 SE Post-ex Trench 28 56 NW 57 Post-ex Trench 27 Ν 58 Post-ex Trench 38 W 59 Post-ex Trench 39 w 60 Post-ex Trench 40 w 61 Post-ex Trench 40, expanded area over feature S 62 Post-ex Trench 40, expanded area over feature N 63 Post-ex Trench 41 Ν 64 General shot of evaluation area 65 General shot of evaluation area 66 General shot of evaluation area 67 General shot of evaluation area 005 68 Pre of feature 005, Trench 40 W 69 005 Pre of feature 005, Trench 40 Ν 70 Post-ex Trench 44 Ν 71 Ι Abandoned trench showing peat depth S 72 Post-ex Trench 45 73 Post-ex Trench 45 Ν Post-ex Trench 46 S 74 75 Post-ex Trench 47 NW 76 Post-ex Trench 48 NW 77 Post-ex Trench 49 NW 78 Post-ex Trench 50 w 79 S 005,006 S facing section of slot 1, Trench 40 80 005,006 Slot 1, Trench 40 post-ex ENE 81 005,006 S S facing section of slot 2, Trench 40 82 005,006 ENE Slot 2, Trench 40 post-ex 83 005,006 E facing section of slot 3, Trench 40 Е 84 005,006 E facing section of slot 3, Trench 40 Е 85 005,006 Slot 3, Trench 40 post-ex Е 86 Post-ex Trench 51 SE 87 Post-ex Trench 52 SSW

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88	-	Post-ex Trench 60	WNW
89	-	Post-ex Trench 59	WNW
90	-	Post-ex Trench 58	WNW
91	-	Post-ex Trench 57	WNW
92	-	Post-ex Trench 56	WNW
93	-	Post-ex Trench 55	WNW
94	-	Post-ex Trench 54	WSW
95	-	Post-ex Trench 53	WSW
96	-	Post-ex Trench 61	SW
97	-	Post-ex Trench 62	N
98	-	Post-ex Trench 63	N
99	-	Post-ex Trench 64	W
100	-	Post-ex Trench 65	SW
101	-	Post-ex Trench 69	SW
102	-	Post-ex Trench 68	SW
103	-	Post-ex Trench 67	SW
104	-	Post-ex Trench 66	SW
105	-	Post-ex Trench 79	SE
106	-	Remains of stone dyke, Trench 79	W
107	-	Post-ex Trench 78	WSW
108	-	Post-ex Trench 77	WSW
109	-	Post-ex Trench 76	WSW
110	-	Post-ex Trench 75	WSW
111	-	Post-ex Trench 74	WSW
112	-	Post-ex Trench 73	WSW
113	-	Post-ex Trench 72	WSW
114	-	Post-ex Trench 71	S
115	-	Post-ex Trench 70	S
116	-	Post-ex Trench 86	E
117	-	Post-ex Trench 85	E
118	-	Post-ex Trench 84	E
119	-	Post-ex Trench 83	E
120	-	Post-ex Trench 82	ESE
121	-	Post-ex Trench 81	ESE
122	-	Post-ex Trench 80	ESE
123	-	Section through bank [013]	E
124	-	Intact section of stone dyke [012]	S
125	-	[012] removed	E
126	-	[011] and [012] removed	E
127	-	Remains of stone dyke [011]	NE

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APPENDIX 2: Stage 1 Written Scheme of Investigation

Northlight Heritage: Townhead of Greenock, East Ayrshire June 2014 (Phase 1 and Enabling Works)

Archaeological Mitigation

Written Scheme of Investigation

1.0 Introduction

1.1

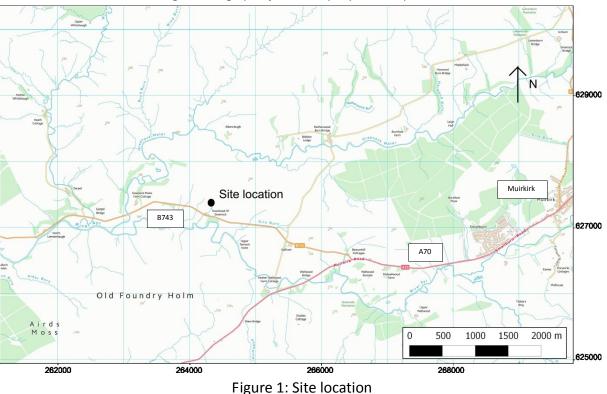
This document sets out a written scheme of investigation for archaeological works relating to a proposed sand and gravel extraction site (Planning Ref 12/0831/PP) at Townhead of Greenock, East Ayrshire (NS 643 275, Figure 1), on the behalf of Hillhouse Quarry Group Ltd. All phases and stages of work will be funded by the client, Hillhouse Quarry Group Ltd.

1.2

It is proposed that a process of archaeological evaluation (termed 'Stage 1' for the purposes of this document) be undertaken in advance of site enabling and quarry works to establish the presence or absence of archaeological features and/or deposits on the site and to record known drystone dyke features with the development area (see 3.1 below). Should significant archaeological deposits be present on site there may be requirement for a staged programme of archaeological works (which could include archaeological excavation, watching brief and/or further evaluation as appropriate). The detailed methodology to be employed during any Stage 2 mitigation works and Stage 3 post excavation analysis and publication, would, if required, be specified in addenda to this document, to be called project designs for any proposed fieldwork at Stage 2, and post- excavation research designs for work required at Stage 3.

1.3

These addenda, if required, will be submitted by the applicant for the agreement of the West of Scotland Archaeological Service (WOSAS), prior to the commencement of any archaeological work, which may be specified in the addenda documents. The Council will not discharge any planning condition which requires the programme of archaeological work, until such time as it is satisfied that all Stages of archaeological fieldwork have been completed (in the cases of Stages 1 and 2), or secured by contract (in the case of Stage 3).



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2. Site Location

2.1

The site comprises gently sloping scrub pasture, to the north of Townhead of Greenock which is situated on the B943 (the road between Mauchline and Muirkirk which broadly follows the course of the River Ayr) (Figure 1).

3. Archaeological Background

3.1

Some archaeological work has been conducted on the site during the production of a cultural heritage chapter for inclusion within an Environmental Statement (ES) produced by SLR Consulting (2012). This work included a desk-based review of the known archaeology and a walkover survey of the site. The only known sites located within the development boundary are three drystone dykes (Appendix 1: numbered 12, 14 and 17 - extracted from the ES document).

3.2

In the broader area there is evidence for prehistoric activity. At Nether Wellwood there are records of burial cairns, which have since been destroyed through excavation and development but contained collared urns and beakers of Neolithic/Bronze Age date (SMR 9087, 9091, 9102 and 9103). Stray finds, such as a bifacial chert implement (SMR 12853), also suggest prehistoric activity in the broader area. A sub-oval enclosure and possible mound at Battle Craigs (SMR 9098) may be of prehistoric date, although local tradition holds

that the mound relates to burial following a battle and the site has never been tested archaeologically.

3.2

The majority of the known archaeology in the area around Townhead of Greenock is comprised of agricultural features relating to the post-Medieval period through to the present day. Of particular note for their proximity to the proposed development area are a concentration of features to the north at Aikencleugh (SMR 12114, 12115, 12116, 12117 & 12118) which suggest possible Medieval or later settlement in the area.

4.0 Aims and Objectives

The aims and objectives of the Stage 1 evaluation are to:

- establish the presence or absence of archaeological remains on site within a 8% sample of the area conducted in four (or less) phases of fieldwork;
- determine the character, extent and significance of any archaeological remains encountered;
- and, where preservation in-situ is not feasible, provide sufficient information to develop a stage 2 mitigation strategy to excavate and record any significant archaeological features or sites encountered during the evaluation to.
- ensure preservation through record of three drystone dykes (recorded as 12, 14 and 17 within the ES - see Appendix 1)

5.0 Methodology

5.1

The Stage 1 investigation requires an 8% archaeological evaluation of the entire development area to be achieved through trial trenching. The total development area comprises approximately 40.4 hectares of which approximately 29.4 hectares will be directly impacted by quarry operations. Quarry extraction is planned to run for a period of some 159 months, within four distinct phases of activity (Appendix 2) and as such, archaeological evaluation work will require to be carried out in advance of each phase of expansion.

5.2

Each phase of archaeological work will be reported on within a separate Data Structure Report (see below) and a revised version of this document (WSI) will be issued prior to each phase of work.

5.3

The first phase of evaluation will encompass the Phase 1 development area along with the areas to be impacted by enabling works (the access track, plant site and lagoon 1 - as shown

in Appendix 3). The Phase 1 and enabling works areas total approximately 10.2 hectares, resulting in a requirement for 8160 m^2 of trenching (this equates to 90 evaluation trenches, each measuring 50 m by 1.8 m or a variation thereon - Figure 2).

5.3

Trenches will be positioned to ensure even coverage of the area. An indicative trench plan (for Phase 1 and enabling works areas see Figure 2) will serve as a guide, but may be altered on the ground to target topographic features deemed more likely to contain archaeologically significant material, or to avoid areas (particularly live services or other hazards such as particularly boggy areas or steep slopes) in accordance with the site health and safety risk assessment.

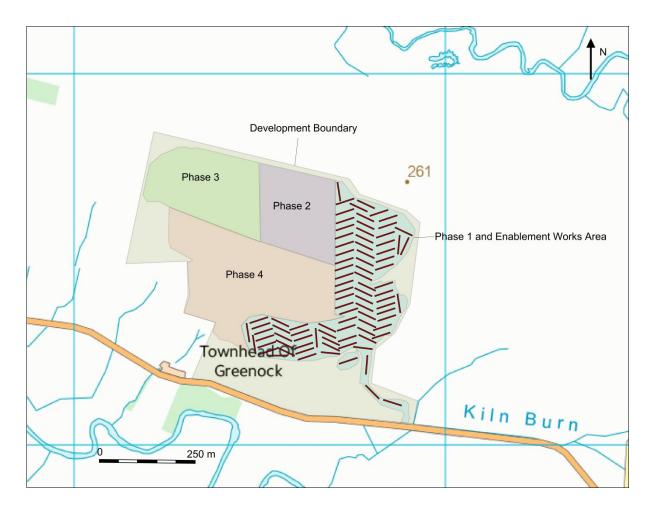


Figure 2: Indicative trench layout within Phase 1 and Enablement Works Area (trenches shown in red) Contains Ordnance Survey data © Crown copyright and database right 2014

The strategy to be employed during evaluation works across all Phases will consist of the following:

- Excavation will be undertaken by a mechanical excavator using a toothless ditching bucket under direct archaeological supervision.
- The topsoil, and any subsoil interfaces, will be removed in spits to the level required for the construction works (likely to be the natural subsoil) or the first archaeological horizon. Any archaeological features encountered will be cleaned by hand to help determine the date of the deposits, their character and extent. Such features will be recorded by written description on pro forma recording sheets, by photograph and by measured drawing.
- Any archaeological features encountered will be investigated by the on-site archaeologists. Should negative-cut features be encountered a representative sample of them will be 50% excavated in order to determine their significance, date and function.
- In the event that discovered features are deemed to be of archaeological significance, trenches will be extended to investigate the broader area surrounding them and establish the extent of the archaeological remains. Linear features will be sampled excavated to establish their character and potential date. Isolated features will be 100% excavated where possible.
- Recording will include pro forma sheets, drawings and photographs.
- All archaeological finds will be dealt with by the on-site archaeological team. The general practice will be to bulk recover all artefacts by context and, when appropriate, they will be three-dimensionally recorded prior to up-lifting. Finds which are of particular sensitivity or importance may require specialist conservation assessment.
- All excavated feature fills and horizons will be sampled for artefactual and palaeoenvironmental evidence. Where appropriate, this may also include micromorphological sampling in order to address key issues on soil development at the site.
- Where archaeological deposits or features prove to be present, and particularly extensive, numerous or complex are encountered, the client and WOSAS will be informed and a site meeting will be held between all relevant parties to agree the most appropriate strategy. Where preservation in-situ is not feasible, this will generally comprise a need to develop a stage 2 mitigation strategy to excavate and record any significant archaeological features or sites encountered during the evaluation to ensure preservation through record.
- Trenches will be backfilled and reinstated at the end of each day where possible. In the case of trenches containing archaeology, these may require to be kept open but will be backfilled by the end of the fieldwork.
- All trenches will be surveyed in to the OS grid.

There are three drystone dykes within the development area and each will be recorded with a combination of photographs and written descriptions.

6.0 Reporting

6.1

Should the evaluation encounter no or limited archaeology a single data structure report will be produced outlining the circumstances and results of the project. Should archaeological deposits or features prove to be present, and particularly extensive, numerous or complex, the results of stage 2 works will take the form of data structure report for each area or concentration of features as appropriate. Drafts of these reports will be submitted to WOSAS for agreement within four weeks of the completion of fieldwork. These reports will outline the main results of the fieldwork and incorporate lists of all features, finds, samples, photographs and drawings. They will be produced in-house by Northlight Heritage as a desk-top published document and disseminated in digital formats.

6.2

In the circumstances of significant archaeological remains having been excavated, additionally a post-excavation research design will be produced (within three months of the completion of fieldwork) making recommendations for stage 3 works including further analysis and publication (within one year of the completion of fieldwork). Implementation of any recommendations offered would however be conditional on meeting the approval of the planning authority.

6.3

Final decisions on the need for further work, and on the detailed specification of the character of that work, rest with Planning Authority.

6.4

Northlight Heritage will also implement the standards and requirements of the Online Access to the Index of Archaeological Investigations (OASIS) and Discovery and Excavation in Scotland. Copies of the reports will be provided to the developer, to the planning authority and to the National Monuments Record for Scotland. Further copies can be distributed to other recipients if requested and specified.

7.0 Copyright

7.1

Unless otherwise agreed copyright for any report resulting from the archaeological work undertaken as part of the project will be deemed the intellectual property of York Archaeological Trust.

8.0 Human Remains, Archive Arrangements and Finds Disposal

8.1

In the unlikely event that human remains are encountered during the fieldwork the client, the local police and the Council will be notified immediately and no further work will take place on site until agreement on how to proceed has been reached with all parties.

8.2

Northlight Heritage will ensure that the project archive is prepared and ready for submission within six months of the completion of all fieldwork or post-excavation work (as appropriate). The resultant site archive will be deposited with the National Monuments Records for Scotland.

8.3

The laws relating to Treasure Trove and Bona Vacantia in Scotland apply to all finds where the original owner cannot be identified. This includes all material recovered during archaeological fieldwork. Accordingly, all assemblages recovered from archaeological fieldwork are claimed automatically by the Crown and must be reported to the Scottish Archaeological Finds Allocation Panel through its secretariat, the Treasure Trove Unit. In the event of the discovery of small finds on the programme of archaeological works, a filled-out copy of the form "Declaration of an Archaeological Assemblage from Fieldwork" and two copies of the pertinent Data Structure Report will be submitted to the Panel at the conclusion of the fieldwork. The Panel will then be responsible for recommending to the Queen's and Lord Treasurer's Remembrancer (QLTR) which museum should be allocated the finds.

8.4

All artefacts will be stored temporarily by Northlight Heritage until a decision has been made by the Panel regarding the museum which will be allocated the finds for permanent curation. All finds will be transferred to the appropriate museum within six months of completion of the fieldwork, if no post-excavation work is required, or at the end of the latest finishing post-excavation programme.

In the event that unallocated finds recovered from the site require to be removed from Scotland, for the purposes of post-excavation analysis, Northlight Heritage will be legally required to obtain the consent of the QLTR, in the form of a loan agreement. Initially, an indication of intent would be registered with the Treasure Trove Secretariat at the National Museums of Scotland, after which formal consent would be applied for using the form "Application for authority to borrow unallocated Treasure Trove for research purposes". A

consent form, signed by the QLTR and specifying conditions (such as the period during which finds may be held outside Scotland) would then be issued. Northlight Heritage will require to be in receipt of this signed consent form before items may be removed from the country.

9.0 Timetable

9.1

The Phase 1 and enabling works evaluation will be conducted in June/July 2014 and a draft DSR will be submitted to WOSAS four weeks following the conclusion of the fieldwork. According to current estimates Phase 2 works may occur in 2015/16 with the remaining phases, including phased re-instatement, in following years.

10.0 Staffing

10.1

The project will be directed by Andrew Gallacher. The project will be managed for Northlight Heritage by Alastair Becket. A full CV for individuals concerned can be made available on request.

11.0 Health and Safety and Insurance

11.1

Prior to fieldwork commencing a risk assessment of the project will be undertaken. Northlight Heritage, as part of York Archaeological Trust, adheres to all standard Health and Safety regulations governing fieldwork projects.

11.2

Northlight Heritage also possess appropriate third party/public liability insurance cover, proof of which may be supplied upon request.

12.0 Standards and Monitoring Procedures

12.1

Northlight Heritage adheres to standards set by the Institute of Archaeologists Standards and Guidance Notes and Historic Scotland's various Operational Policy Papers.

12.2

WOSAS will have a formal monitoring role on behalf of the Council and will be the final judge of significance for any archaeological remains and may well insist upon full excavation for any remains to be destroyed by the proposals. 12.3

Alastair Becket will be the dedicated archaeological project manager for all the works outlined above and will be the first point of contact for any project-related liaison with the Council and the developer or the developer's agent for all formal logistical, administrative and financial aspects of the archaeological project.

12.4

Northlight Heritage will notify WOSAS and the developer or the developer's designated agent immediately of any significant or complex discoveries, or other unexpected occurrences which might significantly affect the archaeological work and/or the development. All discoveries of significant archaeology will be reported by the site director to the Northlight Heritage project manager immediately. The manager will in turn inform WOSAS and the developer or the developer's representative, in order to allow any necessary discussion and planning for appropriate actions arising to take place.

12.5

It will be important to ensure that all formal communication, requests (including any proposed amendments to on-site strategies) and contacts be made, ultimately in writing and in the first instance to the project manager (as opposed to the site director or other members of the on-site team), to ensure organisational, administrative and financial efficiency.

12.6

Any site visitors, including Council representatives and employees on official business, will be required to conform to the health and safety regime in place during the fieldwork programme.

Alastair Becket Northlight Heritage 4 June 2014 **APPENDIX 3: DES**

LOCAL AUTHORITY:	East Ayrshire
PROJECT TITLE/SITE NAME:	Townhead of Greenock
PROJECT CODE:	4420161
PARISH:	Muirkirk
NAME OF CONTRIBUTOR:	Andrew Gallacher
NAME OF ORGANISATION:	Northlight Heritage
TYPE(S) OF PROJECT:	Archaeological Evaluation
NMRS NO(S):	None
SITE/MONUMENT TYPE(S):	None
SIGNIFICANT FINDS:	None
NGR (2 letters, 8 or 10 figures)	NS 643 275
START DATE (this season)	16/06/14
END DATE (this season)	27/06/14
PREVIOUS WORK (incl. DES ref.)	
MAIN (NARRATIVE) DESCRIPTION: (May include information from other fields)	An archaeological evaluation was conducted on behalf of Hillhouse Quarry Group Ltd at Townhead of Greenock, East Ayrshire (NS 643 275). The evaluation was undertaken between the 16 th and 27 th of June, 2014 in advance of the development of the site for a quarry. Eighty six trenches were opened (totalling 7642 m ²) within the evaluation area, one of which was also significantly extended. One feature of possible archaeological interest was investigated but was determined to represent remnants of a modern sheep fold. No other finds or features were uncovered.
PROPOSED FUTURE WORK:	n/a
CAPTION(S) FOR ILLUSTRS:	
SPONSOR OR FUNDING BODY:	Hillhouse Quarry Group Ltd
ADDRESS OF MAIN CONTRIBUTOR: EMAIL ADDRESS:	Northlight Heritage, Studio 406, South Block, 64 Osborne Street, Glasgow G1 5QT . northlight@yorkat.co.uk
ARCHIVE LOCATION (intended/deposited)	National Monuments Record for Scotland (intended)