REPORT OF THE SKAGAFJÖRÐUR ARCHAEOLOGICAL SETTLEMENT SURVEY 2007:

EXCAVATIONS AT MEÐALHEIMUR, AREA A

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INTRODUCTION

Meðalheimur is an abandoned subfarm (*hjáleiga*) of Glaumbær located approximately 2 kilometers to the west on Langholt. The farm is one of the few known occupations up on Langholt between the two main occupation areas along the Saemundar River to the west and along the fjord bottom to the east. Excavations demonstrate use of the site back to the 10th century however a clear date for domestic occupation was not established. According to the Jarðabók Arni Magnussonar the site was abandoned in 1701, 12 years prior to the survey in Skagafjörður. The site continued to be used by Glaumbær in the 18th and 19th century. Excavation was undertaken to test the capacity of ground penetrating radar (GPR) to reveal subsurface architectural features and stratigraphy in a complex farm mound. Excavations revealed two sheep houses, and the final surviving phase of the domestic occupation. The ruins are currently on land belonging to Hátún. The farm mound is well preserved having escaped field leveling and plowing from 20th century field expansion. Preservation off the farm mound is variable but in most areas post-settlement horizons are present. The site includes material dating from the 10th – 19th centuries

Grid

All measurements are in meters based on the ISN93 coordinate system. Local site datums were shot in from benchmarks at Glaumbær using a total stations and a series of traverse points between the two sites (table x). The local datums were used for the daily set up of the total station and to position reference stakes on the site for drawing and measurement. Plans were drawn based on measurement to a baseline established from these reference stakes. In most cases elevations were measured directly by the total station. When the total station was not available, elevations were measured relative to previously established elevations on the grid stakes.

Name	East (m)	North (m)	Elev (m)	Class
Glaumbær Flagpole	476785.321	568121.729	19.238	Bench-permanent
Glaumbær Monument	476761.570	568223.936	24.464	Bench-permanent
Glaumbaer Tempbase	476761.509	568152.858	23.494	Occupied
Hátún Trav1	476594.190	567920.777	35.695	Traversepoint
Hátún Trav2	476587.868	567952.930	35.533	Traversepoint
Hátún Trav3	476578.118	567803.666	38.719	Traversepoint
Hátún Trav4	476263.541	567751.010	55.182	Traversepoint
Hátún Tempbase	476189.871	567829.069	59.068	Occupied
Meðalheimur RK 1	475456.824	567606.658	87.888	Bench-Secondary
Meðalheimur RK 2	475492.713	567692.031	84.878	Bench-Secondary

Table 1. ISN93 coordinates for Glaumbær benchmarks, traverse, and Meðalheimur local datums.

Elevation Surface Model

A surface elevation model was generated based on 1 a meter interval collection grid over the mound and a 5 meter interval collection grid over the surrounding area. The resulting surface model was used to topographically correct GPR data for variations in surface elevation and aspect. The surface model also provides a record of visible surface ruins. Structural elements are visible clearly on the site but the surface model allows for some greater definition of detail and structure, especially in areas that were covered in tall grass which obscured variations in surface topography. The remains of the two sheep houses are apparent in the surface model and correspond well to architectural details revealed in excavation (figure 1).

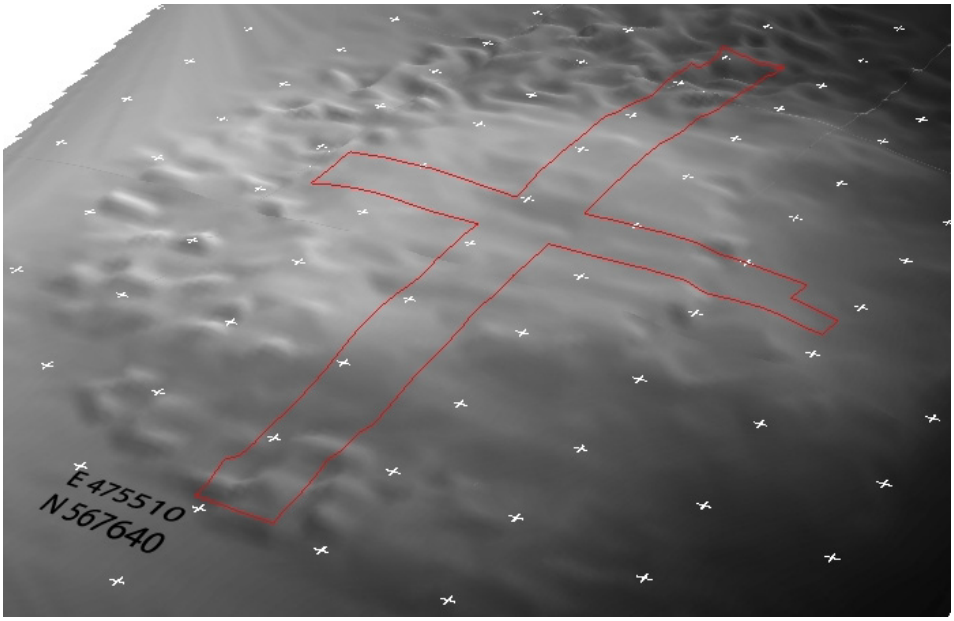


Figure 1. Oblique surface model of Meðalheimur mound … Surface topography in the center of the mound corresponds to the 19th century sheep houses, building 1 and building 2 (grid ticks at 5 meter intervals).

EXCAVATION

Excavation of area A, the farm mound, began on 11 July 2007 and was completed on 8 August 2007. Axial transects were opened over the mound (figure 1) each 3 meters wide. These were considered wide enough to reveal the orientation of architectural features and correlate them with the GPR results as well as trace archaeological features beyond the limits of excavation in the GPR images. The excavation revealed three major phases of activity on the farm mound: two late sheep houses, presumably corresponding to historically known 19th century sheep houses on the site worked from Glaumbær, and a late phase of the pre-18th century domestic occupation of the site.

Building 1: Sheep House

The youngest building exposed during the 2007 excavations is a single sheep house located on the northern edge of the mound (figure 2). The building is shallow and not well-preserved. The wall on the north side [116] was poorly preserved and could not be well defined. The southern wall was entirely missing. The central trough [119] aisle and was preserved as well as a poorly developed floor layer [125] below a layer of collapse turf [120]. No floor deposit was identified south of the central trough. The entire exposed area of building 1 was on top of and partially cut into a layer of collapsed turf [124], presumably associated with remains of the 17th century domestic farmhouse and farm buildings and similar to other collapsed turf layers [155] and [139].

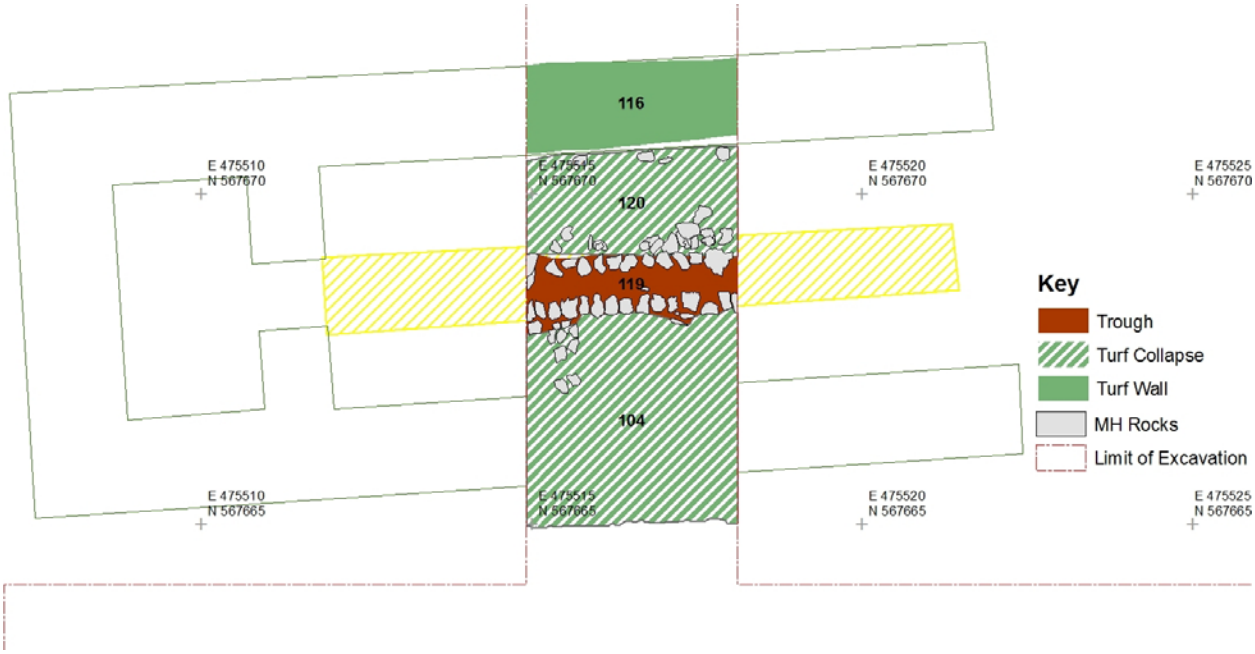


Figure 2. Building 1, sheep house.

Building 2: Sheep House

Immediately south of building 2 was an older and better preserved double sheep house including two sets of aisles and troughs sharing a central turf wall (figure 3).

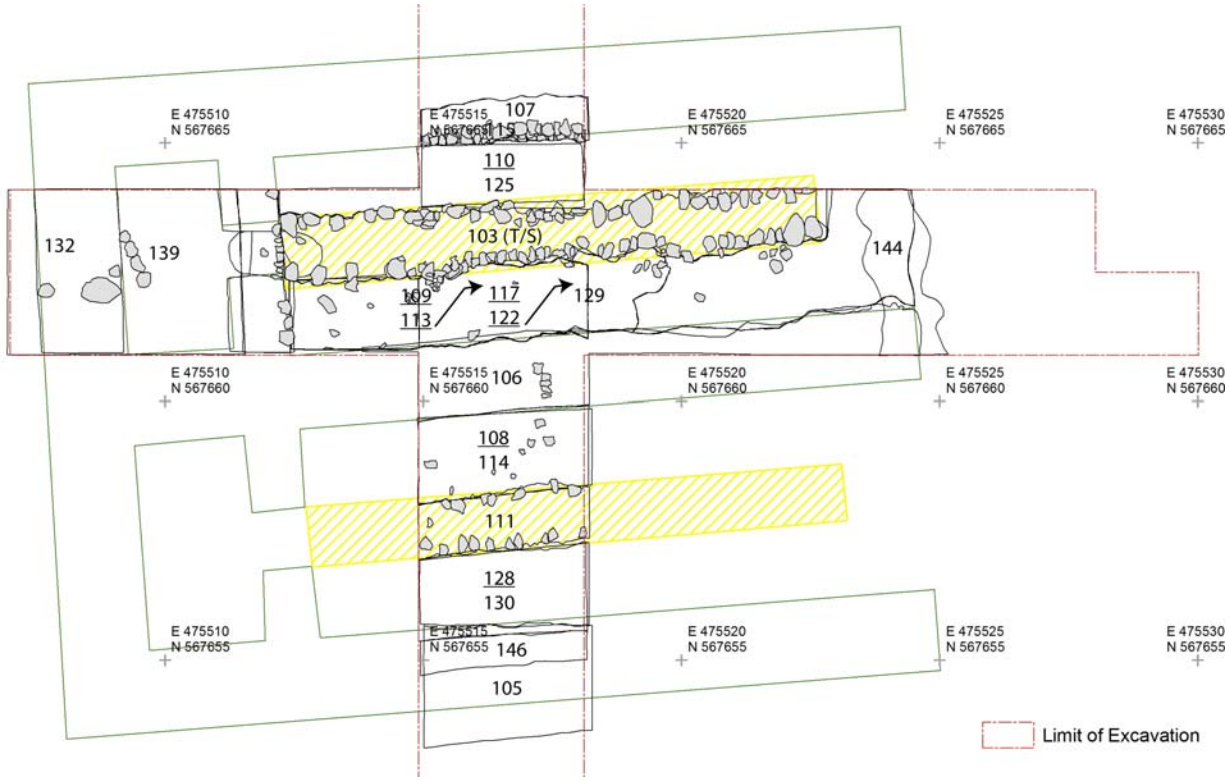


Figure 3. Building 2, sheep house, including extrapolated form of entire sheep house based on GPR and surface topography.

Walls and troughs were constructed with a facing and fill. Turf walls [105][106][132] were constructed with *strengur* facing and a mixed turf fill. *Strengur* was also used as mortar between courses of stone construction in aisles [111][103] and the inside face of edge walls [115][140]. The fill in stone walls was of mixed turf and earth. Sections of standing *strengur* turf walls and collapsed sections of toppled and now vertically aligned *strengur* are visible in a composite section photograph of the western profile of the southern half of the building (figure 4).

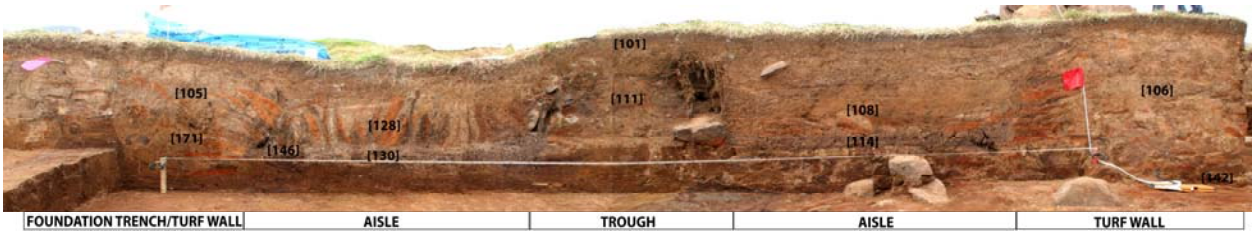


Figure 4. Annotated composite photograph of west profile of southern half of building 2, E 475514.9.

One hay storage area [139] was partially excavated connecting through an inside passage [131] to the northern half of the sheep house. The hay storage area was poorly preserved and had only trace development of compact, floor-like deposits that could be largely identified by thin layers of compressed hay. Surface topography indicates a similar structure attached to the southern half of the sheep house.

The foundation for building 2 was cut into the collapsed turf of earlier structures on the site. These appear to have been deliberately leveled prior to the construction of the new building and the turf collapse layers that were exposed outside of building 2 are highly disturbed (figure 3 and 5). In some sections the boundaries of the building 2 foundation may correspond with earlier architectural features on the site, for example the southern walls of both building 2 and building 3 share the same orientation and are in roughly the same location and possibly on the northern and western edges.

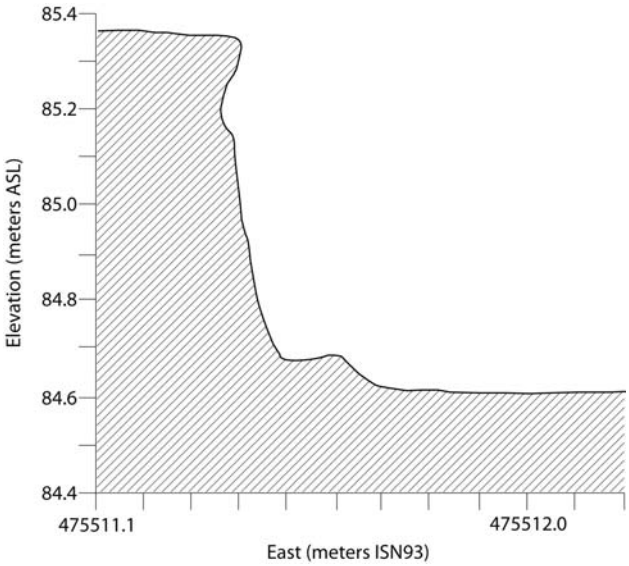


Figure 5. Context 165, north profile of Building 2 foundation cut (N 567664.1).

It is unclear how much of the earlier layers were truncated in the construction of building 2. Stones found under the hay storage area are higher than the preserved sections of building 3 underneath building 2 and suggest that some architectural horizons may have been lost between the two building phases but that remnants may remain outside of building 2. The correspondence may not represent the real boundaries of building 3, which may extend beyond the section that was exposed beneath building 2.

Building 3: Domestic House.

Building 3 was located immediately beneath of building 2. The foundation cut truncated sections of building 3 however the floors and wall bases do appear to be preserved. It is unclear when the domestic structure dates to or if it is the last domestic structure on the site. Later building phases may have been destroyed during the construction of building 2. Immediately under building 2, building 3 is partially compromised from the later building; sections of stones and wall were pushed down into the earlier phase by their heavy weigh in the soft turf. The eastern edge of the building was not preserved. Nonetheless much of the building survived.

Excavation was limited to exposing the deposits, which were then left largely unexcavated. Four rooms are apparent in the exposed section of the building a northern room, a western room [179], a middle room [177], and a southern room [174]. A possible central passage [180] runs east-west through the building (figure 6).

Figure 6. Building 3.

Midden

The purpose of the midden excavation was to determine the occupational sequence of the farm mound, determine the date of initial mound formation, and collect zooarchaeological and paleobotanical samples. Based on a preliminary interpretation of ground penetrating radar there is little evidence of structures in the eastern half of the farm mound. An earlier test excavation on the eastern half of the mound showed a deep, stratified midden without architectural remains (Steinberg 2004). At the end of the eastern axis of the excavation a 1x1½ meter unit was extended down into the farm mound (figure 7).

The midden excavation shows a long and continuous record of activity at the site beginning in the 10th century, below the V~1000 tephra layer. Initial deposits are partially cut into the pre-settlement horizon truncating the landnám sequence and landnám tephra. H3/H4 tephra has been re-deposited between the V~1000 and H 1104 tephra layers suggesting some disruption of the land surface in the 11th century, potentially localized erosion or land clearance. This disruption roughly corresponds to a change in midden composition from a dominantly charcoal ash deposit to one dominated by peat ash. This change in midden composition may represent a change activity at the site.

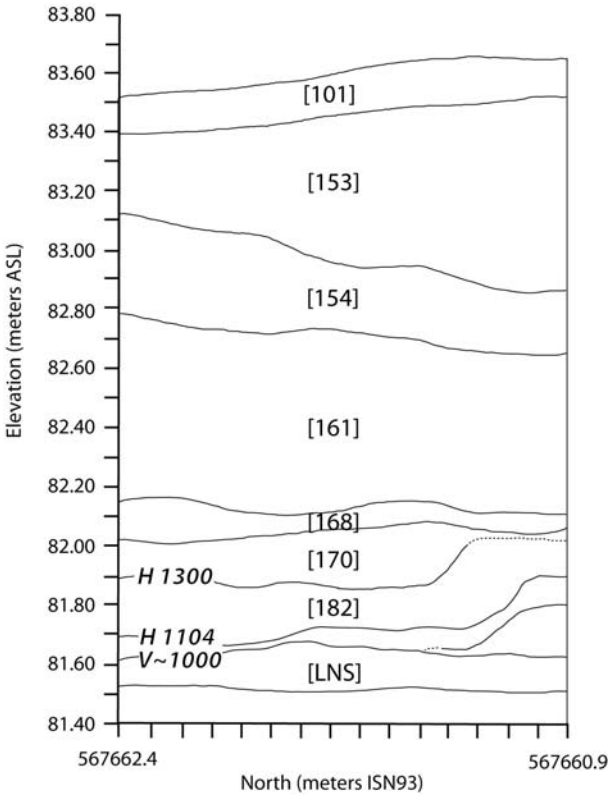


Figure 7. Midden excavation profile, east face at 475531.

APPENDIX A. CONTEXT REGISTER

NUMBER	TYPE	GROUP	DESCRIPTION	DATE	ID
1	Group	1	Building 1, Fjárhús		DJB
2	Group	2	Building 2, Fjárhús		DJB
101	Deposit		Top soil	18-Jul-07	JDB
102	Deposit		Stone pavement	18-Jul-07	JDB
103	Deposit	2	Turf wall with stone faces	19-Jul-07	RSS
104	Deposit	2	Mixed turf	19-Jul-07	DJB
105	Deposit	2	Possible turf wall	20-Jul-07	DJB
106	Deposit	2	Turf wall directly south of 103	20-Jul-07	KMJ
107	Deposit	2	Brown soil with turf abutting stone wall	20-Jul-07	DJB
108	Deposit	2	Turf tumble in aisle south of 106	20-Jul-07	DJB
109	Deposit	2	Turf tumble in aisle north of 106	20-Jul-07	DJB
110	Deposit	2	Turf tumble in aisle north of 103	20-Jul-07	DJB
111	Deposit	2	Turf/stone trough south of 108	20-Jul-07	DJB
112	Deposit		Turf north of 115 with irregular contact	23-Jul-07	SDE
113	Deposit	2	Turf tumble under 109	23-Jul-07	RSS
114	Deposit	2	Turf tumble under 108	23-Jul-07	KPS
115	Deposit	2	Stone and turf wall	23-Jul-07	PJG
116	Deposit	1	Turf wall, north	23-Jul-07	SDE
117	Deposit		Compressed turf layer	24-Jul-07	
118	Deposit	2	Floor south of 106	24-Jul-07	
119	Deposit	1	Stone/turf wall - trough	24-Jul-07	DJB
120	Deposit	1	Turf tumble	24-Jul-07	PJG
122	Deposit	2	Turf and wood under 117 with rocks	24-Jul-07	KMJ
124	Deposit		Collapsed turf under building 1	25-Jul-07	KDL
125	Deposit	2	Floor south of 120	25-Jul-07	
128	Deposit	2	Turf collapse south of 111	26-Jul-07	KDL
129	Deposit	2	Turfy barn floor with large stones	26-Jul-07	KMJ
130	Deposit	2	Floor under 128	27-Jul-07	KPS
131	Deposit	2	Turf tumble, fill of passage between hlaða and fjárhús	29-Jul-07	DJB
132	Deposit	2	Turf wall, western wall of hlaða	29-Jul-07	DJB
135	Deposit	2	Turf wall between fjárhús and hlaða on top of 140	39293	KDL
136	Deposit		Dark soil mottled with ash east of building 2/entrance	30-Jul-07	
137	Deposit	2	Turf collapse mixed with organic material and wood	30-Jul-07	KMJ
138	Deposit		Extramural surface west of 132; contemporary with building 2	30-Jul-07	DJB
139	Deposit		Collapsed turf under building 2, hlaða/west transect area	30-Jul-07	KDL
140	Deposit	2	Turf/stone wall and foundation fill between fjárhús and hlaða, similar to 124 and 142	31-Jul-07	DJB
142	Deposit		Compact turf floor layer - upper interface of underlying turf deposit under the building 2	31-Jul-07	SAT
144	Deposit		Threshold deposit at east entrance of fjárhús	2-Aug-07	TEO
146	Deposit		Contact between floor and collapsed turf (southern east-west trench)	2-Aug-07	MJM
148	Deposit		Soft organic deposit east of 144	2-Aug-07	TEO
151	Deposit		Compact dark layer under turf floor layer [142] with large rocks	4-Aug-07	KMJ
152	Deposit		Collapsed turf, under fjárhús	4-Aug-07	KMJ
153	Deposit		Ash midden in 2x1.5 unit, arbitrary level 1	5-Aug-07	TEO
154	Deposit		Ash midden in 2x1.5 unit, arbitrary level 2	6-Aug-07	TEO
155	Deposit		Mixed turf and hay outside wall	6-Aug-07	PJG

NUMBER	TYPE	GROUP	DESCRIPTION	DATE	ID
156	Deposit		Lensed ashy midden with rocks inclusions	6-Aug-07	KMJ
157	Deposit		Stones	6-Aug-07	DJB
158	Deposit		Earthen wall fall	6-Aug-07	JMS
159	Deposit		Charcoal lens	6-Aug-07	EPD
160	Deposit		Charcoal/midden lens	6-Aug-07	KDL
161	Deposit		Ash midden in 2.x1.5 unit, arbitrary level 3	6-Aug-07	TEO
162	Deposit		Floor	6-Aug-07	JMS
163	Deposit		Turf wall under Fjarhus, E-W (center of cross)	7-Aug-07	PJG
164	Deposit		Turf wall intersecting E-W Wall, Running N-S Abutting East Excavation Limit	7-Aug-07	PJG
165	Cut	2	Foundation cut associated with 140	7-Aug-07	DJB
168	Deposit		Ash Midden 1x1.5 (2x1.5 East)	7-Aug-07	TEO
169	Deposit		Two Groups of Rocks Outside CXT [163] N of [163]	7-Aug-07	PJG
170	Deposit		Ash Midden 1.5 Arbitrary Break	7-Aug-07	TEO
171	Cut	2	Cut for wall 105	7-Aug-07	DJB
172	Deposit	3	Wall, South Building 3, Truncated by [171]	7-Aug-07	DJB
173	Deposit	3	Wall, East of South Room Building 3 Abutting [172]	7-Aug-07	DJB
174	Group	3	Turf and floor (to be split later) inside south room, building 3	7-Aug-07	DJB
175	Deposit	3	Threshold, turf and stone between south room	7-Aug-07	DJB
176	Deposit	3	Wall Between [174] and [175]	7-Aug-07	DJB
177	Group	3	Room North of 174	7-Aug-07	DJB
178	Deposit	3	Wall Running N-S at E515 N660 Abutting [179] and [163]	7-Aug-07	KMJ
179	Deposit	3	Room Abutting Wall [178] with Ash Deposit	7-Aug-07	KMJ
180	Deposit	3	Gong Path Running E-W through transects	7-Aug-07	KMJ
182	Deposit		1300 Tephra	7-Aug-07	MRS, TEO
183	Deposit	3	Turf Wall and Stones, North of Gong in East Transect	8-Aug-07	DJB
184	Deposit		Pre 1104 Midden	8-Aug-07	MRS, TEO
185	Deposit		Below 1000 Midden	8-Aug-07	MRS, TEO
186	Deposit	3	Wall, N Side of Hallway, West Transit	8-Aug-07	PJG
187	Cut	2	Foundation cut associated with 115	29-May-08	DJB

APPENDIX B. FINDS REGISTER

NUMBER	CONTEXT	GRID/PT EAST (m)	GRID/PT NORTH (m)	ELEV (m)	RET.	MATERIAL TYPE	OBJECT TYPE
1	101	475515.28	567649.94	84.69	U	copper	
2	101	475517.20	567649.27	84.48	U	glass? Obsidian?	
3	101	475515.13	567666.68	85.27	U	copper?	
4	101				B	slag	
5	103	475517.08	567663.44	84.92	U	metal	nail
6	101	475517.62	567653.65	84.87	U	metal	nail
7	104	575516.23	567667.26	85.08	U	metal	iron ring
8	101	475515.07	567652.10	85.04	U	metal	nail
9	101	475516.06	567651.91	84.92	U	metal	
10	108	475517.29	567659.03	84.99	U	metal	rivet
11	110	475517.91	567665.20	84.77	U	wood	post
12	113				U	copper	fragment
13	113	475516.09	567662.09	84.89	U	metal	rivet
14	117				U	ceramic	
15		475515.1	567665.07	84.93	U	rock	
16	114				U	slag	
17					U	copper	rivet
18		475515.93	567671.20	85.17	U	metal	nail
19		475516.61	567670.49	85.09	U	copper	
20	121				U	metal	
21		475575.39	567664.82	84.62	U	organic	
23	109	475523.29	567663.41	84.67	U	rock	
24	117	475519.02	567662.51	84.73	U	ceramic	
25	137	475521.16	567662.9	84.67	U	ceramic	
26	132				U	slag	
27	137	475523.05	567661.89	84.54	U	felt	
28	137	475522.78	567662.31	84.52	U	ceramic	
29	137	475522.78	567662.31	84.49	U	ceramic	
30	137	475522.61	567662.72	84.61	U	ceramic	
31	137	475523.41	567662.56	84.61	U	iron	
32		475524.31	567661.56		U	iron	
34		475522.19	567662.7	84.69	U	ceramic	
35		475521.80	567662.92	84.63	U	metal	2 nails
36					U	slag	
37		475513.41	567663.19	85.01	U	glass	
38		475517.28	567665.29	84.63	U	ceramic	
39		475516.90	567665.19	84.55	U	iron	
40		475516.63	567665.59	84.67	U	iron	
41		475515.97	56766.59	84.63	U	ceramic	
43		475523.25	567661.31	84.45	U	copper	
45	142	475520.94	567662.44	84.57	U	wood	
46	142	475521.67	567662.25	84.54	U	copper	
47	142	475522.58	567662.08	84.4	U	unidentified	
49	142	475517.82	567661.99	84.37	U	copper	
52	139				U	stone	
53	139				U	stone	

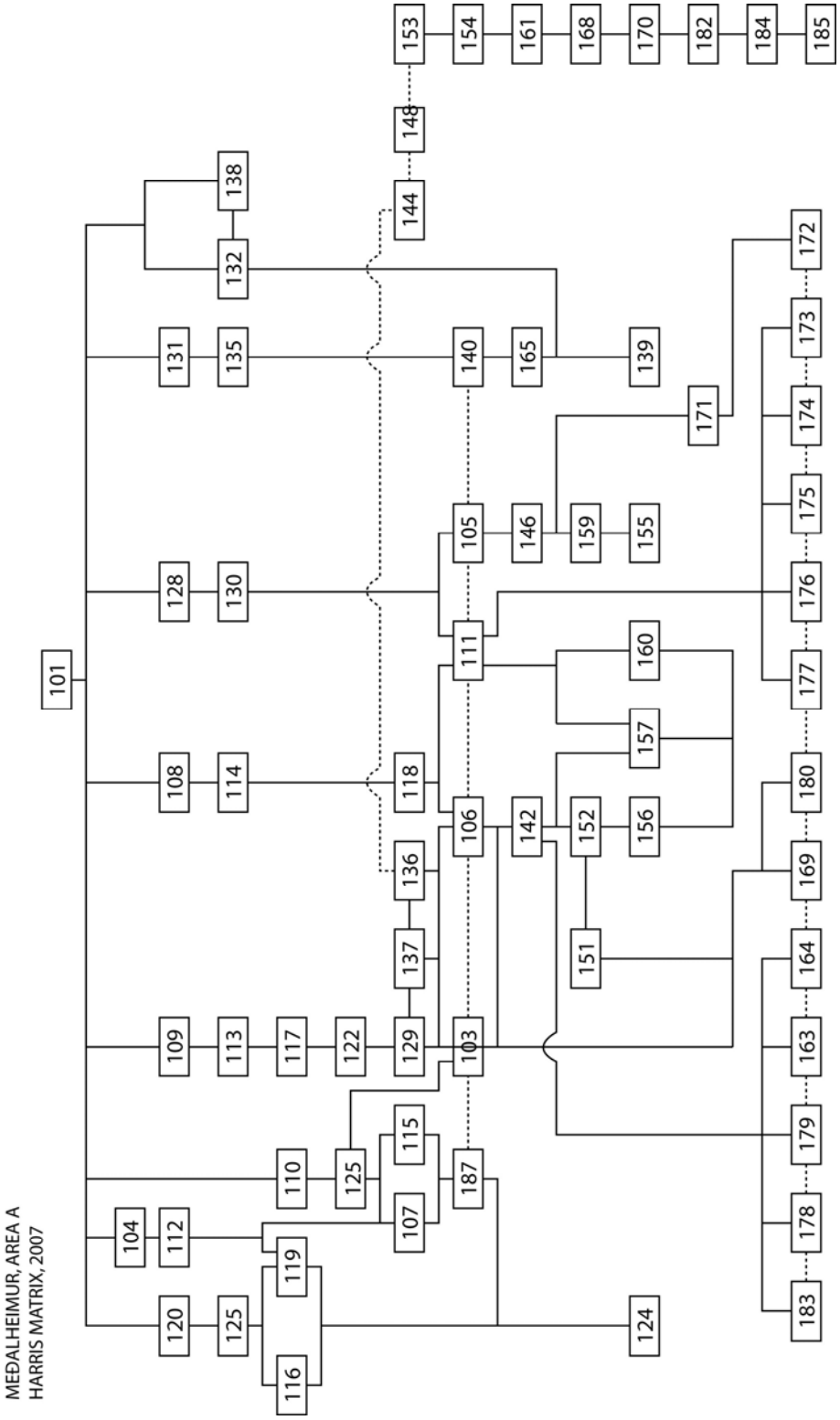
NUMBER	CONTEXT	GRID/PT EAST (m)	GRID/PT NORTH (m)	ELEV (m)	RET.	MATERIAL TYPE	OBJECT TYPE
54	139				B	copper	
55	130	475514.15	567662.54	84.59	U	copper	
58	142	475517.47	567659.68	84.71	U	ceramic	
62	114				U	ceramic	
63	151	475529.77	567662.48	84.47	U	wood post	
68	106	475515	567659.8	84.77	U	rock	sledge
69	142	475516.73	567658.79	84.5	U	ceramic	redware pot
70	157	475515.25	567658.79	84.54	U	iron	
71					U	ceramic	redware sherd
72	155	475517.06	567662.98	84.51	U	ceramic	stoneware sherd
73	156	475516.75	567660.94	84.52	U	iron	slag
74	156	475516.12	567660.97	84.5	U	copper	misc object
75	156	475517.97	567661.06	84.5	U	iron	
76	142	475516.03	567660.25	84.49	U	iron	slag
77	156	475517	567661.20		B	obsidian	rock
79	163	475515.76	567662.26	84.32	U	copper	
80	185	530	661		U	not sure	
81	101	530	661		U	stone	whetstone
82	107				U	ceramic	

APPENDIX C. SAMPLE REGISTER

NUMBER	CONTEXT	GRID/PT EAST (m)	GRID/PT NORTH (m)	ELEV (m).	LITERS/ GRAMS	BAGS/ BUCKETS	DESCRIPTION
1	101						bone
2	102						bone
3	108						bone
4	110					2	bone
5	113						bone
6	117				2L		soil sample (f/ poop)
8	120						bone/teeth
9	119						bone
11	124						bone
12	126						bone
13	109						grass seeds f/ poss. rodent hole
14	109						bone
15							bone
55	139						bone
56	129E				2L		float sample f/ floor
57	129W				2L		float sample f/ floor
58	142				2L	1	float sample f/ charcoal pile
72	106	475520.95	567661.21	84.68			large jawbone within turf
73	103	475518.21	567663.26	84.54			teeth/jawbone
74	103						bone
77	142	475520.33	567661.94	84.52			bone (jaw/teeth from [142])
89	103	475515.84	567663.41	84.50			sheep teeth & jaw
90	139						bones
92	103	475514.21	567662.48	84.50		1	charcoal lens 30x30x1cm burned fish bone
93	142	475517	567659			1	bone
133	142	475517	567661.5		2L	1	pink ashy layer/midden
135	156	475516.75	567661.04	84.58	2L	1	ash/midden lens
136	154	475536	567661			1	bone
137	153	475530	567661			1	bone
138	154	475530	567661			1	various screen finds
139	153	475530	567661			1	various screen finds
172	168	475530	567661			1	screen bone
173	161	475530	567661			1	screen finds
174	168	475530	567661			1	screen finds
175	175	475530	567661			1	screen bones
176	170	475530	567661			1	screen bones
177	170	475530	567661			1	screen finds
181	184	475530	567661		3L	1	float sample
182	185	475530	567661		3L	1	float sample
183	184	475530	567661				bone
184	185	475530	567661				bone
185	185	475530	567661				slag
186	185	475530	567661				iron
187	117E						seed (with bot. samples)

NUMBER	CONTEXT	GRID/PT EAST (m)	GRID/PT NORTH (m)	ELEV (m).	LITERS/ GRAMS	BAGS/ BUCKETS	DESCRIPTION
189	134					1	bone
190	130					1	fish bone
191	117					1	bone
192	117					1	shell
193	120					1	bone
194	109					1	rock
195	109					1	bone
196	101	475530	567661			5	mixed finds
197	170	475530	567661			1	textile
198	112					1	bone
199	101					1	bone
200	107					1	bone/slag
201	106					1	bone
202	117					1	seed
203	104					1	bone
204	104					1	nail/slag
205	103					1	bone
206	101					1	bone
207	113					1	bone
208	101					1	mandibles
209	152					1	mixed, bones
210	142					1	bones
211	129					1	bones
212	101					1	bones
213	129					1	iron nail
214	137					1	calcine bone
215	110					1	bone
216	137					1	seed?
217	139					1	bone
218	110					1	bone
219	137					1	ceramic
220	101					1	metals

APPENDIX D. HARRIS MATRIX



APPENDIX E. 2007 CREW LIST AND REGISTER IDENTITIES

Douglas Bolender	(DJB)
Jessica Bowes	(JDB)
Brian Neil Damiata	(BND)
E. Paul Durrenberger	(EPD)
Susan Erem	(SDE)
Peter Gangemi	(PJG)
Allen Gontz	(AMG)
Kate Johnson	(KMJ)
Kristina Larkin	(KDL)
Mike McIntyre	(MJM)
Tess Ostrowsky	(TEO)
Marisa Patalano	(MDP)
John Walter Schoenfelder	(JWS)
Rita Stuart Shepard	(RSS)
Michael Slawson	(MRS)
Konrad Smiarowski	(KS)
John Steinberg	(JMS)
Ayshe Yeager	(ARY)