

APPENDIX 1

Context Listing

Context Number	Category	Matrix	Colour	Type
1001	Deposit	Silty clay	10YR4/2	Pit
1002	Deposit	Silty clay	10YR4/2	Pit
1003	Deposit	clay silt	10YR5/2	Posthole
1004	Deposit	clay silt	10YR4/3	Posthole
1005	Deposit	clay silt	10YR4/6	Pit
1006	Deposit	clay silt	10YR4/6	Posthole
1007	Deposit	clay silt	10YR4/6	Posthole
1008	Deposit	clay silt	10YR4/2	Posthole
1009	Deposit	clay silt	10YR4/2	Posthole
1010	Deposit	silt	10YR4/6	Posthole
1011	Deposit	silt	10YR4/4	Posthole
1012	Deposit	silt	10YR6/8	Posthole?
1013	Deposit	clay silt	10YR4/4	Posthole
1014	Deposit	silt	10YR4/2	Posthole
1015	Deposit	clay silt	10YR6/6	Postpad
1016	Deposit	sandy silt	10YR5/3	Pit
1017	Deposit	clay silt	10YR4/2	Pit
1018	Not a feature			Saddle quern
1019	Deposit	clay silt	10YR4/5-5/8	Posthole?
1020	Deposit	sandy silt	10YR4/2	Posthole
1021	Deposit	sandy silt	10YR4/4	Posthole
1022	Deposit	sandy silt	10YR4/6	Pit
1023	Deposit	sandy silt	10YR4/4	Posthole
1024	Deposit	sandy silt	10YR4/4	Posthole
1025	Deposit	sandy silt	10YR4/6	Posthole
1026	Deposit	sandy silt	10YR4/4	Posthole
1027	Deposit	clay silt	10YR4/2	Post Pit
1028	Deposit	silt	10YR4/6	Posthole
1029	Deposit	silt	10YR5/6	Posthole
1030	Deposit	silt	10YR4/4	Posthole
1031	Deposit	clay silt	10YR4/4	Posthole?
1032	Deposit	silty sand	10YR4/4	Posthole
1033	Deposit	silty sand	10YR4/4	Posthole
1034	Deposit	sandy silt	10YR5/2	Posthole
1035	Deposit	sandy silt	10YR5/2	Posthole
1036	Deposit	silty sand	10YR5/2	Posthole
1037	Deposit	sandy silt	10YR4/2	Posthole
1038	Deposit	silt	10YR4/6	Posthole
1039	Deposit	silty sand	10YR5/8	Posthole
1040	Deposit	silty sand	10YR4/1	Natural?
1041	Deposit	clay silt	10YR4/3	Posthole?
1042	Deposit	clay silt	10YR4/2	Posthole
1043	Deposit	clay silt	10YR4/2	Posthole

1044	Deposit	silt	10YR4/1	Posthole
1045	Deposit	sandy clay	10YR3/1-3/2	Posthole
1046	Deposit	silty sand	10YR4/1-4/2	Posthole
1047	Deposit	silt	10YR4/4	Pit
1048	Deposit	silty sand	10YR4/6	Posthole
1049	Deposit	silty sand	10YR5/4	Posthole
1050	Deposit	silt	10YR4/2	Posthole?
1051	Deposit	sandy silt	10YR4/2	Natural?
1052	Deposit	fine silt	10YR4/2	Posthole
1053	Deposit	sandy silt	10YR5/8	Posthole
1054	Deposit	sandy silt	10YR5/6	Pit
1055	Deposit	sandy clay	10YR3/3	Posthole
1056	Deposit	sandy silt	10YR5/6	Posthole
1057	Deposit	silty sand	10YR4/6	Posthole
1058	Deposit	fine silt	10YR4/4	Posthole
1059	Deposit	sandy clay	10YR4/4	Ditch
1060	Deposit	sandy clay	10YR5/6	Posthole?
1061	Deposit	sandy silt	10YR4/6	Natural
1062	Deposit	silty sand	10YR5/6	Posthole
1063	Deposit	silty sand	10YR5/6	Posthole
1064	Deposit	silty sand	10YR5/8	Posthole
1065	Deposit	silty sand	10YR5/4	Posthole?
1066	Deposit	silty sand	10YR5/4	Posthole
1067	Deposit	silty sand	10YR4/4	Ditch
1068	Deposit	silty sand	10YR5/4	Posthole
1069	Deposit	clay silt	10YR5/6	Natural?
1070	Deposit	silty loam	10YR4/3-3/3	Pit/Hearth?
1071	Deposit	silt	10YR7/3	Natural?
1072	Deposit	clay silt	10YR4/3	Posthole
1073	Deposit	clay silt	10YR4/2	Posthole
1074	Deposit	silty loam	10YR4/6	Post Pipe
1075	Deposit	silty loam	10YR4/4-4/6	Posthole
1076	Deposit	silty sand loam	10YR4/4	Posthole
1077	Deposit	silty loam	10YR4/6	Posthole
1078	Deposit	sandy silt	10YR4/3	Posthole
1079	Deposit	silty clay	10YR4/4	Posthole
1080	Deposit	silty clay	10YR4/4	Posthole
1081	Deposit	clay silt	10YR5/4	Posthole
1082	Deposit	clay silt	10YR4/6	Posthole
1083	Deposit	sandy silt	10YR4/3	Posthole
1084	Deposit	clay silt	10YR5/6	Posthole
1085	Deposit	silt	10YR3/4	Natural?
1086	Deposit	clay silt	10YR5/6	Natural?
1087	Deposit	clay silt	10YR/4/6	Posthole
1088	Deposit	silty clay	10YR5/8	Posthole
1089	Deposit	silt	10YR3/2	Posthole
1090	Deposit	silty clay	10YR4/2	Pit

1091	Deposit	silty clay	10YR5/4	Posthole
1092	Deposit	silty clay	10YR4/6	Posthole
1093	Deposit	silty clay	10YR4/4	Posthole
1094	Deposit	silt	10YR3/1	Posthole
1095	Deposit	silt	10YR4/4	Posthole
1096	Deposit	silt	10YR4/4	Dump
1097	Deposit	silty clay	10YR5/4	Posthole
1098	Deposit	silty clay	10YR5/4	Posthole
1099	Deposit	silty sand	10YR4/4	Posthole
1100	Deposit	silty clay	10YR4/4	Posthole
1101	Deposit	sandy silt	10YR4/4	Posthole
1102	Deposit	silty clay	7.5YR5/6	Posthole
1103	Deposit	silty clay	7.5YR4/6	Posthole
1104	Deposit	silty clay	10YR4/4	Posthole
1105	Deposit	silty clay	10YR4/4	Pit
1106	Deposit	silty clay	10YR4/4	Posthole
1107	Deposit	silty clay	10YR4/4	Posthole
1108	Deposit	silty clay	10YR4/4	Dump
1109	Deposit	silty clay	10YR4/6	Posthole
1110	Deposit	silty clay	10YR4/4	Posthole
1111	Deposit	silty clay	10YR5/6	Posthole
1112	Deposit	silty sand	10YR4/2	Posthole
1113	Deposit	silty clay	10YR5/4	Posthole
1114	Deposit	clay silt	10YR3/4	Posthole
1115	Deposit	silty clay	7.5YR4/4	Pit
1116	Deposit	silty clay	10YR5/2	Posthole
1117	Deposit	silty clay	10YR5/6	Posthole
1118	Deposit	silty clay	10YR4/4	Posthole
1119	Deposit	silty clay	10YR5/4	Pit
1120	Deposit	silty clay	10YR5/6	Posthole
1121	Deposit	silty clay	10YR3/4	Pit
1122	Deposit	silty clay	10YR4/3	Posthole
1123	Deposit	silty clay	10YR5/4	Posthole
1124	Deposit	silty clay	10YR4/4	Posthole
1125	Deposit	silty sand	10YR5/4	Posthole
1126	Deposit	silty sand	10YR5/2	Posthole
1127	Deposit	silty sand	10YR5/2	Posthole
1128	Deposit	silty clay	10YR4/4	Posthole
1129	Deposit	silty clay	10YR5/4	Posthole
1130	Deposit	silty sand	10YR5/6	Posthole
1131	Deposit	silty sand	10YR5/8	Posthole
1132	Deposit	clay silt	10YR4/6	Posthole
1133	Deposit	sandy clay	10YR5/8	Posthole
1134	Deposit	sandy silt	10YR5/8	Posthole
1135	Deposit	silty clay	10YR5/8	Posthole
1136	Deposit	silty clay	10YR5/8	Posthole
1137	Deposit	clay silt	10YR5/6	Posthole
1138	Deposit	silty sand	10YR4/6	Posthole

1139	Deposit	silty clay	10YR4/6	Posthole
1140	Deposit	sandy silt	10YR4/6	Posthole
1141	Deposit	sandy silt	10YR5/8	Posthole
1142	Deposit	silty clay	10YR5/8	Posthole
1143	Deposit	silty sand	10YR4/6	Posthole
1144	Deposit	sandy silt	10YR5/6	Posthole
1145	Deposit	silty clay	10YR4/4	Posthole
1146	Deposit	silty clay	10YR5/4	Posthole
1147	Deposit	silty clay	10YR5/4	Posthole
1148	Deposit	silty clay	10YR5/4	Posthole
1149	Deposit	silty clay	10YR5/4	Posthole
1150	Deposit	silty clay	10YR4/4	Posthole
1151	Deposit	sandy silt	10YR6/3-6/4	Posthole
1152	Deposit	sandy silt	10YR5/6	Natural
1153	Deposit	silty clay	10YR5/6	Natural
1154	Deposit	silty clay	10YR4/6	Posthole
1155	Deposit	silty clay	10YR4/6	Posthole
1156	Deposit	clay silt	10YR4/4	Posthole
1157	Deposit	clay silt	10YR5/8	Posthole
1158	Deposit	clay silt	10YR4/6	Posthole
1159	Deposit	sandy silt	10YR4/6	Posthole
1160	Deposit	clay silt	10YR4/6	Posthole
1161	Deposit	silty clay	10YR4/6	Posthole
1162	Deposit	silty clay	10YR4/4	Posthole
1163	Deposit	clay silt	10YR5/3	Posthole
1164	Deposit	clay silt	10YR4/4	Ditch 3
1165	Deposit	clay silt	10YR4/4	Ditch 2
1166	Deposit	sandy silt	10YR5/2	Pit
1167	Deposit	silty clay	10YR5/4	Posthole
1168	Deposit	fine silt	10YR5/6	Posthole
1169	Deposit	sandy silt	10YR4/6	Posthole
1170	Deposit	sandy silt	10YR5/6	Posthole
1171	Deposit	sandy silt	10YR4/6	Posthole
1172	Deposit	sandy silt	10YR3/4	Unknown
1173	Deposit	silty sand	10YR5/8	Posthole
1174	Deposit	silty sand	10YR4/4	Posthole
1175	Deposit	clay silt	10YR4/3	Posthole
1176	Deposit	clay silt	10YR4/3	Posthole
1177	Deposit	silt	10YR4/4	Posthole
1178	Deposit	clay silt	10YR4/3	Posthole
1179	Deposit	sandy silt	10YR5/8	Posthole
1180	Deposit	silty clay	10YR5/4	Posthole
1181	Deposit	silty clay	10YR5/4	Posthole
1182	Deposit	silty sand	10YR5/2	Posthole
1183	Deposit	silty sand	10YR5/3	Posthole
1184	Deposit	silty clay	10YR5/3	Posthole
1185	Deposit	silty sand	10YR5/3	Posthole
1186	Deposit	silty clay	10YR4/2-4/3	Posthole

		sand		
1187	Deposit	silty clay	10YR5/4	Pit
1188	Deposit	silty clay	10YR4/3	Posthole
1189	Deposit	silty sand	10YR5/2	Posthole
1190	Deposit	silty sand	10YR5/8	Posthole
1191	Deposit	silty clay	10YR4/3	Posthole
1192	Deposit	silty clay	10YR4/3	Posthole
1193	Deposit	silty sand	10YR5/6	Posthole
1194	Deposit	sandy silt	10YR4/6	Posthole
1195	Cut			Pit
1196	Cut			Pit
1197	Cut			Posthole
1198	Cut			Posthole
1199	Cut			Posthole
1200	Cut			Posthole
1201	Deposit	sandy silty clay	10YR4/4	Pit
1202	Deposit	clayey silt	10YR4/2	Pit
1203	Deposit	clayey silt	10YR4/4	Pit
1204	Deposit	silty clay	10YR4/4	Pit
1205	Cut			Pit
1206	Cut			Posthole
1207	Cut			Posthole
1208	Cut			Posthole
1209	Cut			Posthole
1210	Cut			Posthole
1211	Cut			Posthole
1212	Deposit	silty clay	10YR4/8	Posthole
1213	Deposit	silt	10YR4/8	Posthole
1214	Cut			Posthole
1215	Cut			Posthole
1216	Deposit	sandy clay	10YR5/8	Posthole packing
1217	Cut			Posthole
1218	Cut			Posthole
1219	Cut			Posthole
1220	Deposit	clayey silt	10YR5/2	Natural
1221	Cut			Natural
1222	Cut			Posthole
1223	Cut			Posthole
1224	Cut			Posthole
1225	Cut			Posthole
1226	Cut			Natural
1227	Cut			Natural
1228	Deposit	silty sand	10YR5/4	Posthole
1229	Cut			Posthole
1230	Cut			Posthole
1231	Cut			Posthole
1232	Deposit	clayey silt	10YR5/8	Posthole

1233	Deposit	fine silt	10YR4/6	Posthole?
1234	Deposit	silt	10YR4/4	Posthole
1235	Deposit	sandy silt	10YR5/4-5/6	Pit
1236	Deposit	sand	NA	Posthole?
1237	Deposit	sandy silt	10YR5/6	Posthole?
1238	Cut			Posthole
1239	Cut			Posthole
1240	Cut			Posthole
1241	Cut			Posthole
1242	Deposit	silty sand	10YR4/4	Posthole
1243	Cut			Posthole
1244	Cut			Posthole
1245	Cut			Posthole
1246	Cut			Posthole
1247	Cut			Posthole
1248	Cut			Posthole
1249	Cut			Posthole
1250	Cut			Posthole
1251	Cut			Posthole
1252				Not Assigned
1253	Cut			Posthole
1254	Cut			Posthole
1255	Cut			Posthole
1256	Cut			Postpad
1257	Cut			Posthole
1258	Cut			Posthole
1259	Cut			Posthole
1260	Cut			Posthole
1261	Cut			Posthole
1262	Cut			Posthole
1263	Cut			Posthole
1264	Cut			Posthole
1265	Cut			Posthole
1266	Cut			Posthole
1267	Cut			Posthole
1268	Deposit	clayey silt	10YR4/2	Pit
1269	Deposit	clayey silt	10YR5/6	Pit
1270	Cut			Pit
1271	Deposit	sandy silt	10YR4/2	Pit
1272	Cut			Pit
1273	Cut			Posthole?
1274	Cut			Posthole
1275	Cut			Posthole
1276	Cut			Posthole
1277	Cut			Posthole
1278	Cut			Posthole
1279	Cut			Posthole
1280	Cut			Posthole

1281	Cut			Posthole
1282	Cut			Posthole
1283	Cut			Posthole?
1284	Cut			Posthole
1285	Cut			Posthole
1286	Cut			Posthole
1287	Cut			Posthole
1288	Cut			Posthole
1289	Cut			Posthole
1290	Cut			Posthole
1291	Deposit	clayey silt	10YR4/6	Furrow
1292	Cut			Furrow
1293	Cut			Posthole
1294	Cut			Pit
1295	Cut			Posthole
1296	Cut			Posthole
1297	Cut			Posthole
1298	Cut			Posthole
1299	Cut			Posthole
1300	Cut			Posthole
1301	Deposit	silty clay	10YR4/6	Pit
1302	Cut			Pit
1303	Cut			Ditch
1304	Cut			Ditch
1305	Cut			Posthole
1306	Cut			Posthole
1307	Cut			Posthole
1308	Cut			Posthole
1309	Cut			Posthole
1310	Cut			Posthole
1311	Deposit	clayey silt	10YR5/4	Ditch
1312	Deposit	clayey silt	10YR5/6	Ditch
1313	Cut			Ditch
1314	Deposit	silty sand	10YR5/2	Ditch
1315	Deposit	silty clayey sand	10YR5/2	Ditch
1316	Cut			Ditch
1317	Deposit	silty sand	10YR5/3	Ditch
1318	Cut			Ditch
1319	Cut			Posthole
1320	Deposit	clay silt	10YR5/8	Ditch
1321	Deposit	clay silt	10YR5/8	Ditch
1322	Cut			Ditch
1323	Cut			Posthole
1324	Cut			Posthole
1325	Cut			Posthole
1326	Cut			Posthole
1327	Cut			Posthole

1328	Cut			Posthole
1329	Cut			Posthole
1330	Deposit	silty clay	10YR4/6	Posthole
1331	Cut			Pit
1332	Cut			Posthole
1333	Cut			Posthole
1334	Deposit	clayey silt	10YR4/2	Pit
1335	Cut			Pit
1336	Cut			Posthole
1337	Cut			Posthole
1338	Cut			Posthole
1339	Cut			Posthole
1340	Cut			Posthole
1341	Cut			Posthole
1342	Deposit	silty clay	10YR3/3	Pit
1343	Cut			Posthole
1344	Cut			Pit
1345	Cut			Posthole
1346	Cut			Posthole
1347	Cut			Posthole
1348	Cut			Posthole
1349	Cut			Linear
1350	Cut			Posthole
1351	Cut			Posthole
1352	Deposit	silty sand	10YR5/3	Ditch
1353	Deposit	silty sand	10YR4/4	Ditch
1354	Cut			Ditch
1355	Cut			Posthole
1356	Cut			Posthole
1357	Cut			Posthole
1358	Cut			Posthole
1359	Cut			Posthole
1360	Cut			Posthole
1361	Cut			Posthole
1362	Cut			Posthole
1363	Cut			Posthole
1364	Deposit	clayey silt	10YR5/3	Ditch
1365	Cut			Ditch
1366	Deposit	clayey silt	10YR6/6	Ditch
1367	Cut			Ditch
1368	Cut			Posthole
1369	Deposit	silty sandy clay	10YR5/4	Ditch
1370	Cut			Ditch
1371	Deposit	silty sandy clay	10YR6/4	Ditch
1372	Cut			Ditch
1373	Deposit	silty clay	10YR6/8	Ditch
1374	Cut			Posthole

1375	Cut			Posthole
1376	Cut			Posthole
1377	Cut			Posthole
1378	Cut			Posthole
1379	Cut			Posthole
1380	Cut			Posthole
1381	Cut			Posthole
1382	Deposit	silty sand	10YR5/6	Posthole
1383	Cut			Posthole
1384	Deposit	silty clay	10YR6/6	Ditch
1385	Cut			Posthole
1386	Cut			Posthole
1387	Cut			Posthole
1388	Cut			Posthole
1389				Not Assigned
1390	Cut			Posthole
1391	Cut			Posthole
1392	Cut			Posthole
1393	Cut			Posthole
1394	Cut			Posthole
1395	Cut			Posthole
1396	Cut			Posthole
1397				Not Assigned
1398				Not Assigned
1399	Cut			Posthole
1400	Cut			Pit
1401	Cut			Posthole
1402	Cut			Posthole
1403	Cut			Posthole
1404	Cut			Posthole
1405	Cut			Posthole
1406	Cut			Posthole
1407	Cut			Postpad
1408	Cut			Posthole
1409	Cut			Posthole
1410	Cut			Posthole
1411	Cut			Posthole
1412	Deposit	silty sandy	10YR5/4	Ditch
1413	Deposit	clay silt	10YR5/4	Ditch
1414	Cut			Ditch
1415	Deposit	clay silt	10YR4/4	Ditch
1416	Cut			Ditch
1417	Cut			Posthole
1418	Cut			Posthole
1419	Cut			Posthole
1420	Cut			Posthole
1421	Cut			Posthole
1422	Cut			Posthole

1423	Cut			Natural?
1424	Cut			Posthole
1425	Cut			Posthole
1426	Cut			Posthole
1427	Cut			Posthole
1428	Cut			Posthole
1429	Cut			Posthole
1430	Cut			Posthole
1431	Cut			Posthole
1432	Cut			Posthole
1433	Cut			Posthole
1434	Cut			Posthole
1435	Cut			Posthole
1436	Cut			Posthole
1437	Cut			Posthole
1438	Cut			Pit
1439	Cut			Pit
1440	Cut			Posthole
1441	Cut			Posthole
1442	Cut			Posthole
1443	Cut			Posthole
1444	Cut			Posthole
1445	Deposit	sandy silt	10YR5/1	Posthole
1446	Cut			Posthole
1447	Cut			Posthole
1448	Cut			Pit/Natural
1449	Cut			Same as 1416
1450	Deposit	sandy silt	10YR4/4	Ditch
1451	Cut			Ditch
1452	Deposit	silty sand	10YR4/3	Posthole
1453	Cut		10YR4/3	Posthole
1454	NA			Posthole
1455	Deposit	clayey silt	10YR4/4	Ditch
1456	Cut		10YR4/4	Ditch
1457	Deposit	silty sandy clay		Ditch
1458	Deposit	clayey silt		Ditch
1459	Cut			Ditch
1460	Cut			Ditch
1461	Cut			Posthole
1462	Deposit	clayey silt	10YR4/4	Ditch
1463	Cut			Ditch
1464	Deposit	clayey silt	10YR4/4	Ditch
1465	Cut			Ditch
1466	Deposit	clayey silt	10YR4/4	Ditch
1467	Cut			Ditch

APPENDIX 2

Structures Listing

Structure 1	
Deposit	Cut
1041	1210
1072	1209
1073	1208
1075	1219
1074/1216	1217
1076	1218
1077	1222
1045	1224
1046	1223
1044	1215
1043	1214
1042	1211
Structure 2	
Deposit	Cut
1020	1267
1019	1286
1032	1326
1033	1327
1028	1261
1029	1262
1012	1249
1010	1247
1011	1248
Internal features ?	
1017/1268/1269	1270
1031	1258
1030	1259
1015	1256
1014	1255
Structure 3	
Deposit	Cut
1085	1351
1129	1348
1082	1347
1081	1346
1083	1306
1084	1350
Structure 4	
Deposit	Cut
1142	1357
1143	1358
1140	1360
1141	1359
1139	1374
1138	1375
1137	1361

Large pit

1136	1376
1135	1377
1134	1378
1132	1363
1133	1362
1131	1381
1130	1379
1242	1380

Structure 5

Deposit	Cut	
1178	1429	
1176	1428	
1175	1427	
1174	1426	
1173	1424	
1172	1423	or ?natural cut
1171	1421	
1170	1420	
1445	1446	
1169	1422	
1168	1442	
1092	1419	
1452	1453	Cut by ditch segment 1451
1154	1390	
1157	1391	
1158	1392	
1159	1393	
1160	1399	
1161	1394	
1162	1395	
1163	1396	

Structure 6

Deposit	Cut
1186	1435
1185	1434
1184	1433
1181	1430
1182	1431
1183	1432

Structure 7

Deposit	Cut
1037	1263
1036	1264
1034	1265
1035	1266

Structure 8

Deposit	Cut	
1120	1386	
1121	1400	Posthole or ?small pit
1123	1401	
1149	1404	
1148	1403	

1147	1402	
1144	1409	
1124	1406	
1125	1410	
1128	1405	
1127	1407	Postpad
1126	1408	
1125	NA	
1122	1411	
1119	1387	

Structure 9

Deposit	Cut	
1190	1444	
1189	1319	Cuts ditch fill 1317
1188	1438	Pit
1187	1439	Pit
1179	1443	
1117	1388	
1194	1441	

Structure 10

Deposit	Cut	
1065	1282	
1066	1274	
1049	1275	
1068	1280	
1064	1281	
1063	1285	
1062	1288	
1061	NA	
1060	1283	?Posthole
1039	1284	

Structure 11

Deposit	Cut	
1058	1250	
1150	1341	
1111	1339	
1109	1328	
1229	1329	
1107	1332	
1105	1294	Pit
1106	1343	
1103	1325	
1104	1324	
1048	1246	
1054	1243	
1055	1251	
1056	1244	
1057	1245	

NA = not assigned

Structure 12

Deposit	Cut	
1101	1295	
1100	1297	
1099	1296	
1080	1299	
1079	1298	Central posthole?
1078	1305	

Structure 13

Deposit	Cut	
1095	1338	
1094	1337	
1093	1336	
1087	1345	
1088	1310	
1089	1333	Cuts pit fill 1090

Structure 14

Deposit	Cut
1009	1200
1008	1199
1006	1197
1007	1198

Structure 15

Deposit	Cut
1026	1289
1025	1257
1027	1290
1024	1287
1023	1276
1022	1254
1021	1260

APPENDIX 3

Ditch Segments

Ditch 1

Deposit	Cut	
1059	1304	Cutting Ditch 3
1364	1365	Cutting eastern arm square barrow
1371	1370	Cutting western arm Square Barrow
1455	1456	Inside square barrow ditch

Ditch 2 Square Barrow

Deposit	Cut	
1366/1384	1367	Eastern arm, cut by Ditch 1, 1365
1371/1373	1372	Western arm, cut by Ditch 1, 1371
1412/1413	1414	Segment in western arm, cut by Pit? 1416
1450	1451	Segment in eastern arm, cutting posthole 1452/1453
1457/1458	1459	Segment in western arm
1464	1465	Segment in northern arm
1466	1467	Segment in southern arm

Ditch 3

Deposit	Cut	
1067	1303	Segment cut by Ditch 1
1164		Excavated to recover finds
1311/1312	1313	Segment
1314/1315	1316	Segment
1317	1318	Segment cut by posthole 1189/1319
1320/1321	1322	Segment on western baulk
1352/1353	1354	Segment in terminal

APPENDIX 4

Finds Catalogue

NBQ 99 Evaluation

Trench No	Context No.	Type	Description
1	1001	Pottery	4 sherds
3	3002	Pottery	2 sherds
4	4011	Pottery	8 sherds (1 rim)
	4012	Pottery	2 sherds
	4015	Pottery	1 rim sherd
5	5004	Pottery	12 sherds
6	6002	Pottery	3 sherds

NBQ 99 Excavation

Context No.	Type	Description	Weight
1002	Pottery	1 rim	0.045kg
	Stone	8 pot-boilers	0.700kg
1004	Pottery	1 sherd	0.060kg
	Cu alloy	1 v. small fragment	
1005	Pottery	3 sherds	0.020kg
1007	Slag	1 fragment (Appendix 9)	0.010kg
1016	Pottery	10 sherds (3 rim sherds)	0.190kg
1018	Stone	Saddle Quern	
1019	Pottery	5 sherds	0.050kg
	Stone	2 pot-boilers	
	Bone	1 calcined frag.	0.001kg
1022	Stone	Quern frag.	
1023	Pottery	3 sherds	0.010kg
	Stone	Saddle Quern /2\	
1024	Pottery	1 sherd	0.020kg
1025	Pottery	7 sherds (1 rim)	0.125kg
1026	Flint	Flake	
1037	Pottery	1 sherd	0.010kg
1044	Daub	11 fragments	0.045kg
	Stone	1 pot-boiler	
1046	Stone	1 pot-boiler	
1047	Flint	Core	
1049	Pottery	3 sherds (1 rim sherd)	0.125kg
	Stone	1 pot-boiler	
1054	Stone	9 pot-boilers	0.440kg
1066	Pottery	12 sherds	0.050kg
1067	Stone	1 pot-boiler	0.100kg
1068	Flint	Bladelet	
1081	Flint	Core	
1090	Pottery	11 sherds (1 rim, 2 bases)	0.045kg
	Flint	4 retouched flakes; 2 flakes, /5\ and /8\	
1091	Flint	Retouched flake /4\	
1092	Flint	Arrowhead /1\	
1097	Pottery	24+ sherds	0.205kg

1105	Pottery	2 sherds	0.010kg
	Flint	1 flake /3\	
1114	Flint	Edge-retouched blade	
1119	Pottery	1 sherd	0.005kg
1124	Pottery	1 sherd	0.001kg
1152	Pottery	4 sherds	0.010kg
	Flint	Blade	
1164	Pottery	78 sherds (3 rims)	0.695kg
	Bone	5 cow tooth frags., 1 cow tooth	0.025kg
	Flint	3 flakes, 1 blade, 1 chunk, 1 edge-retouched flake, 1 piercer?	
1166	Pottery	17 sherds	0.005kg
	Flint	1 double-crested blade	
1178	Flint	1 crested blade	
1187	Pottery	5 sherds	0.035kg
	Bone	3 unid. frags, 1 sheep/goat rib	0.020kg
1189	Pottery	1 sherd	0.015kg
1202	Pottery	1 sherd	0.020kg
	Stone	18 pot-boilers	3.320kg
	Flint	3 flakes	
1203	Bone	3 unid. frags	0.001kg
	Stone	16 pot-boilers	2.040kg
1204	Pottery	5 sherd (1 rim sherd)	0.185kg
1212	Pottery	1 sherd	0.025kg
1235	Flint	1 flake	
1271	Pottery	1 sherd	0.005kg
	Bone	1 pig molar frag.	0.002kg
	Slag	2 - iron working debris	0.005kg
	Flint	1 single-crested blade	
1301	Pottery	4 sherds (1 rim)	0.025kg
	Flint	1 flake /6\, 1 end-side scraper /7\	
1311	Pottery	8 sherds	0.05kg
	Stone	Perforated stone block (loomweight)	
1314	Flint	1 blade	
1317	Pottery	2 sherds	0.010kg
1320	Pottery	1 sherd	0.020kg
1342	Bone	15 unid. frags.	0.010kg
1352	Pottery	3 sherds	0.015kg
1353	Flint	1 chunk	
1364	Pottery	2 sherds	0.005kg
1366	Pottery	1 rim sherd	0.010kg
1412	Pottery	1 rim sherd	0.025kg
1455	Pottery	crumbs	0.005kg
1458	Stone	Perforated stone block (loomweight)	
1462	Pottery	2 sherds	0.030kg
	Flint	2 flakes, 1 core and 1 scraper	
Unstratified	Flint	Flake	

/1\ = small find no.

APPENDIX 5

ASSESSMENT OF POTTERY ASSEMBLAGE

T.G. Manby

East Riding Archaeological Research Trust

Vessel types and comparisons

- Class 1: Thin sharply out-turned rimmed jars:-
(1016 a) Large: Kilham Manor Farm (Challis & Harding Fig.24.14)
(1001-2) Small: Great Kendale (Challis & Harding Fig.27.8)
- Class 2: Large Lid-seated Jar (1204), Kilham (Rigby Fig. No. 3)
Small 'Kilham' Jar (1016 b), Kilham (Rigby Fig. No. 4)
- Class 3: S-profiled rim and neck jars (1067) & (1164)
Kilham Manor Farm (Challis & Harding Fig. 24.12)
Great Kendale (Challis & Harding- Fig. 27.11)
Staple Howe (Brewster Fig. 34,2; 48,12;54,3)
- Class 4: Large jars with shallow neck and out-turned rim profile
(4015) Kilham Manor Farm (Challis & Harding Fig. 24.8)
(1016) Great Kendale (Challis & Harding Fig. 27.3)
Staple Howe (Brewster 1963, Fig. 48,10;50,5)
- Class 5: Barrel-shaped jars with internal rim bevel.
(1002) and (1002) Common at Scarborough, Staple Howe,
Kilham, Heselton, Levisham Moor.

Total Vessels represented: by rim fragments = 15-17
by fabric character = up to 25

At least two vessels of each Class represented.

Fabrics

Selection examined with x10 hand lens, some minerals examined with x20 binocular microscope. The leached character of most of the sherd material limits the possibilities of identifying the sources of pottery tempering.

1. "Vesicular Fabric": Coarse laminated, with voids caused by the solution of angular, sub-angular and sub-rounded temper. The acid soil conditions cause the dissolution of calcium minerals leaving voids and reduce the wall fabric to a soft sponge-like texture and can cause a loss of surface finish.

Only one context (1025) has sherds retaining crystalline calcite which is consistent with the angular and sub-angular voids of all sherds; however, crushed limestone is an alternative that would also include sub-rounded inclusions.

Fine sand is usually present and rare inclusions noted are crushed quartz and white quartzite and rounded ironstone

2. Erratic tempered: Crushed dark igneous - three sherds (1187) (1247) (1317)
3. Flint tempered: Angular Wold flint - one sherd (1164)
4. Surface treatment: external confined to brushing; internal confined to horizontal finger smoothing. All coarse ware, low temperature clamp firing; mostly unoxidised dark-toned surface colours. There is one small sherd, thin walled, smooth oxidised exterior (1204 b), could be a fine ware, and one sherd has been slip coated (1024).

Decoration is confined to a row of finger tip printing immediately under the lip of a small jar (1412).

Residues

Carbonised black residue noted on sherd interiors. Sooting noted on a small number of exteriors.

Production and Usage

The pottery is of local production, calcite, the Wold flint and igneous temper are all available within a 10 km. radius across the North York Moors or the Vale of Pickering.

There is a range of domestic forms from large storage jars down to cooking pots and small jars. Some cooking is indicated by the carbonised residues and exterior sooting.

Dating

As there is no direct dating evidence at Newbridge for any of the pottery forms and comparisons of the vessel shapes, finish and fabrics must be made with assemblages across eastern Yorkshire. Some elements, such as the use of calcite temper and barrel-shaped jars were long lived, having a chronological range from the Middle Bronze Age 1500-1150 BC down to the end of the Romano-British period.

A laminated structure, caused by the pulling up of the wall during potting, and the sharply out-turned simple rims of Class 1 and the Class 2 lid-seat and 'Kilham' jar forms at Newbridge Quarry are consistent with an early phase of the Iron Age assemblage. The best parallels are with the Kilham Manor Farm pit assemblages excavated by C. & E. Grantham (Challis & Harding 1975, II, 13-15), and other pit groups excavated by Dr. I.M. Stead in the Kilham-Burton Agnes area in the British Museum's Prehistoric and Roman Pottery Research

Programme (Rigby et al 1998; & in prep). Some of their Kilham pit assemblages had associated ring-head pins and penannular brooches supporting a date range of c..700-500 -BC. Newbridge Class 3 and 4 jars also appears in the Eighth century BC Staple Howe assemblage (Brewster 1963) and the Class 4 jar profile developed as Evans Form 0iii Jar amongst the later Iron Age-Early Romano-British 'Native' pottery (Evans 1995, Fig. 5.8).

Not represented at the Newbridge Quarry are the harder fired calcite tempered fabrics, weak shouldered jars, heavy and developed rim forms, and lugs that are dominant elements in local later Iron Age assemblages from Costa Beck, Thornton Dale and Levisham Moor (Evans 1995).

The chronology of mid-First millennium BC sites and pottery has been difficult to refine unless there is accompanying datable metalwork. Radiocarbon dating for Late Bronze Age-Iron Age transition has a limited use as there is a calibration plateau for the period 800-400 cal BC. The application of thermoluminescent dating is the preferred technique for the Iron Age.

Bibliography

- Brewster, T.C.M., 1963 The Excavation of Staple Howe
- Challis, A.J., & Harding, D.W., 1975 Later Prehistory from the Trent to the Tyne, Brit. Archaeol. Rep. No.20. (Oxford).
- Evans, J., 1995 'Later Iron Age and 'native' pottery in the north-east', in B. E. Vyner (ed) *Moorland Monuments: studies in the archaeology of north-east Yorkshire in honour of Raymond Hayes and Don Spratt* CBA Research Report No. 101, 46-78
- Rigby, V., Freestone, I., Humphrey, S., & Middleton, A., 1998, 'Thoughts on the pottery of the first millenium BC found in East Yorkshire', in P. Halkon (ed) Further Light on the Parisi (Hull) 33-37

SUMMARY CATALOGUE OF PREHISTORIC POTTERY

Evaluation

The small assemblage recovered represented three different types of vessel and up to five different types of fabric

Context

Tr 1. 1001-2
Topsoil/Subsoil
DRAW

Description

Four joining sherd, sharply out-splayed rim of small jar, rounded lip. c.12 cm. dia. Laminated dark grey, grey-toned brown exterior.

Tr. 3 3002
Subsoil

Small wall sherd: Laminated dark grey, brown exterior
Sub-rounded temper dissolved. WT 8 mm.

Small sherd: Laminated dark grey, orange and brown surfaces

Tr. 4 4011
Ditch 1 fill

Small wall sherd: Laminated light grey core, buff interior, smoothed greyish-brown exterior. WT 10 mm.

Weathered wall sherd: Hard light grey, buff exterior.
Pitted by solution of sub-rounded temper. WT 10 mm.

Heavy out-turned rim: Laminated grey, buff interior,
Greyish-toned light brown exterior. Common dissolved find temper.
WT 15 mm.

Two weathered sherds: Light weight grey, orange exterior. Pitted from solution of temper. WT 12 mm.

Three wall sherds. Laminated, dark grey, brownish interior. Dissolved angular temper > 4 mm. WT 12 mm. Wall sherd,,: Laminated grey core, buff interior, brown exterior with traces of sooting. Dissolved temper. WT 10 mm

Tr. 4 4012
Ditch 1 fill

Small weathered sherd and crumb. Light weight, dark grey, buff surfaces. WT 7 mm.

Tr. 4 4015
Ditch 1 fill
DRAW

Outsplayed rim, flattened lip, joins upper neck and body of large jar. Compact exterior with brushing. Laminated, pitted by solution of angular temper >8 mm. WT 13 mm. 345 gm.

Wall sherds and flakes, Various laminated fabrics.
Small temper dissolved.

Tr. 5 5004
Ditch 1 fill

Small weathered sherd and three crumbs.

Tr. 5 5004
Ditch 1 fill

Three small sherds and crumbs

Small wall sherd (2 joining pieces. Soft dark grey core, brown surfaces. Dissolved fine temper. WT 13 mm.

Small wall sherd: Laminated dark grey, light brown exterior. Pitted from solution of fine temper. WT 8 mm

Flake, laminated grey, grey-brown surface.

Small sherd. Harsh compact dark grey, brown exterior. Sand and angular quartzite temper >5 mm. WT. 7 mm.

Tr. 6 6002
Subsoil

Small sherd and two crumbs. Laminated grey, reddish exterior, dissolved sub-angular temper >2 mm. WT. 8 mm.

Excavation

The assemblage recovered represented twelve to fourteen different types of vessel and up to twenty different types of fabric

Abbreviations: VF=Vesicular Fabric. WT=Wall thickness

(1002)
DRAW

Rim fragment of a barrel-shaped jar or globular bowl, internally bevelled rim, 19 cm. diameter.
Laminated grey, dark toned interior, brown exterior
Dissolved angular temper >6 mm. WT 9 mm.

(1004)

Neck fragment to turn of rim. Large jar.
Dark grey, Interior layer orange with unoxidised surface. VF WT 15 mm.

(1005)

Two small sherds and flake. VF

(1016)
DRAW

a. Two joining Rim fragments of a large jar. Out-turned rim above convex neck, rounded lip c.34 cm. diameter smoothed surfaces. Laminated grey, brown surfaces.
VF Common sub-angular voids, rare rounded ironstone. WT 10 mm.

DRAW

b. Rim of small jar, outplayed rim, slightly hollow internal bevel.
Laminated grey, brown surfaces. VF
WT 8 mm. "Kilham Jar"
c. Wall sherd and three small sherds. Laminated grey, buff exterior.
Dissolved temper. WT 10 mm.
d. Two small sherds, grey. VF
Total 210 gm.

(1016)
DRAW

Rim sherd, Outcurving profile, folded down lip, shallow groove on interior. Horizontal smoothed surface.
Small sherd, VF, dark grey VF WT 5 mm.
Wall sherd, laminated grey, orange buff exterior WT 9 mm.

- (1019) Wall sherd and two small sherds, dark grey VF WT 9 mm
Two sherds, laminated grey, orange exterior, VF, WT 10 mm.
- (1023) Three small crumbs VF
- (1024) Wall sherd, hard laminated, dark grey, buff slipped interior, brown toned exterior. Sand and sparse dissolved temper > 3 mm. WT 10 mm.
- (1025) Joining rim fragment (7 x 6.5 cm) barrel-shaped jar with
DRAW internal bevel, c.18 cm. diameter rim.
Laminated grey, horizontally smoothed interior, brown exterior with remains of sooting. Scattered crystalline calcite >6 mm.
WT 10 mm. Another wall sherds without sooting.
Two wall sherds, grey, buff exterior. VT WT 10 mm.
- (1037) Small weathered sherd VF
- (1044) Daub, 11 small fragments. Hard gritty dark grey. Grass impressions on one surface.
- (1049) Rim fragment (9 x 7.5 cm) of large vessel.
DRAW Upright rim above Grooved neck, flattened lip. Laminated grey.
Reddish oxidised interior with horizontal brushing. Angular to sub-rounded voids >6 mm. WT 10 mm.
- (1049) Wall sherd, laminated grey, brown interior, VF. WT. 7 mm.
Remains of carbonised residue on interior. Wall sherd and small sherd.
Laminated grey, buff surfaces, VF. WT 6mm.
- (1066) 12 sherds (2 base sherds and crumbs), grey core, light brown surfaces, dissolved temper <5 mm. WT. 5 mm
- (1090) Wall sherd, laminated grey, buff interior, brown over buff exterior. VF.
WT 11 mm. Flake, dark grey
- (1090) Wall sherd, VF Carbonised material on exterior.
- (1090) Two weathered base angles, rounded and slightly moulded; Seven wall sherds. Small rim fragment, internal bevel All laminated grey, orange exterior, horizontal smoothed interior. Sparse dissolved sub-angular temper >6 mm. Total 155 gm.
- (1097) Mass of small sherds and crumbs. Pea-sized ironstone nodule. 45 gm.
- (1105) Two small sherds, Orange buff VF
- (1119) Small sherd, laminated dark grey, oxidised surfaces. VF WT 9 mm.

- 1124 Flake
- (1152) Two small sherds & crumb, grey, buff exterior. WT 10 mm Small sherd
VR WT 5 mm.
- (1164) Two flakes. VF
- (1164) 8 small sherds, dark grey VF. WT 6-11 mm. Small sherd, hard
Middle laminated grey, buff exterior. Angular wold flint >4 mm. WT 6 mm.
- (1164) Rim fragment of large vessel, slightly hollowed lip. Laminated soft buff.
NE arm of Traces of carbonised residue on exterior. VF WT 15 mm
Ditch 3 Three wall sherds. Laminated grey, buff exterior. VF WT 9 mm.
Traces of carbonised residue on exterior,
DRAW Seven small sherds. VF. WT 7-15 mm. Total 110 gm.
- (1164) Rim of large jar (10x7 cm) Flattened lip, shallow S- profile. Profile
DRAW dissolved sub-angular temper >5 mm.
- 7 Body sherds VF WT. 12 mm. Sooting on some sherds.
Two small sherds, 2 crumbs VF 260 gm.
- (1164) Weathered wall sherd. Soft laminated light buff. VF WT 16 mm.
West Small sherd and flake. Dark grey VF WT 15 mm.
13 small sherds, flakes and crumbs.
- (1164) Rim of large jar, similar size and profile to SE but
west of grey toned exterior. VF also 14 wall sherds, 18 small
corner sherd. Dissolved sub-rounded and sub-angular voids >6 mm. rare
rounded ironstone. Many sherds have exterior sooting. 260 gm
- (1166) Small weathered sherd, harsh sand.
12 sherds, 4 crumbs and flake, weathered. Grey, sand and sparse angular
white quartzite temper >3 mm and voids. WT 7 mm.
- (1187) Sherd, grey, reddish surfaces. Angular erratic grit >1mm and sparse
angular white quartzite and dissolved subangular >6 mm. WT 9 mm.
Sherd as above but brown surfaces
Two sherds, soft buff, orange exterior VF. WT 10 mm.
- (1187) Small sherd. VF
- (1189) Small sherd, laminated dark grey, orange-brown slipped exterior.
WT 10 mm.
- (1202) Angular shoulder with finger and thumb pressing. Soapy
DRAW laminated dark grey, brown exterior. Dissolved temper.

- (1204) DRAW a. Rim fragment (11.5.x8.5 cm) Out-turned ledge rim of a large lid-seated Jar form. c.36 cm. diameter. Soft laminated grey, buff surfaces. Profuse sub-angular to sub-rounded voids > 8 mm. WT 12-14 mm.
b. 'Small sherd, Laminated grey, buff exterior. WT 6 mm. 2 small flakes VF
- (1204) Wall sherd. VF
- (1212) Wall sherd, laminated grey, orange-buff exterior. Sub-rounded and sub-angular voids >4 mm. WT 7 mm.
- (1271) Wall sherd, Hard laminated grey, buff slipped surfaces. Sand, crushed igneous and rare dissolved angular temper >5 mm. WT 10 mm.
- (1301) a. Rim, flat lip, small jar. Laminated dark grey, dissolved fine temper. WT 7 mm.
b. Two small sherds, laminated dark grey, sparse crushed angular quartz >5 mm. and sand. WT 7 mm.
c. Wall sherd, laminated dark grey, compact orange-buff exterior, sand and dissolved angular temper >3 mm. WT 5 mm. Traces of carbonised layer on interior.
- (1311) Seven sherds and a flake. Laminated grey, buff-brown exteriors. VF WT 7-11 mm. Remains of black residues on some pieces
- (1317) Small sherd, Laminated grey, orange exterior, dissolved angular temper >8 mm. and rare rounded igneous. WT 7 mm. Small sherd, laminated grey, buff exterior, VF. WT 7 mm.
- (1320). Small rim sherd, flattened lip. Laminated grey, brown surfaces. VF. WT 10 mm.
- (1352) Small weathered sherd and 2 crumbs. VF
- (1364) Two small weathered sherds. VF
- (1366) Small rim sherd, pointed lip. Hard dark grey
- (1412) DRAW Rim of small jar, everted rim, rounded lip c.8 cm., finger tip impressions below lip. Laminated dark grey, buff surfaces. Sub-rounded.voids > 2 mm. WT 8.
- (1455) Crumbs
- (1462) Wall sherd. Laminated grey, buff exterior, VG. WT 9 mm. Remains of carbonised residue on interior. Sherd, weathered VF. Wt 17 mm.

APPENDIX 6

ASSESSMENT OF STONE OBJECTS

CATALOGUE SUMMARY

- NBQ99 (1018) Saddle Quern segment, rectangular block with two intact sides, two broken sides and boulder surface as base; working surface pecked, evidence of wear, prominent dish. Red medium sandstone.
33.4 cm. long, 30 cm. wide, 15.2 cm. thickness. 25 kg
- NBQ99 (1022) Saddle Quern segment; rectangular block with two intact sides, two broken sides and boulder surface as base; working surface pecked, largely worn smooth, very slightly dished. Red medium sandstone.
21.8 cm. long, 21.6 cm. wide, 8.8 cm. thickness. 2.6 kg
- NBQ99 (1023) Saddle Quern segment; two sides broken, lower face boulder surface as base; working surface pecked, slightly concave. Red medium sandstone.
/2\ 17.5 cm. long, 10.2 cm. wide, 8.2 cm. thickness. 0.25 kg
- NBQ99 (1029) Saddle Quern segment; large rectangular block, three sides broken, one side with intact, vertical face; lower face boulder surface as base; working surface, deeply pecked, markedly concave. Yellow medium sandstone.
DRAW 38 cm. long, 37 cm. wide, 21.8 - 9.5 cm. thickness.
- NBQ99 (1311) Perforated stone block (loomweight). Orange ferruginous medium sandstone. Cylindrical perforation 15 mm. diameter.
DRAW 5.5 cm. long, 4.5 cm. wide, 2.8 cm. thickness. 60 gm.
- NBQ 99 (1458) Perforated stone disc, broken. Orange ferruginous medium sandstone, rough flaked surfaces and edge. Cylindrical perforation 13-15 mm. diameter. 9 cm. diameter; 3.4 cm.
DRAW

RECOMMENDATIONS

All of the objects should be petrologically examined and their source(s) identified. The objects requiring illustration have been noted above.

APPENDIX 7

Assessment of biological remains

Allan Hall, John Carrot, Stephen Rowland and Deborah Jacques

Summary

Samples of sediment, of Late Bronze Age/Iron Age date, recovered from excavations at Newbridge Quarry, Pickering, North Yorkshire, have been assessed for their potential for bioarchaeological analysis. A small amount of animal bone was also assessed.

Ancient biological remains were restricted to charcoal and other charred plant material. However, biological remains from Bronze Age deposits in the north of England are rare so that the one of the four processed samples (Sample 9, Context 1164) examined which gave a few charred plant remains (including barley) should be recorded in more detail (especially if more material is available), provided that the dating of the feature can be confirmed.

It is possible that at least one or two of the samples not selected for examination as part of this assessment may also yield interpretatively useful plant remains but probably no especially strong case can be made for their examination unless, like the material from Context 1146, they can be securely dated.

KEYWORDS: NEWBRIDGE QUARRY; PICKERING; NORTH YORKSHIRE; LATE BRONZE AGE; IRON AGE; CHARRED PLANT REMAINS; CHARRED BARLEY

Introduction

Continuous archaeological observation of topsoil and upper subsoil stripping was carried out by MAP Archaeological Consultancy Ltd. on land to the west of Newbridge Quarry, Pickering, North Yorkshire (NGR: SE 7950 8570), between 21 September and 20 October 1999. Nine sediment samples ('GBA'/'BS' sensu Dobney et al. 1992) from nine contexts were recovered from the deposits. Dating of the deposits currently rests on two groups of pottery. Mackey's (1999), site report states that 'A quantity of pottery recovered from one of the larger pits (1090) during trial trenching gave a fairly secure Late Bronze Age date, whilst a shard from a pit (1001) close to the northern edge of the site belongs to the Iron Age'.

All of the samples were submitted to the EAU for assessment of their bioarchaeological potential.

Methods

The submitted sediment samples were inspected in the laboratory. None of the samples were thought likely to yield large quantities of biological remains but, in view of their early date, those with an obvious content of charred material were selected for further investigation. The

lithologies of these four samples were recorded using a standard proforma prior to processing, following the procedures of Kenward *et al.* (1980; 1986), for recovery of plant and invertebrate macrofossils.

Plant macrofossils were examined from the residues and washovers resulting from processing. The residues were also examined for other biological and artefactual remains.

Table 1 shows a list of the submitted samples and notes on their treatment.

Results

The results are presented in context number order.

On a general point, none of what has been described in Mackey's report as limestone was, to judge from the samples, at least, strictly speaking limestone (with the possible exceptions noted below); it was noncalcareous (no reaction to dilute hydrochloric acid) grindstone, presumably from the Middle Oolite in this area.

Two pieces of light grey, fairly soft, rounded, material were removed from the samples during processing (1 each from contexts 1003 and 1046, samples 3 and 1 respectively). These were initially thought to be pot but were found to effervesce when tested with dilute hydrochloric acid and appeared to contain 'tube-like' fossils in places - this suggested that they were, perhaps, some form of limestone.

Context 1003 [Fill of small subcircular post hole]
Sample 3 (11 kg bulk-sieved to 300 microns and washover)

Moist, mid grey-brown, crumbly to unconsolidated (working just soft), sandy silt. Very small to large (2 to 60+ mm) stones, charcoal and modern rootlets were present in the sample.

A washover of about 100cm³, mainly of charcoal (up to 15mm in maximum dimension) was obtained from this sample, the residue consisting of a moderate amount (about 2.2 litres) of subangular to subrounded grindstone (to 90 mm). The charcoal included (but was not all) oak (*Quercus*). There were very small numbers of charred and uncharred plant remains, mostly weeds of cultivated soils. The uncharred material is likely to be of recent origin (as were some rootlet fragments also present in the washover).

Context 1046 [Fill of substantial post hole]
Sample 1 (10 kg bulk-sieved to 300 microns, with washover)

Moist, mid grey-brown, unconsolidated to crumbly (working just soft), sandy silt with small to medium sized (6 to 60 mm) stones, fine ?charcoal and modern rootlets present.

The small residue of about 1 litre consisted of subangular to subrounded grindstone (to 70 mm), with occasional reddened (probably ferruginous rather than burnt) fragments and some sand. The washover of about 100 cm³ was of charcoal (to 10 mm, but mostly less than 5 mm) and sand with some modern earthworm egg capsules and a few charred and uncharred weed seed, the latter certainly modern. There were also rather large numbers of modern soil nematodes and some modern rootlets. Some scraps of insect cuticle observed in the washover might be ancient but they were few and not interpretatively useful. No oak was seen amongst the charcoal but the material could only be examined quickly for the purposes of assessment.

Context 1164 [Fill of small subcircular post hole]
Sample 9 (9 kg bulk-sieved to 300 microns, with washover)

Moist, mid to dark grey-brown (with mm-scale mottling, more grey and more brown), unconsolidated to crumbly (working just soft), slightly clay, sandy silt with occasional lumps of light orange-brown silty sand (to 40 mm). Medium-sized and large stones (20 to 60+ mm), charcoal and modern rootlets.

The washover of about 120 cm³ comprised charcoal (to 10 mm) with some sand; the small residue of about 1 litre comprised subangular to subrounded grindstone (to 65 mm) and some sand. Amongst the charred remains in the washover were a few barley (*Hordeum*) grains (some well enough preserved to show that they were hulled) and a few fragments of rachis which might well permit closer identification of the barley material. Also present were a few weed seeds and fragments of charred herbaceous detritus which could not be identified but which was probably largely from rushes or grasses.

Context 1301 [Primary pit fill]
Sample 8 (13 kg bulk-sieved to 300 microns)

Dry, light to mid grey-brown, hard to crumbly (working soft and slightly sticky when wet), slightly clay, sandy silt with some charcoal present.

The washover of about 60 cm³ was about 30% charcoal, the rest sand; the small residue of about 1.8 litres was of subangular to subrounded grindstone (to 65 mm) with some sand. Amongst the charcoal were fragments determined as oak and ash (*Fraxinus*). The only other plant remains recorded were traces of charred fat hen (*Chenopodium album L.*) seeds.

Discussion and statement of potential

Biological remains from the Bronze Age are quite rare and, as such, the one of the four samples (Sample 9, Context 1164) examined which gave a few charred plant remains should be recorded in more detail (especially if more material is available) provided that the dating of the feature can be confirmed though given that these remains were in a post-hole fill, it may, in fact, be worth considering AMS dating of plant material to provide a date.

Recommendations

It is possible that at least one or two of the samples not selected for examination as part of this assessment may also yield interpretatively useful plant remains but probably no especially strong case can be made for their examination unless, like the material from Context 1146, they can be securely dated (to the Bronze Age) by one means or another.

Retention and disposal

All samples and material extracted from them should be retained for the present.

Archive

All material is currently stored in the Environmental Archaeology Unit, University of York, along with paper and electronic records pertaining to the work described here.

Acknowledgements

The authors are grateful to MAP Archaeological Consultancy Ltd. for providing the material and the archaeological information, and to English Heritage for allowing AE to contribute to this report.

References

Dobney, K., Hall, A. R., Kenward, H. K. and Milles, A. (1992). A working classification of sample types for environmental archaeology. *Circaea*, the Journal of the Association for *Environmental Archaeology* 9 (for 1991), 246.

Kenward, H. K., Hall, A. R. and Jones, A. K. G. (1980). A tested set of techniques for the extraction of plant and animal macrofossils from waterlogged archaeological deposits. *Science and Archaeology* 22, 3-15.

Mackey, R. (1999). Report on continuous archaeological observation of topsoil and upper subsoil stripping at Newbridge Quarry, Pickering, North Yorkshire. Included within the report as Appendix 12.

Table 1. List of sediment samples from excavations at Newbridge Quarry, Pickering, North Yorkshire, with notes on their treatment.

Context	Sample	Notes
1002	2	Sample examined. No further action.
1003	3	Sample description. 11 kg bulk sieved to 300 microns and washover.
1004	4	Sample examined. No further action.
1046	1	Sample description. 10 kg bulk sieved to 300 microns and washover.
1164	9	Sample description. 9 kg bulk sieved to 300 microns and washover.
1187	7	Sample examined. No further action.
1271	5	Sample examined. No further action.
1301	8	Sample description. 13 kg bulk sieved to 300 microns and washover.
1334	6	Sample examined. No further action.

Animal Bone

Six contexts (of which four were dated by pottery to the Early Iron Age period) produced a very small quantity of hand-collected bone, comprising 34 fragments with a total weight of 59 grammes. Most of the assemblage came from postholes and pits, with material recovered from posthole fills weighing over three times that from pit fills (46g and 13g respectively). The range of identified species was limited to cattle, pig and sheep/goat.

Preservation of the material was poor; many of the bones were fragile, porous or flaking. Colour ranged from fawn to brown, with some variation within contexts (1187). Teeth represented in contexts 1164 and 1271 were from adults. There was no evidence for fresh breakage, dog-gnawing or butchery. A single fragment (context 1019) was calcined.

The recovered assemblage is far too small to allow statistical analysis to be undertaken, nor does it require any further work.

Table 2. List of hand collected animal bone from excavations at Newbridge Quarry, Pickering, North Yorkshire.

Taxon		No. fragments	Weight (g)	Context(s)
<i>Bos. f.</i>	cattle	8	22	1164 and 1187
<i>Sus. f.</i>	pig	1	2	1271
Caprovid	sheep/goat	1	10	1187
Unidentified		24	25	1019, 1164, 1187, 1203 and 1342
Total		34	59	6

APPENDIX 8

FLINT ASSESSMENT

By P. Makey.

A report prepared for MAP Archaeological Consultancy (Last Revision 16/06/00).

1. Introduction: The incidence and composition of the assemblage is given in table 1.

The archaeological excavation produced a total of 36 (168g) struck pieces of flint from, 20 separate, stratified contexts (see table 1). All but 2 of the pieces came from the filling of features, rather than stratified layers and deposits. Only 1 piece of natural (non-flint) was recovered. Of the struck assemblage, 16 pieces (44.5%) had been subjected to varying degrees of breakage. A miscellaneous retouched flake from context 1090 (pit 1090?, records 5-8) has been broken into 4 separate pieces (this implement has been recorded as a single item).

2. State:

The majority of the material (c. 67%) is in what might be termed, a moderate state. Almost a quarter of the flint is in a much fresher state, suggestive of *in-situ* or nearly *in-situ* contextual associations. There is slight tendency for these pieces to have been obtained from the filling of ditches. Few of the pieces (<14%) exhibit traces of patination and the distribution of this trait does not appear to show any underlying spatial or chronological patterning. The extent to which individual pieces are patinated tends to be light.

3. Reduction Sequence Technology & Raw Material:

All the struck pieces have been manufactured on local flint of till derivation. The majority of the flints can be said to have been knapped via the application of hard hammer techniques. Debitage is generally of a poor quality. A surprisingly large proportion of the assemblage (c. 28%, 10 pieces) can be securely assigned to the final (tertiary) stages of lithic reduction, with a further c. 25% (9 pieces) of the material being of possible tertiary attribution. There is a slight preference for the occurrence of tertiary pieces within the fills of ditches. To a slightly lesser extent, tertiary pieces are also present in pit fills; however proportionally fewer pieces are found in the fills of postholes. No flints can be ascribed to the initial (primary) stages of lithic reduction.

4. Traits:

4.1 Use wear (see table 1).

Overall 33% (12 pieces) of the assemblage appears to have been utilised. The majority of pieces bearing signs of the trait have received only a light to moderate degree of utilisation. The trait is present on most of the retouched implements. There is a slightly (proportionally) increased incidence of this trait in the material derived from the fills of postholes. Provisional microscopic analysis appears to indicate that the implements were probably being used on a variety of substrates (i.e., meat, bone, fat, wood, vegetative mater, etc.).

4.2 Burning.

Traces of burning are only present on 6 of the pieces (< 17%). In 5 instances, the degree of burning is heavy, although there is no discernible spatial or chronological patterning with regard to this trait.

5. Chronology:

The lithic debitage and cores (1 is a fragment) are not chronologically discreet but they are consistent with material of later Neolithic and early Bronze Age date. The side end scraper, (record 33, small find 7, Pit 1302?) from context 1301, is of a form and dimension that regionally tends to occur in flint assemblages associated with Peterborough and Beaker pottery. Piercers, miscellaneous retouched implements and edge-utilised pieces occur sporadically in later Neolithic and early Bronze Age assemblages. The chisel shaped *petit tranchet* arrowhead (record 12, small find 4, context 1092) from post hole 1419 is the most diagnostic piece in the assemblage. This form tends to be associated with Grooved Ware pottery of the Woodlands sub-style and Peterborough Wares. Regionally, Peterborough associations are the most frequent. The assemblage does not contain any pieces that can be ascribed to the Mesolithic or earlier Neolithic periods. The assemblage probably has a predominately bi-modal chronology, containing a mixture of middle to later Neolithic pieces (i.e., Peterborough) and Beaker material.

A very tentative suggestion of the assemblages chronological composition is given below: -

Any date = c 15%
Middle /Later Neolithic = c 20%
Later Neolithic / EBA = 40%
Early Bronze Age = c 25%

6. The Archaeological Potential of the Flint Assemblage:

All of the flint assemblage is residual and does not exhibit clear evidence of settlement. The assemblage probably represents a background scatter away from a Neolithic / Bronze Age settlement. There is a slight difference in the material obtained from the fills of ditches by comparison with that from postholes and pits. Material from the ditches tends to be fresher, from later stages of lithic reduction and more Bronze Age in character. This may represent a later cutting of these features. It is of note that the chisel arrowhead has been re-used, with slight scraper retouch on its tip. It is possible that this may have occurred in the Bronze Age.

7. Recommendations:

It is possible that a small proportion of the features in the area are of Bronze Age date and the presence of larger scale lithic assemblages in areas adjoining the site, cannot be ruled out. These areas are probably more than 50 meters from the boundaries of the excavated area. This should be considered if any further areas are to be quarried.

8. Illustration:

Only c. 3 of the pieces in the current assemblage are of a quality that might warrant illustration, should any further work be conducted.

TABLE 1. Newbridge Quarry; Composition of the Flint Assemblage:

Flint ID	Total Number	Number Broken	Edge -Use	Weight in gms	Feature Type				
					Pit	Post Hole	Ditch	Layer / Deposit	U/S
Cores	2	1		26.1	1	1			
Chunks & Chippings	2	NA		9.6			2		
Flakes	16	5	3	56.8	7	4	4		1
Blades & Bladelets	7	6	3	16.5	2	2	2	1	
UTILISED									
Edge Utilised Core Rej Fl	1	NA	1	9.8		1			
RETOUCHED									
Miscellaneous Ret Fl	2	2	1	10.2	1	1			
Edge Retouched Flakes	1	NA		9.1			1		
Edge Retouched Blades	1	1	1	1.6		1			
Piercers	1	NA		4.7			1		
Arrowheads: Ptd	1	NA	1	7.0		1			
Scrapers	2	1	2	16.6	1	1			
Total = 36		16	12	168g	12	12	10	1	1

Newbridge Quarry:

Site NBQ 99.

Newbridge Quarry, Pickering (1999), NORTH YORKSHIRE.

ASSESSMENT.

(Final revision on 16/06/00)

By Peter Makey.

Prepared for MAP Archaeological Consultancy Ltd.

Archive recorded in MS Excel 97 format.

File = Newbridge Quarry (Pickering) – NBQ 99 (Assessment)

<p style="text-align: center;">FLINT ARCHIVE: KEY TO THE RECORD SHEETS.</p>
--

The archive sheets are arranged in ascending context order.

KEY:

Note* The conventional term patina is used throughout this catalogue to avoid confusion between the terms cortex and the Process, of cortication. Patina is here used to refer to a visible discoloration and/or waxy staining of a flint's surface.

Bracketed figures are those used as headings on the spreadsheet. The code NA = Not applicable.

A) Record Number (Rec No). Individual flint identification numbers starting at the number 1. These are specific to this record sheet only and are intended as an aid to locating individual flints.

B) Context Number. As allocated on site.

C) Feature / Layer.

D) Small Find (S Find). Small find record.

E) ARTEFACT TYPE. Non struck lithics are recorded as natural. Broken pieces have the suffix /Br or Frag (fragment). Unclassifiable sub types of tools and cores have the suffix /UC. The basic classification of artefacts is as follows: -

Un-Retouched:

Blades. These are defined as flake removals, which are at least twice as long as they are wide and possess a length:breadth ratio of at least 5:2. In addition to this some degree of subjective judgement of bladedness, has also been made with regard to traits such as dorsal scarring etc.

Flakes. Here defined as un-retouched removals with a length in excess of 1cm (not included in the above).

Spalls. Tiny (often bulbar) knapping debitage, usually below 1 cm in diameter.

Lumps. Large bulbar or non-bulbar debitage of dimensions in excess of 1cm. Pieces do not possess angular facets.

Chipping's & Chunks. Chippings are defined as non-bulbar debitage with maximum dimensions below 1cm.

Chunks are defined as non-bulbar debitage with maximum dimensions in excess of 1 cm.

Cores. These are defined here as a nodule or chunky pieces of flint from which more than 2 flakes have been intentionally removed in a systematic order.

Retouched: Conventional classifications of diagnostic implement types have been used. The following lists only types specifically defined for this catalogue.

Edge Retouched Flakes & Blades.

Intentionally straight edged retouch along the lateral margins of blades or blade like flakes.

Edge Utilised Flakes & Blades.

Technically not retouched, this class encompasses pieces on which the macroscopic edge use is so intensive as to resemble intentional retouch.

Indeterminate Retouch.

Fragments of diagnostic implements such as scrapers, of which the precise nature cannot be classified with over 75% certainty.

Miscellaneous Retouch.

Many post glacial flint assemblages contain retouched pieces that defy conventional classification.

F) Sub Type. The following basic artefact classification systems have been used: -

Cores. The Hurst Fen system has been adopted (Clark et al 1960) with the addition of levalloise, tortoise / keeled, and Discoidal, forms plus an additional B (4) class (2 platformed core, one of which is keeled).

Core rejuvenation flakes. Classified via the system devised by Saville (1973).

Arrowheads (most forms). These have been classified following Green (1980).

Petit Tranchet and Oblique Arrowheads. Classified following Clark (1934).

Scrapers. Classified by area of retouch; for example, end, side, side & end etc. In the case of pieces with side retouch the side with retouched is noted.

G) Breakage. This is meant as the relative state of integrity of a piece of, flint; compared to what is assumed to have been the knappers, original intention. The remaining portion is classified via reference to a piece's location, with the exception of pieces, which are described as lateral. In these instances, lateral describes a slight breakage around the margins of pieces. Complete, Dist = Distal fragment, DM = Distal / Medial fragment, Lat = Minor edge damage, Med = Medial fragment, Prox = Proximal fragment, PM = Proximal/Medial fragment.

H) State. A purely subjective expression of the overall state of a piece. Classifications are: -
VF = Very fresh, F = Fresh, M = Moderate, O = Old, R = Residual (often rolled or redeposited).

I) Reduction. The sequence of lithic reduction is based on the following commonly accepted basic divisions: -

Primary	=	Pieces with total cortication of dorsal surface and striking platform.
Secondary	=	Semi-corticated pieces from, secondary stages of lithic reduction.
Secondary / Tertiary	=	Broken, un-corticated pieces that may originally have been cortical.
Tertiary	=	Totally un-corticated pieces from the final stages of lithic reduction.

In addition to the above, pieces may at times be recorded as Sec 2 or Sec 3. These are respectively, pieces with Marginal, cortication and pieces on which cortication is restricted to the striking platform.

J) Weight. This is given to the nearest 0.1g. Pieces are weighed principally as an aid to identification.

K) Length. Measurements in mm are taken along the bulbar axis (expressed to the nearest 10th of a mm). Broken dimensions are given the prefix 00:

L) Width. Measurements in mm are taken at widest point perpendicular to the bulbar axis (expressed to the nearest 10th of a mm). Broken dimensions are given the prefix 00:

M) Angle of Retouch (Ret Angle). Edge angle measured to the nearest 5 degrees.

N) Retouch (Retouch Type & Area). The codes in this section are in 3 main categories and more than 1 code may be used in the case of multiply retouched items. Codes follow the sequence; description, area, angle (part 1, 2, 3).

Part 1) Retouch Form. AO = All over, BF = Bifacial, CC = Concave, CIRC = Circular, CV = Convex, IR = Irregular, MC = Microlith, MI = Minimal, MA = Marginal, NO = Notched, PR = Parallel, PI = Pointing, PS = Pressure, SC = Scraper, SCO = Semi-convex, SCC = Semi-concave, SR = Serrated, ST = Straight.

Part 2) Retouch Angle Description. AB = abrupt, IV = Invasive, SA = Semi-abrupt, SI = Semi-invasive.

Part 3) Area of Retouch. D = Distal, LS = Left side, M = Medial, O = Oblique, P = Proximal, RS = Right side, TD = Transverse distal, TP = Transverse proximal, VT = Ventral. DR = Dorsal, UF = Upper face, LF = Lower face.

O) COLOUR. The colour of the flint is given in Munsell (1988) nomenclature.

P) Record Number (Rec No). See A.

Q) Context Number. See B.

R) Patina. Degree of patination: -

Very Light to Light = A misty colouration or speckling usually covering less than 10% of visible surfaces.

Moderate / Mottled = A non solid or solid colouration of limited extent, typically >10% < 75%.

Dense = A total or near total discolouration of a flint, usually > 75% of a flint's surface area.

Total = Typically pieces with c.90-100% of surface covered.

S) Source. This is basically an **assumption** of the most probable raw material source for the flint: -

RAW MATERIAL	RAW MATERIAL SOURCE
C	= Chalk derived material.
G	= Gravel exposures such as streams etc.
Till	= Till deposits.
T/G	= Till / Gravel. Till deposits of a gravelly nature.
W	= Yorkshire Wolds or similar material.

T) Post Depositional Damage (PD Dam).

Damage resulting from excavation and other agencies such as ploughing not covered by any previous categories.

Basically damage that is not of prehistoric origin. Classes of damage are subjective.

VL = Very light, L = Light, M = Moderate, H = Heavy, VH = Very Heavy, R = Rolled, B = Battered, N = Notched.

U) Use Wear (Macroscopic). A subjective classification of visible edge damage resultant from prehistoric utilisation.

A basic division of very light, light, moderate, heavy and very heavy is used. Occasionally the location may also be given: -

Part 1) Wear types/degree. BA = Battering, VL= Very light, L= Light, M= Moderate, H = Heavy, VH = Very Heavy.

Part 2) Location. AE = All edges, AO = All over, D = Distal, DR = Dorsal, LS = Left side, P = Proximal,
RS = Right side, TD = Transverse distal, VT = Ventral.

V) Burning. Expressed if the trait is present: -

L= Light, M= Moderate, H= Heavy (crackled), CAL = Calcined, STUB= Stubble or recent burning.

W) DATE? (Provisional).

This is basically a best guestimate of the probable age of a piece and/or it's possible industrial association.

X) Illustrate (Draw).

Note if the piece warrants illustration.

Y) NOTES. Any other traits not mentioned in the above, such as iron staining, re-use, edge gloss, hammer type, dorsal scarring, bulb scarring, platform type, cortex colouration, re-cortication, micro-wear and the presence of conjoins.

KEY, Bibliography.

Clark, J.G.D. 1960. Excavations at the Neolithic Site at Hurst Fen, Mildenhall, Suffolk.
Proceedings of the Prehistoric Society xxvi: 202 - 245.

Clark, J.G.D. 1934. Derivative Forms of the *Petit Trachet* in Britain.
The Archaeological Journal 91: 32 - 58.

Saville, A. 1972-1973. A Reconsideration of the Prehistoric Flint assemblage from Bourne, Pool, Aldridge, Staffs. *Transactions of the South Staffordshire Archaeological and Historical Society 14: 6 - 28.*

Newbridge Quarry:

Site NBQ 99.

Newbridge Quarry, Pickering (1999), NORTH YORKSHIRE.

ASSESSMENT.

(Final revision on 16/06/00)

By Peter Makey.

Prepared for MAP Archaeological Consultancy Ltd.

Archive recorded in MS Excel 97 format.

File = Newbridge Quarry (Pickering) – NBQ 99 (Assessment)

<p style="text-align: center;">FLINT ARCHIVE:</p> <p style="text-align: center;">FLINT ILLUSTRATIONS.</p>

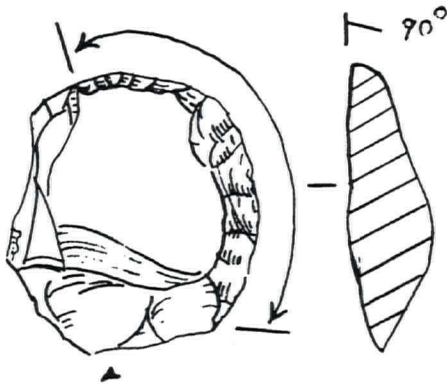
The following page contains rough sketches of the most significant pieces.

***Note: These are rough sketches for archive information only.**

FLINT

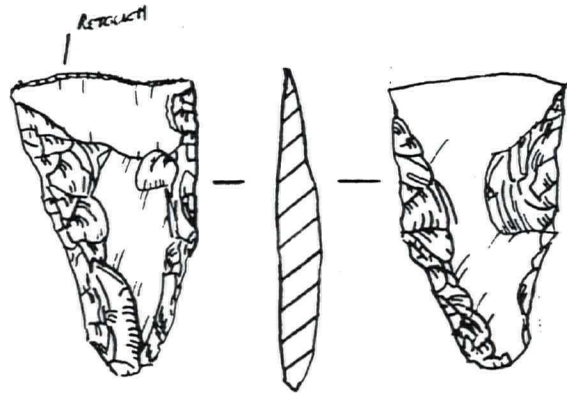
SCALE 1:1

Peter Ellsley



7 RECORD 33 CONTEXT 1301
PIT 1302^F

SIDE (RIGHT) END SCRAPER.
LIGHT OLIVE GREY (MOTTLED)
TILL FLINT. 13.9g
HEAVY USE.



1 RECORD 12 CONTEXT 1092
POST HOLE 1419

DARK OLIVE GREY TILL FLINT 7.0g
ARROWHEAD Fld CLASS C1
STRIKING EDGE HAS BEEN SLIGHTLY
RETOLDED.

Newbridge Quarry, Pickering: (Site NBQ 99). STRATIFIED FLINT ARCHIVE (In Context Order).

Rec No	CONTEXT	Feature / Layer	S Find	ARTEFACT TYPE	Sub Type	Breakage	State	Reduction	Weight	Length	Width	Ret Angle	Retouch	COLOUR
1	1026	Post Hole 1289		Flake		Complete	Moderate	Sec / Ter	4.7	19.0	32.9	NA	NA	Olive Grey
2	1047	Pit (lower fill) 1302		Core	Class E (5 platforms)	Complete	Fresh	Secondary	16.3	33.8	31.4	NA	NA	D Olive Grey
3	1068	Post Hole 1280		Bladelet / Br	Micro	Medial	Moderate	Sec / Ter	0.7	NA	NA	NA	NA	Olive Grey
4	1081	Post Hole 1346		Edge Utilised Core Rej	Distal. Class B	Complete	Moderate	Sec / 2	9.8	43.3	24.1	70	AB/TD/IR	Olive Grey
5	1090	Pit 1090?		Misc Ret Flake / Br	Broken into 4 pieces	Broken	Moderate	Sec / Ter	8.7	NA	NA	70	AB/MI/MA	Olive Grey
6	1090	Pit 1090?		Misc Ret Flake / Br	Refits 5, 7, 8	Broken	Moderate	Sec / Ter		NA	NA	NA	NA	Olive Grey
7	1090	Pit 1090?		Misc Ret Flake / Br	Refits 5, 6, 8	Broken	Moderate	Sec / Ter		NA	NA	NA	NA	Olive Grey
8	1090	Pit 1090?		Misc Ret Flake / Br	Refits 5, 6, 7	Broken	Moderate	Sec / Ter		NA	NA	NA	NA	Olive Grey
9	1090	Pit 1090?	5	Flake / Br	Broad	Prox / Med	Fresh	Secondary	7.9	NA	NA	NA	NA	Olive Grey
10	1090	Pit 1090?	8	Flake	Glossy	Complete	Moderate	Tertiary	1.2	17.8	20.0	NA	NA	NA
11	1091	Post Hole 1308	4	Misc Ret Flake / Br	TD	Prox / Med	Fresh	Secondary	1.5	NA	NA	55	SA/TD/MA/MI	Olive Grey
12	1092	Post Hole 1419	1	Arrowhead	Ptd Class C1	Complete	Fresh	Tertiary	7.0	39.5	23.4	50/50/40/40	SAPS/LS SAPS/RS SIPS/LS SIPS/RS	D Olive Grey
13	1105	Pit 1294	3	Flake / Br		Prox / Med	Moderate	Secondary	2.2	NA	NA	NA	NA	Olive Grey
14	1114	Post Hole 1356		Edge Ret Blade / Br	RS. Ancillary LS	Prox / Med	Moderate	Secondary	1.6	NA	NA	45	SA/DC/IR/MA/MI/RS	Olive Grey
15	1152	Deposit ? 1152?		Blade / Br		Prox / Med	Moderate	Secondary	2.3	NA	NA	NA	NA	Olive Grey
16	1164	Ditch		Flake	Broad	Complete	Old	Secondary	6.0	28.9	22.9	NA	NA	NA
17	1164	Ditch. West of Corner		Non Flint	Natural	NA	NA	NA	NA	NA	NA	NA	NA	NA
18	1164	Ditch. West of Corner		Flake	Chunky	Complete	Moderate	Tertiary	3.7	15.2	25.1	NA	NA	Olive Grey
19	1164	Ditch. West		Blade / Br	Double crested	Medial	Moderate	Sec / Ter	2.1	NA	NA	NA	NA	Olive Grey
20	1164	Ditch. West		Edge Ret Flake	Vent LS, prox	Complete	Fresh	Tertiary	9.1	41.9	19.9	60	SA/MA/MI	Black
21	1164	Ditch. East arm		Chunk		Complete	Fresh	Secondary	1.8	16.1	14.6	NA	NA	Olive Grey
22	1164	Ditch. East arm		Flake / Br		Prox / Med	Moderate	Sec / Ter	1.4	NA	NA	NA	NA	Olive Grey
23	1164	Ditch. East arm		Flake	Chunky	Complete	Moderate	Tertiary	5.7	26.4	26.8	NA	NA	Olive Grey
24	1164	Ditch. East arm		Piercer ?		Complete	Fresh	Tertiary	4.7	31.0	14.0	NA	NA	D Olive Grey
25	1166	Pit 1331		Blade / Br	Double crested	Medial	Fresh	Secondary	2.1	NA	NA	NA	NA	Olive Grey
26	1178	Post Hole 1429		Blade / Br	Crested	Dist / Med	Moderate	Sec / Ter	2.5	NA	NA	NA	NA	NA
27	1202	Pit (upper fill) 1205		Flake / Br	Trimming	Prox / Med	Moderate	Sec / Ter	2.9	NA	NA	NA	NA	D Olive Grey
28	1202	Pit (upper fill) 1205		Flake	Trimming	Complete	V Fresh	Tertiary	0.6	16.0	14.4	NA	NA	Olive Grey
29	1202	Pit (upper fill) 1205		Flake		Complete	Moderate	Tertiary	2.3	26.0	26.2	NA	NA	Olive Grey
30	1235	Post Hole 1241		Flake		Complete	Moderate	Secondary	6.6	48.00	26.0	NA	NA	Olive Grey
31	1271	Pit 1272		Blade / Br	Single Crested	Medial	Moderate	Secondary	3.9	NA	NA	NA	NA	Olive Grey
32	1301	Pit 1302?	6	Flake		Complete	Moderate	Secondary	1.9	17.3	21.0	NA	NA	Olive Grey
33	1301	Pit 1302?	7	Scraper	Side (Right) & End	Complete	Moderate	Tertiary	13.9	31.9	27.2	90 / 80	AB/CC/TD/CT/RS	L Olive Grey
34	1314	Ditch 1316		Blade		Complete	Moderate	Secondary	2.9	38.1	14.8	NA	NA	Olive Grey
35	1353	Ditch (lower fill) 1354		Chunk	Pebble	Complete	Fresh	Secondary	7.8	27.0	28.0	NA	NA	Olive Grey
36	1462	Post Hole		Flake / Br	Broad	Prox / Med	Moderate	Sec / Ter	6.4	NA	NA	NA	NA	Olive Grey
37	1462	Post Hole		Core / Frag	Un-classifiable	Broken	Moderate	Secondary	9.8	NA	NA	NA	NA	Olive Grey
38	1462	Post Hole		Flake	Almost core rejuvenation	Complete	Moderate	Secondary	1.7	19.6	12.8	NA	NA	Olive Grey
39	1462	Post Hole		Scraper / Br	Flake scraper.	Dist / Med	Moderate	Sec / Ter	2.7	NA	NA	80	AB/CV/MA	Olive Grey
40	U/S	Area 1A South		Flake	Plat edge trimming	Complete	V Fresh	Tertiary	1.6	13.4	24.1	NA	NA	D Olive Grey
Rec No	CONTEXT	Feature / Layer	S Find	ARTEFACT TYPE	Sub Type	Breakage	State	Reduction	Weight	Length	Width	Ret Angle	Retouch	COLOUR

Newbridge Quarry, Pickering: (Site NBQ 99). STRATIFIED FLINT ARCHIVE (In Context Order).

Rec No	CONTEXT	Patina	Source	PD Damage	Use Wear	Burning	DATE ?	Draw	NOTES
1	1026	None	Till		NA	None	L Neo / EBA		Pronounced hinge termination.
2	1047	None	Till		NA	None	L Neo / EBA	Yes	Small irregular flakes. c16 removals. Class E (1 platform is keeled).
3	1068	None	Till	Light	Moderate	None	L Neo / EBA	Yes?	Looks like a microlith. Left and right hand margins have moderate use damage.
4	1081	None	Till	Light	Heavy	None	L Neo / EBA		Core has probably been a small irregular flake variety.
5	1090	None	Till	V Heavy	Light	V Heavy	Any		Burnt chunky flake. Broken in 4. Probably broken during excavation. Small c1cm area of nondescript retouch.
6	1090	None	Till	V Heavy	Light	V Heavy	Any		Re-fit. Piece is not calcined but is heavily crackled.
7	1090	None	Till	V Heavy	Light	V Heavy	Any		Re-fit.
8	1090	None	Till	V Heavy	Light	V Heavy	Any		Re-fit.
9	1090	None	Till	Moderate	Moderate	None	Later Neo		
10	1090	Total	Till	Light	NA	Heavy	Any		Total white patina. High gloss with a residue appearance is probably due to heating.
11	1091	None	Till	Light	NA	None	L Neo / EBA		Pebble slice with small area of very slight retouch.
12	1092	None	Till	Moderate	Heavy	None	L Neo / EBA	Yes	Very fine example. Striking edge has received light retouch. The piece has been used as a scraper.
13	1105	None	Till	Heavy	NA	Mod	Any		
14	1114	None	Till	Light	Light	None	L Neo / EBA		Small single crested blade fragment. Very irregular retouch. Left side has small area of irregular ancillary retouch.
15	1152	None	Till	Moderate	NA	None	L Neo / EBA		Context is probably the Eastern cut of the Western barrow ditch.
16	1164	Total	Till	Heavy	NA	Calcined	Neolithic		
17	1164	NA	NA		NA	NA	NA		Natural mudstone.
18	1164	None	Till	Heavy	NA	None	Any		
19	1164	None	Till	Light	Light	None	L Neo / EBA		
20	1164	V Light	Till	Heavy	NA	Heavy	L Neo / EBA		Very high quality black flint with crackled surfaces. Small c1 cm area of retouch. Single flake platform.
21	1164	None	Till		NA	None	Any		
22	1164	None	Till		NA	None	Any		
23	1164	None	Till	Light	Light	None	EBA		
24	1164	None	Till	Light	NA	None	L Neo / EBA	?	Chunky flake with single flake platform. Angular dist has had 1 or 2 minor flake removals. Res a crude piercer.
25	1166	None	Till	Heavy	NA	None	L Neo / EBA		Fine. Looks Later Neolithic.
26	1178	Dense	Till	Light	Moderate	Heavy	Neolithic		Light grey coloured patina. Ventral RS edge use. Crackled through burning. Fine piece.
27	1202	Mod	Till	Moderate	NA	None	L Neo / EBA		
28	1202	None	Till		NA	None	L Neo / EBA		Very fine. Looks like in-situ knapping debitage.
29	1202	None	Till		Moderate	None	L Neo / EBA		Use wear on RS.
30	1235	None	Till	Light	NA	None	L Neo / EBA		
31	1271	None	Till	Light	NA	None	L Neo / EBA		
32	1301	None	Till	Light	NA	None	L Neo / EBA		
33	1301	None	Till	Moderate	Heavy	None	Neolithic	Yes	There is slight ventral thinning flaking on the ventral surface. Fine scraper. Flint is slightly mottled.
34	1314	None	Till		NA	None	L Neo / EBA		
35	1353	None	Till		NA	None	L Neo / EBA		Pebble chunk.
36	1462	None	Till	Heavy	NA	None	EBA		Recently broken.
37	1462	None	Till	Light	NA	None	L Neo / EBA		From a small irregular flake core.
38	1462	None	Till		NA	None	L Neo / EBA		Small chunky, basal removal.
39	1462	None	Till	Heavy	Moderate	None	Neolithic		Thin flake. Retouch is probably on a hinged termination. Breakage is a recent transverse distal snap fracture.
40	U/S	None	Till	Light	NA	None	L Neo / EBA		Very fine.
Rec No	CONTEXT	Patina	Source	PD Damage	Use Wear	Burning	DATE ?	Draw	NOTES

APPENDIX 9
ASSESSMENT OF SLAG

By I Mack

1 Introduction

The material classed as slag recovered from the excavation is described below.

2 Slag Classification

The slag was visually examined, but it was not possible to classify it on morphological grounds. In general slags and residues are divided into two broad groups; diagnostic and non-diagnostic slags. The diagnostic slags, can be attributed to a particular industrial process. These comprise the ironworking slags, i.e. smelting or smithing slags, and the non-ferrous residues, e.g. crucibles. The non-diagnostic residues cannot be directly ascribed to a process, but may be identified with a process by association with diagnostic residues, e.g. clay furnace lining with smelting slag.

2.1 Ferrous Diagnostic Slags and Residues

Iron Smelting Slags and Residues

Tap Slag (Tap) - smelting slag characterised by a ropy flowed upper surface.

Iron Smithing Slags

Hearth Bottom (HB) - a plano-convex accumulation of fayalitic slag formed in the smithing hearth.

Smithing Slag (SSL) - randomly shaped pieces of fayalitic slag generated by the smithing process.

Cinder (CIN) - high silica smithing debris, often formed at the reaction zone between the smithing, slag and the hearth lining.

Metal

Iron Metal - some slags contain significant amounts of metallic iron. They were separated from the slags and should be stored as iron artefacts.

2.2 Non-Ferrous Diagnostic Residues

Metal

Copper Alloy - corroded copper alloy objects

Slags

Litharge - the residue derived from the separation of silver and/or gold from other base metals. It is lead rich.

2.3 Non-Diagnostic Slags and Residues

Cinder (Cin) - a high silica slag that can either be formed by high temperature reaction between silica and ferruginous material. It can be ascribed to either the nondiagnostic slags or the diagnostic slags depending on its iron content and morphology.

Furnace/Hearth Lining (FL or HL) - the clay lining of an industrial hearth, furnace or kiln which has been subjected to high temperature oxidising conditions. It is characterised by a vitrified surface inner face. In some cases the tuyere mouth may be preserved. Furnace Lining is considered non-diagnostic, since it cannot be ascribed to a process on grounds other than archaeological association, i.e. there is as yet no diagnostic feature which will distinguish vitrified lining from a smithing hearth from that from an iron smelting furnace.

Other Material (Other) - which normally comprises fragments of fuel etc.

3. Discussion of Slag Type

The material recovered from this excavation comprised one fragment from context 1007. Although there was no morphology to indicate the process which formed it, the fragment is clearly iron working slag. Visually, it falls into a group of slags of Late Bronze Age / Early Iron Age date.

4. Recommendations

Given its early date, the slag fragment would repay chemical analysis and thin-sectioning.

APPENDIX 10

REPORT ON CONTINUOUS ARCHAEOLOGICAL OBSERVATION OF TOPSOIL AND UPPER SUBSOIL STRIPPING

Rod Mackey
(Observing Archaeologist for Guildhouse Consultancy)

Method

An initial stripping operation was carried out between 21st and 30th of September 1999 on land to the west of Newbridge Quarry, Pickering. The area stripped measured c. 180m north-south and c65m east-west. A360 degree Komatsu excavator with a toothless ditching bucket was used with two/three 30 ton dumper trucks to haul the spoil from the site along agreed routes. Before work commenced, a request was made by the Plant Contractor to change the stripping sequence from that outlined in the Project Design and this was agreed between the Quarry Manager, the Plant Contractor and the Observing Archaeologist. Accordingly, work commenced by stripping the northern half of the site, from east to west, followed by the southern half from south to north, thus affording the opportunity to examine the 'grain' of the natural subsoil and the archaeological features cut into it. In each area, about 0.3m of topsoil was stripped first and dumped separately from the upper subsoil. The total overburden removed varied in thickness from 0.36m at the north end to 0.90m at the south. The Observing Archaeologist continuously controlled the level of the machine cut down to the horizon at which archaeological features became apparent. This horizon, which undulated slightly, was left clean and about 200 features were defined and flagged for the Archaeological Contractor to excavate and record. The excellent ground definition gave confidence that very little, if anything was missed and considerable time and costs were saved by reducing the need for hand cleaning by the Archaeological Contractor. There was no machine standing time caused by the archaeology and the continuous observation enabled immediate decisions to be made on the stripping programme, plant access and the scale of further archaeological input. By 1 October all archaeological features had been dealt with within the southern half of the site and within a 40m wide strip along the northern edge. These areas were then released back to the quarry for stripping down to bedrock.

No archaeological work was carried out in Area C (*Guildhouse 1999b*, fig 3).

Archaeological Observations

The only archaeological feature visible at the interface between the topsoil and the upper subsoil was an Eighteenth/Nineteenth century dew pond in the southern half of the site, which had been identified by the Desk-based study (*Guildhouse 1999a*) and confirmed by the geophysical survey (*Guildhouse 1999b*, fig. 5, 'E'). This was exposed in plan and photographed. It was slightly oval and at the upper subsoil level it measured 12.2m north-south and 13.5m east-west. It was sectioned by machine through the centre, revealing an elaborate method of construction. In form it resembled a shallow inverted cone with its centre cut to a depth of c. 1.3m from the original surface. It had been lined with two beds of clay each sandwiched between layers of lime. The lower sandwich only occupied the middle area of the pond. These beds of clay had turned a bluish grey and had adopted a shale-like character.

Finally a thick layer of limestone rubble had been added, perhaps over straw, to form the bed of the pond, thus reducing its depth at the centre to about 0.75m.

The medieval rigg and furrow, noted by the geophysical survey (*Guildhouse 1999b, fig. 5*) and encountered during trial trenching was not discernible in the upper subsoil. It only became visible on the surface of the lower subsoil, where it appeared as a series of broad straight parallel lines running north-south, filled with brown stony, silty clay. Preservation was variable; some furrows survived intermittently and others had been too shallow to reach the lower subsoil. The whole pattern had been severely truncated by subsequent ploughing.

Several natural features were noted in the surface of the lower subsoil, notably a series of fissures filled with darker gravel and greyish-brown clay. These crisscrossed the site from north-east to south-west and from north-west to south-east and coincided with linear anomalies recorded by the geophysical survey (*Guildhouse 1999b, fig. 5, 'I'*). These were seen as geological in origin. Other features included leached grey areas and broad irregular loam-filled patches. Some of the latter were flagged for investigation and three (1196, 1225 & 1205), which were sectioned, proved to be shallow hollows with irregular bottoms. They probably represent tree 'throws' caused by wind-felling and could date from any period before the Middle Ages.

A dense scatter of post-holes and pits was visible in the lower subsoil in the northern half of the site, within an area measuring c. 50m east-west by c. 60m north-south. Some sets of post-holes formed rectilinear patterns (e.g. Structure 6, 1430-35), whilst others were more complex. Many were filled with blackish loam containing quantities of ?limestone packing. The stone used was grey and distinctly different from that present in the lower subsoil on the site, suggesting that it may have been imported. Much of it had been burnt, probably by its previous use in hearths. Fragments of saddle querns were observed in the packing of two post-holes (1268 & 1276) and a rubbing stone was recovered from a third (1223) during excavation. Soft calcite-gritted pottery was also evident in several features (e.g. 1271 & 1096). A sinuous boundary ditch (Ditch 3), filled with similar material to the post-holes and pits, ran southwards from within the complex and then turned westwards to form its southern boundary. This ditch began to curve northwards again before it left the western edge of the site. A large square barrow (Ditch 2), c. 10m square, with bowed sides and no central grave, lay within this curve. A third ditch (Ditch 1) crossed the entire site from east to west in a straight line, and was substantially narrower where it cut the barrow platform, suggesting that it had been dug at a time when the barrow was still upstanding. It also appeared to cut the fill of the sinuous boundary ditch, although only the very bottom of it had survived at this point.

The main complex is clearly a small nucleated settlement; its southern, and possibly its eastern, northern and western limits lie within the excavated area. The straight east-west ditch appears to be later and unrelated to it. A quantity of pottery recovered from one of the larger pits (1335) during trial trenching suggests a Late Bronze Age date, whilst a large sherd from a pit (1195) close to the northern edge of the site belongs to the Iron Age. A chisel-point, flint arrowhead, found during stripping is much earlier and probably residual.

The square barrow belongs to the earliest type found at Burton Fleming (*Stead, I. M. 1991*); perhaps occupation continues from the Late Bronze Age into the Iron Age. It is tempting to see the square barrow as being sited to respect the southern boundary ditch. This ditch is too slight

to have remained visible for long after its abandonment, so the square barrow could be contemporary with the later stage of occupation.

Most of the post-holes and pits were not recorded by the geophysical survey due to their small size; but it is unclear why the east-west ditch was detected (*Guildhouse 1999b, fig 5, 'H'*) and the square barrow and boundary ditch were not. The overburden in this area was about 0.55m thick. The distribution of features revealed by the stripping was generally in keeping with the trial trenching results.

Currently very little is known about Late Bronze Age / Early Iron Age settlements in the north of England. Sites are extremely scarce and their limits are seldom well-defined. The rarity, coupled with the possibility of linking a square barrow with a settlement makes it potentially a very significant archaeological site.

October 1999

References:

- Guildhouse Consultancy 1999a: A Desk-Based Assessment - Archaeology and Historic Features, Newbridge Quarry Extension, Pickering. (Developer Report May/June 1999)
- Guildhouse Consultancy 1999b: Archaeological Evaluation - Geophysical Survey ~ Area B, Newbridge Quarry Extension, Pickering. (Developer Report August 1999)
- Stead, I M 1991: Iron Age Cemeteries in East Yorkshire. English Heritage Archaeological Report 22.