

# ARCHAEOLOGICAL PROGRAMME OF WORK

**ON SELECTED AREAS WITHIN THE BRISTOL WATER RESILIENCE SCHEME**  
(Harry Stoke to Clifton)  
**BRISTOL**

NGR ST 62001 78618 to NGR ST 57624 73711  
JOB N<sup>o</sup>: BA1130BWDD



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*Frontispiece: Possible section of the Bath to Sea Mills Roman road revealed during removal of topsoil in the vicinity of Durdham Down Water Tower*

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# 1. Non-Technical Summary

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*This report details the results of a programme of archaeological work undertaken by Border Archaeology on behalf of Bristol Water in specified areas of archaeological sensitivity identified along the easement of a 9.5km mains pipeline extending from Harry Stoke to the Victoria Pumping Station on Clifton Down.*

***Evidence of human activity was identified ranging broadly in date from the Mesolithic up to the present day.***

- *Durdham Down – During topsoil removal for the construction of the Site Compound at the junction of Parry’s Lane and Westbury Road, **the remains of a Roman rotary quern** were identified, together with extensive spreads of domestic refuse ranging broadly in date from the 17<sup>th</sup> to the 19<sup>th</sup> centuries.*
- *Topsoil stripping of the pipeline easement revealed a small quantity of unstratified prehistoric worked flint in the topsoil and subsoil deposits, including a blade and core fragment of probable Mesolithic date.*
- *Immediately S of the Site Compound, topsoil stripping of the pipeline easement revealed evidence of a metalled surface (067) which was subject to further investigation and recording and was identified as a trackway of probable early to mid-19<sup>th</sup> century date associated with a quarry site to the W of Westbury Road.*
- *Further detailed investigation was undertaken on another metalled surface (082) identified to the E of the Water Tower on Durdham Down, which appeared to form part of a road or track running along the projected line of the Roman road linking Bath and Sea Mills. This section of road closely resembled a ‘stony track’ described in this location by the early 19<sup>th</sup> century antiquarian Samuel Seyer, who associated this feature with the earthwork remains of the Roman road visible further to the W.*
- *While it was not possible, based on the available archaeological evidence, to determine conclusively the date of this feature, it is clear that it represents a routeway of considerable antiquity.*
- *Archaeological monitoring of groundworks at Stanley Farm and Bonnington Walk revealed evidence of a roughly coursed stone-built culvert running NE-SW, immediately SE of Stanley Farm, a settlement site of medieval origin. No archaeological evidence was found to conclusively establish the date of the culvert although a medieval or early post-medieval date may be concluded.*
- *Archaeological observation of ground works in the vicinity of Horfield Leisure Centre revealed a number of features of probable 19<sup>th</sup>-20<sup>th</sup> century date including a free-standing ‘garden’ wall, several rubbish pits, a cobbled surface and a linear ditch feature.*

## 2. Introduction

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Border Archaeology was instructed by Bristol Water plc to carry out a programme of archaeological work both prior to and during the groundworks phase of the Bristol Water Resilience Scheme (BW Job No. CAS0080). The scheme involved the installation of a new 9.5km trunk main extending between Harry Stoke, South Gloucestershire (NGR ST 62001 78618) and Victoria Pumping Station (NGR ST 57624 73711), Bristol Water's existing reservoir in Clifton.

The programme of work comprised archaeological monitoring of the topsoil strip for the pipeline easement in specific areas of archaeological sensitivity agreed in advance with Bob Jones Esq., Senior Archaeological Officer, Bristol City Council and David Evans Esq., Archaeology and HER Officer, South Gloucestershire Council.

The areas where archaeological works were deemed necessary are listed within the methodology section herein.

### 2.1 Topography

The pipeline travels approximately 9.5km through the NW suburbs of Bristol, traversing the watershed between the Severn, Frome and Avon rivers, from the N side of the A4174 at Harry Stoke (NGR ST 62001 78618) to the Victoria Pumping Station in Clifton (NGR ST 57624 73711) (*fig. 1*). The route passes through Clifton, Westbury Park, Horfield, Lockleaze and parts of Filton and follows an undulating course over terrain that ranges in height between c.60m OD at its northern end to 97m OD at its most elevated point on Durdham Down. Much of this route, indeed, all but approximately 15 per cent, runs along existing roads through a largely suburban environment, the remainder crossing open ground

Part of the route encompasses Clifton and Durdham Down, which together comprise a designated Landscape Character Area. This area consists of a flat-topped elevated plateau on the Failand-Clifton Limestone Ridge and is characterised by carboniferous limestone geology and extensive grassland with scrub mosaic and avenue trees. Aside from a modern Water Tower feature (WA110) at Stoke Road Durdham Down (ST 57174 74968) no other landscape designations are present near the scheme. Clifton and Durdham Down SNCI is designated for a number of reasons including its large areas of unimproved limestone grassland. In view of this, the route was subject to alteration to avoid its crossing areas of unimproved grassland on Clifton Down and now travels along Upper Belgrave Road.

A second Landscape Character Area, Patchway and Filton, which is designated as such by South Gloucestershire Council is also traversed by a short section of the route. This comprises a mix of residential, commercial and retail development and major transport corridors, with open space scattered throughout.

### 2.2 Soils and Geology

In the vicinity of Stanley Park, the predominant soil type consists of the pelo-stagnogley soils of the DENCHWORTH (712b) series consisting of slowly permeable seasonally waterlogged clayey soils with similar fine loamy over clayey soils with some fine loamy over clayey soils with only slight seasonal waterlogging and some slowly permeable calcareous clayey soils. The underlying geology consists of Jurassic and Cretaceous clay (SSEW, 1983).



The remainder of the route, extending through residential suburban areas, is classed as Unsurveyed in the Soil Survey of England and Wales (SSEW, 1983). To the NE of Westbury Park, the soils may be broadly characterised as comprising loams and clays with impeded drainage overlying a series of interbedded limestones and mudstones with Charmouth Mudstones forming the surface geology in the area of Horfield Common. To the S and W of this point, soils are freely-draining lightly acid loams overlying older oolitic limestones with younger Paleozoic limestones forming the surface geology at Durdham Down.

### 3. Brief historical & archaeological background

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#### Prehistoric

The study area lay within the scope of a recent review carried out on behalf of Bristol City Council of the Palaeolithic archaeological potential of the Bristol Avon region, which concluded that 'considerable potential exists for Palaeolithic study' within the region, although surviving Pleistocene deposits are unevenly distributed (Bates & Wenban-Smith 2005, 8). It is reported elsewhere (BCC 2006) that remains of Pleistocene fauna including rhinoceros, elephant, horse, hyena and bear were recovered in 1842 from a fissure exposed in a limestone quarry at Durdham Down, which was possibly situated within the study area, although its precise location remains unclear.

Specific evidence from the Mesolithic and Neolithic otherwise appears to be lacking, although a polished Polished flint axe (WA139) has been recovered within the study area at Henleaze Park. More prominent is the evidence for Bronze Age activity. A barrow (WA22) was excavated to the SW of Horfield church in 1890. Further evidence has been recently revealed in the Harry Stoke area, where a possible cremation burial (WA32) was investigated in 2001 identified close to a cropmark site identified as a possible ploughed-out barrow (WA31). A section of Bronze Age ditch was found in 2001 at Stoke Park Road South (BCC 2006, 2). Evidence of extensive field systems had been noted from aerial reconnaissance on the Carboniferous Limestone of Durdham and Clifton Downs within the study area (WA37 & 33). Grinsell (1958, 142) refers to these as being of probable prehistoric and Romano-British date.

#### Roman

In terms of Roman activity, the 14-mile stretch of Roman road linking Bath (*Aquae Sulis*) and Sea Mills (*Abonae*) passes through N Bristol to Durdham Down. According to Margary (1973, 138), the *agger* is clearly visible on the Down in the form of a low ridge; this section (WA1, SAM No.BS88) (ST 56771 75128) is located on the S side of Stoke Road between Ladies Mile and Rockleaze. The course of the road has been identified in the vicinity of the route at one specified location (WA 21), where a section was excavated across the SE end in 1899 (SMR 20441) by Alfred Trice-Martin and colleagues from the Bristol and Gloucestershire Archaeological Society and the Clifton Antiquarian Club (Trice-Martin 1899; 1900-3). A layer of sand overlying rock was recorded with a 'reddish-looking earth' above upon which the *agger* had been established. Investigation of the ditches on either side of the road found these to survive in a heavily eroded condition. Subsequent investigations have failed to identify conclusive evidence for the Roman road (WA 24-26, 151).



## Medieval

An early medieval burial site comprising some 51 inhumations has been revealed approximately 300m S of the route at Wallscourt Farm Stoke Gifford (WA34) (ST 61339 77817). There is also a settlement site (WA41) located in this area and, although these sites lie away from the pipeline route, the possibility has been highlighted (Wessex Archaeology 2011, 13) of encountering contemporary buried deposits representing a continuation of this activity along a section of the pipeline route lying immediately W of this area.

Land-use during the Saxon period is evidenced in a charter of 883AD, which establishes grazing rights over an area encompassing part of Durdham Down (BCC 2006). Domesday Book records established settlements at Harry Stoke, Horfield and Clifton, which suggests these were in existence by at least the later Saxon period.

The northernmost section of the pipeline route extends to the SE of Stanley Farm (WA39) (ST 60826 77882), a farmstead/settlement site of probable medieval origins. The earliest documentary reference to Stanley Farm (as 'Stanlegh', denoting a 'stony clearing') occurs in a reference in the Hundred Rolls of 1275 (Smith, 1964, 140), implying that the site had been occupied since the 13<sup>th</sup> century, although the existing 'model-farm' buildings were constructed between in 1860 by George Godwin for Thomas Proctor of nearby Wallscourt Farm (Verey & Brooks, 2002, 693).

During the medieval period, Durdham Down (WA46) served principally as common grazing for the manor of Henbury, although court leases also record small-scale industrial usage, such as quarrying, lime-processing and lead-mining. Manorial history appears to be characterised by a range of divisions and changes of ownership (BCC 2006). Existing boundary stones in places mark the limits the manor. Although its precise location is currently unknown, the medieval Chapel of the Holy Cross (WA44), which is documented in the 1480s, appears to be close to the pipeline route near the Water Tower on Durdham Down (Wessex Archaeology 2011).

## Post-Medieval

During the 18<sup>th</sup> century, Durdham Down achieved a degree of notoriety as the haunt of petty thieves and footpads and underpaid colliers from Kingswood; the miners opposed the turnpiking of the Down in 1727 and vandalised tollgates connecting Westbury and Stoke Bishop. Troops were called in to restore order but the gates were demolished for a second time 'by men disguised in women's clothes and wearing high-crowned hats' in imitation of the 'daughters of Rebecca' rioters of South Wales. With the development of nearby Hotwells as a spa - modelled on Bath but failing to attain its status - the Downs began to attract visitors engaged in a variety of leisure pursuits, such as riding, horseracing and cricket. Fairs were common, as were prize-fighting bouts, bull-baiting contests, cock-fighting and wrestling (Pascoe 1985, 31).

The post-medieval period saw the existing manorial possessions subject to reorganisation and changes of ownership. During the late 18<sup>th</sup>- early 19<sup>th</sup> century, the Downs began to contract due to the piecemeal spread of residential development and the leasing of areas for small-scale industrial extractive activity, including lead-mining and limestone quarrying, although the character of the landscape remained largely agricultural. Enclosure of the landscape of Durdham Down appears to have been complete by the mid-19<sup>th</sup> century and it



was eventually purchased by the City of Bristol from the Lord of the Manor of Henbury for the sum of £15,000 by means of the Clifton and Durdham Downs (Bristol) Act 1861.

## 4. Methodology

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The archaeological programme of work detailed herein was carried out in accordance with recognised sources of professional guidance including *Standard and Guidance for an archaeological watching brief* (IfA 2008), *Standard and Guidance for archaeological excavation* (IfA 2008) and *Management of Research Projects in the Historic Environment (MoRPHE)* (EH 2006). Reference is also made to the relevant English Heritage Historic Environment Local Management (HELM) resources. Border Archaeology adheres to the IfA *Code of conduct* (2012) and *Code of approved practice for the regulation of contractual arrangements in field archaeology* (2008) and work was carried out in compliance with Bristol Water's *Code of Conduct*. Areas subject to archaeological monitoring were detailed in the Written Scheme of Investigation submitted for approval by Border Archaeology to Bob Jones, City Archaeologist, Bristol City Council and David Evans, Historic Environment Record Officer, South Gloucestershire Council, prior to the commencement of engineering works.

In summary Border Archaeology observed the following sections of the pipeline route:

1. Durdham Down between the Site Compound area (centred on ST 57236 75505) and the Water Tower / Stoke Road (ST 57196 74916) to investigate the potential for multi-period archaeological remains, possibly including evidence for the following:

- An extensive field system noted on aerial photographs. Grinsell (1958, 142) refers to these as being of probable prehistoric and Romano-British date. It was considered possible that components extending up to the W side of Westbury Road may be encountered
- Evidence of the 14-mile stretch of Roman road linking Bath and Sea Mills, which passes through N Bristol to Durdham Down. The course of the road has been identified in the vicinity of the route at one specified location while subsequent investigations in the vicinity have failed to identify definite evidence for the road.
- The medieval Chapel of the Holy Cross as documented in the 1480s. Although its precise location is currently unknown it appears to be in close proximity to the pipeline route near the Water Tower (Wessex Archaeology 2011).
- Evidence of small-scale industrial usage, quarrying, lime-processing and lead-mining.

2. Stanley Farm Stoke Gifford (ST 60826 77882). Observation between ST 61327 78152 and ST 60716 77768 to investigate potential for medieval settlement

3. Horfield Leisure Centre between ST 59707 77525 and ST 59448 77317

4. Granny Down between ST 57344 75718 and ST 57270 75548

5. Clifton Down between ST 57147 74915 and 57186 74717



## 5. Results

Each area investigated by Border Archaeology is discussed separately in detail, prefaced by a summary outlining the results of the archaeological work undertaken.

### 5.1 DURDHAM DOWN - SITE COMPOUND AREA

#### Summary

Construction of a site compound in the NE corner of Durdham Down necessitated the removal of topsoil which exposed extensive evidence of post-medieval refuse disposal in the form of pottery, oyster shell, ash and cinder typical of domestic waste of that period deposited either directly on the surface or in shallow scoops. Another feature, probably representing hard-standing for a temporary structure of some kind, contained post-medieval pottery and a lead-alloy toy cannon of probable 18<sup>th</sup> or 19<sup>th</sup> century date. Of particular interest, however, was the discovery within limestone quarry rubble of an almost complete lower portion of a Roman rotary quern of a type used for grinding from the 1<sup>st</sup> century AD onwards. The type of quartz conglomerate used in its manufacture outcrops some 5km distant. Unfortunately, as it was not found within a sealed dated context, it is unclear precisely where the object originated or when it was deposited.



Fig. 1: Location plan showing Site Compound at the junction of Parry's Lane and Westbury Road





## Results

A site located at the junction of Parry's Lane and Westbury Road (centred on ST 57236 75505) was prepared for use as a fenced Compound for car-parking, storage, offices, access roads and paths; a piped water supply was installed from Westbury Road to the office area at the northern end of the Compound. Ground works comprised initial machine stripping of the Compound area and a short section of trenching for the installation of services (**Fig. 1**). All ground works were observed and all finds and features recorded.

Topsoil (486) was excavated to a depth of approximately 0.25m and was generally humic in composition consisting of moderately compact mid-brown clayey silt containing moderate small to medium angular & sub-angular stones, occasional rounded stones, chalk fragments and charcoal; root disturbance was also evident. A mixed assemblage of finds was recovered from (486) consisting of occasional pottery, CBM, glass fragments and fragmentary clay pipe. The underlying subsoil appeared to vary somewhat in composition across the site. Over much of the area, topsoil removal exposed a friable mid greyish-brown clayey silt containing occasional small rounded stones (487); however, in certain locations a light yellowish-brown clayey silt subsoil containing few or no inclusions (488) was revealed. This deposit may relate to a period of use contemporary with the granting of leases for small-scale post-medieval industrial extractive activity, including lead-mining and limestone quarrying.

A number of features were revealed, all of which appeared to be either post-medieval or modern in date (**Fig.2**). These are discussed below in relation to the respective functional components of the Compound in which they were found and chiefly consisted of spreads of domestic refuse possibly associated with the quarrying activity documented on Durdham Down from the 18<sup>th</sup> century through to the mid-1870s or with the fairs, military displays or sporting events which have been held on the Down from the 18<sup>th</sup> century up to the present day. The majority of the finds were post-medieval, with one notable exception discussed below, and can be broadly characterised as domestic waste, comprising a mixed assemblage of pottery largely ranging in date from the late 17<sup>th</sup> to early 19<sup>th</sup> century, fragmentary clay pipe stems, animal bone and oyster shell.

Assessment of this material examined 20 sherds (837g) which were identified as post-medieval wares ranging broadly in date from the late 17<sup>th</sup> to the early 19<sup>th</sup> century and included typical Bristol products, namely, Bristol/Staffordshire slip wares, 'tiger'-glazed local stoneware and black basalt stoneware (1750s-1820s), although plain lead-glazed wares were the most numerous. Two sherds of medieval pottery were found consisting of Ham Green coarse wares of the 12<sup>th</sup>-13<sup>th</sup> centuries, which were unglazed and exhibited clear evidence of sooting/burning.

Of considerable interest was a near complete early Roman lower rotary quern recovered from within limestone rubble in the car-park area (**Plate 9**). The piece was exceptionally thick (110mm), with a very slightly convex base and splayed edges. It was partially perforated with dimensions 120mm × 120mm × 25mm and its form appeared comparable to the type 1b beehive quern (Shaffrey 2006; Fig. 4.19), which occurs most frequently in early Roman contexts and is not found later than the 2<sup>nd</sup>-3<sup>rd</sup> century (Shaffrey, 2006, 42). The geological character of the piece compares with a type of quartz conglomerate from the Devonian of the Bristol/Forest of Dean Area and was evidently imported from outcrops at least 5km away to the W at Lydiard Trigorze or Wootton Bassett.



### 5.1.1 Area 1 Storage bays

The eastern half of the site was divided into three square bays delineated by deposits of topsoil. Several post-medieval features were revealed at the stripped level. Towards the northern extent of the storage bay area (ST 57248 75497) was what initially appeared to be a capping deposit (489) for a pit or similar feature, its visible extent measuring approximately 2.2m (N-S) × 2.3m (E-W) × 0.2m (**Plates 1 & 2**). The deposit consisted of compacted medium to large angular and sub-angular limestone fragments within friable dark greyish-brown clayey silt and this produced occasional pottery, clay pipe and a single, heavily abraded copper alloy halfpenny of George III dated to 1798 or 1799. Several fragments of a lead-alloy toy cannon, broadly datable to the 18<sup>th</sup> or 19<sup>th</sup> century, were recovered from the same deposit.

Further investigation, however, revealed no evidence of a cut and (489) was found to comprise a concentration of stones bedded within subsoil (487), possibly to create a post-pad or other structural support. A second feature (490) was located at NGR ST 57239 75480 within the second bay and comprised a poorly defined, roughly ovoid stony spread containing post-medieval pottery and charcoal (**Plate 3**). The deposit consisted of mid to dark greyish-brown clayey silt with small-medium sub-angular stones, incorporating chalk inclusions and measuring approximately 2.9m (N-S) × 2.5m (E-W).



*Plate 1: View S showing compacted stony deposit (489)*



*Plate 2: Detail of compacted stony deposit (489)*



*Plate 3: View N showing disturbed stone/pottery spread (490)*

A third feature (491) was located at NGR ST 57236 75471, SW of (490), and was also within the second bay. This consisted of a roughly ovoid spread of medium to large angular and sub-angular limestone fragments within a friable mid-greyish-brown clayey-silt matrix containing occasional post-medieval pottery and CBM (**Plate 4**). The feature extended over an area of some 3.20m (N-S) × 1.70m (E-W).



*Plate 4: View W showing heavily disturbed stone spread/capping deposit (491)*



*Plate 5: Detail showing composition of (494)*



A sub-ovoid spread of post-medieval domestic waste (494) measuring 9m × 5m × 0.24m was revealed in the southernmost bay (ST 57244 75465) consisting of compacted mid brownish-grey clayey silt interspersed with isolated 1-2mm charcoal fragments. Frequent oyster shell was mixed with fragmentary post-medieval pottery and clay-pipe stems to give the character of a typical household waste deposit (**Plate 5**). The absence of a cut suggested the material had been dispersed and compressed into the underlying soil by subsequent activity.

Feature (492) (**Plate 6**) was revealed at the southern extent of the Compound to the W of the storage bay area (NGR ST 57210 75458) and consisted of moderately compact to firm dark greyish-brown clayey silt containing frequent charcoal inclusions, small to medium sized angular and sub-angular stones, post-medieval pottery, CBM & oyster shell, together with occasional clay pipe fragments. This again would appear to represent a dump of post-medieval domestic refuse.



*Plate 6: Feature (492) looking SW*

Feature (493) (**Plate 7**) was identified at NGR ST 57215 75478 consisting of moderately compact to firm dark greyish-brown clayey silt containing frequent charcoal, post-medieval glazed pottery, willow pattern porcelain and CBM, moderate oyster shell and occasional animal bone. This measured approximately 3.50m (NNE-SSW) × 2.80m (WNW-ESE) × 0.10-0.15m



*Plate 7: View SW of compacted pottery spread (493) showing NE-facing section*

A seventh feature (499) (**Plate 8**) occurred at NGR ST 57254 75489 and was a limestone rubble spread within a moderate to firm dark reddish-brown clayey silt with occasional CBM & rare post-medieval pottery. The feature extended over an area of approximately 4.50m (NNE-SSW) × 3.20m × (WNW-ESE) × 0.15m and may be interpreted as part of a metallated path or track or possibly as an area of modern hard-standing.

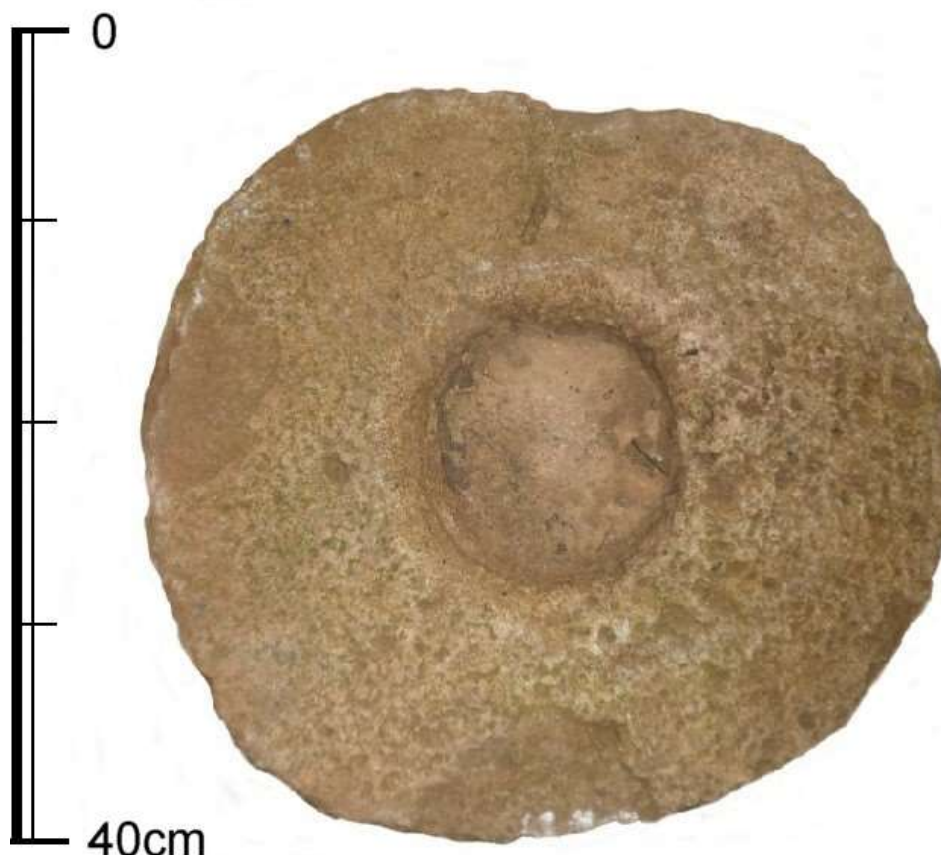


*Plate 8: View S showing limestone rubble spread (499)*



### 5.1.2 Area 2 Car Park

The area designated as car parking was located on the SW side of the Compound (ST 57210 75492). Machine stripping exposed two roughly linear deposits of limestone rubble - (495) & (496) - consisting of large angular blocks of some 0.20-0.70m diameter and measuring 18m × 3.5m and 44m × 7m (maximum width), respectively. A complete lower rotary quern was found at the southern end of (496) (**Plate 9; Appendix 2**). This is typical of querns distributed over a large part of southern and western Britannia from the 1<sup>st</sup> century AD onwards and consisted of worked quartz conglomerate, the closest outcrop of which occurs some 5km distant.



*Plate 9: Near complete early Roman lower rotary quern recovered from within limestone rubble in the car-park area*

### 5.1.3 Area 3 Site office

The office area was located in the NW area of the Compound (ST57213 75423). No significant archaeology was observed. There were similar sub-circular patches of angular limestone blocks as seen in the Area 2 Car Park site.

### 5.1.4 Water pipe trench

A short section of trenching was opened by machine to pipe water from the Westbury Road / Parry's Lane junction to the offices. This was stripped down to a deposit of plastic green silty clay (497) some 400mm below ground level. No archaeology was observed.

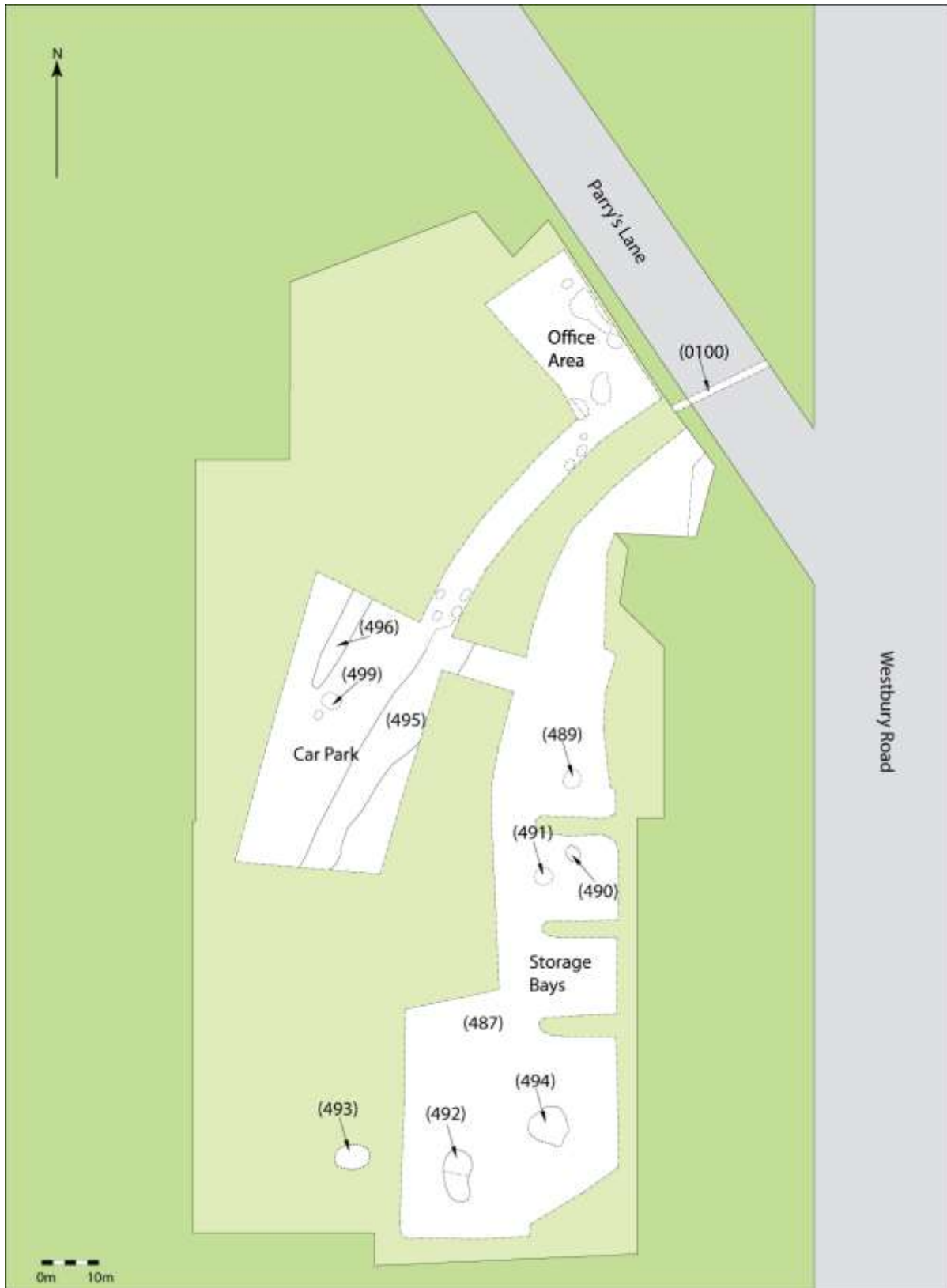


Fig. 2: Plan showing features revealed during the topsoil strip for the Site Compound on Durdham Down





## 5.2 INSPECTION PIT (IP) EXCAVATIONS ON DURDHAM AND CLIFTON DOWNS

### Summary

Five inspection pits were excavated prior to the topsoil strip along the eastern edge of Durdham Down and Clifton Down in May 2012 (**Fig. 3**). The first two pits were devoid of archaeology. Within Pit 3, evidence of a stony deposit probably representing a metalled road or trackway (505=082) was identified in close proximity to the projected alignment of the Roman road from Bath to Sea Mills, marked as the 'via Julia' on the Ordnance Survey 1<sup>st</sup> edition 25 inch map of 1885. The remains of the metalled surface were subject to further detailed investigation and recording, the results of which are presented in Section 5.3. Within Pit 4, the heavily truncated remains of a limestone wall of post-medieval date, possibly associated with nearby quarrying activity were identified.

### Results

Five small inspection pits were excavated on May 3<sup>rd</sup> 2012 at intervals of 250-300m along the course of the pipeline route where this traversed Durdham Down to the S of the Compound (Pits 1-3) and Clifton Down (Pits 4 & 5), the aim being to establish the depth of bedrock for engineering purposes.

#### 5.2.1 Pit 1 (NGR ST 57242 75480)

Measuring 0.60m × 0.40m × 0.88m, the pit revealed a friable dark brown sandy loam with occasional small angular stones to a depth of 0.10m (100) (**Plate 10**). Beneath this was a subsoil deposit (501) composed of firm/moderately compact brown sandy clay some 0.09m in thickness, underlying which was a sterile natural deposit of plastic reddish-brown clay / alluvium (502) above a bedrock horizon occurring at a depth of approximately 0.88m. No archaeological features or deposits were observed.



Plate 10: View SW showing deposits in Inspection Pit 1

### 5.2.2 Pit 2 (NGR ST 57280 75213)

Pit2 measured 0.65m × 0.45m × 0.88m (**Plate 11**). The topsoil consisted of 0.10m of friable dark brown sandy loam (503) with occasional small rounded / angular stones and charcoal flecking present throughout. Subsoil (501) consisted of mid brown moderately compact sandy clay with no inclusions, which this was found to overlie plastic reddish-brown natural clays (502) above bedrock (504), which was exposed at a depth of 0.88m. No archaeological features or deposits were observed.



Plate 11: View SW of Inspection Pit 2 showing deposits (501)-(504)

### 5.2.3 Pit 3 (NGR ST 57290 74988)

Pit 3 (dimensions 0.40m × 0.20m × 0.10m) was located approximately 60m E of the Water Tower adjacent to the Bristol Water covered reservoir at Stoke Road (**Plate 12**). Excavation was halted at a depth of 0.10m due to the presence of a loose deposit of small to medium angular limestone fragments (+/- 6-10cm) (505=082), at least two of which were set deeply within a friable sandy clay, beneath the topsoil (506).

(505=082) was interpreted as the probable remains of a metalled road or trackway, the date of which was not possible to establish at that point. However, the pit was located close to the projected alignment of a Roman road from Bath to Sea Mills, the course of which is marked on the OS 1<sup>st</sup> edition map of 1885 as extending WNW from the junction of Westbury Road and Redland Road towards the reservoir and then continuing in the same direction across Stoke Road and the southern part of Durdham Down.

The remains of the metallised surface revealed in Pit 3 were subject to a programme of detailed investigation and recording, the results of which are presented in Section 5.3.



Plate 12: View SE showing Inspection Pit 3

#### 5.2.4 Pit 4 (NGR ST 57150 74896)

Pit 4 (dimensions 0.50m × 0.26m × 0.42m) was located approximately 60m SW of the Water Tower and 15m S of Stoke Road (**Plate 13**).

A total of three contexts were identified, the uppermost topsoil deposit (507) comprising a friable very dark grey sandy loam exhibiting occasional CBM, mortar and charcoal flecking and extending to a depth of 0.10m. Underlying this was (508), a semi-compact dark grey coarse / granular deposit with a substantial component of crushed red CBM, buff mortar, charcoal and occasional medium (+/- 10cm) angular stones. This came down onto apparently *in-situ* structural remains (509), possibly representing a masonry wall of coursed angular limestone construction, oriented NE-SW and extending for a distance of about 15m, with a coarse lime mortar cement containing frequent very small inclusions of a black unidentified material.

Although exposed only within the confines of a small *sondage*, it is probable that this stratigraphic sequence represented a building and associated demolition debris. The date and function of limestone wall (509) is uncertain; the coarse nature of the lime mortar bonding might suggest an early post-medieval date although it is difficult to be more precise due to the lack of datable material from the deposit overlying (509).



Plate 13: Inspection Pit 4

#### 5.2.5 Pit 5 (NGR ST 57168 74720)

The final Inspection Pit (dimensions 0.50m × 0.26m × 0.58m) was located approximately 10m W of Upper Belgrave Road within an area of visible earthworks and former lead-workings on Clifton Down (**Plate 14**). The uppermost deposit consisted of friable dark grey sandy loam and occasional charcoal flecking (510) to a depth of some 0.17m. This overlay (511), a 0.20m thick deposit consisting of moderately compact made ground formed from rounded and angular stone fragments with occasional flecks of charcoal and buff mortar, which, in turn, overlay compacted dark grey coarse sandy silt with frequent very small fragments of buff mortar, charcoal and rare burnt stone (512).

Beneath (512) was a reddish-brown sandy silt with frequent small to medium burnt natural stone inclusions and rare mortar flecking (513), which measured 0.12m in thickness. A horizontal mid grey compacted coarse cemented sandy deposit (514) was then revealed (**Plate 15**), which contained frequent charcoal and (buff) mortar flecking to create an impression of burning. The required engineering depth having been reached at this point, no further excavation took place; consequently it was not possible to determine the full depth and extent of (514).



*Plate 14: Inspection Pit 5*



*Plate 15: Base of Inspection Pit 5 showing deposit (514)*



Fig. 3: Scheme plan showing easement route and location of areas of further investigation & recording in the NE corner of Durdham Down (Area 1) and to the E of the Water Tower on Stoke Road (Area 2)



### 5.3 DURDHAM DOWN – TOPSOIL STRIP AND FURTHER INVESTIGATIONS

#### Summary

*Topsoil stripping along the line of the pipeline easement on Durdham Down revealed a small quantity of prehistoric worked flint in the topsoil and subsoil deposits, including a blade and core fragment of probable Mesolithic date.*

*Evidence of a metalled surface (067) of probable early to mid-19<sup>th</sup> century date was also revealed during the topsoil strip in the NE corner of Durdham Down just to the S of the Site Compound which was subject to further investigation and recording. Historic mapping indicates that the metalled surface can be identified with a trackway shown on Ashmead's map of 1855 linking a former quarry site with Westbury Road.*

*Further investigation was undertaken on another metalled surface identified to the E of the Water Tower on Durdham Down, which appeared to form part of a road or track running along the projected line of the Roman road linking Bath and Sea Mills, a section of which located some 240m to the west had been subject to archaeological investigation in 1899 (and which still survives as a raised earthwork).*

*This section of road appears to correspond to a 'stony track' described in this location by the early 19<sup>th</sup> century antiquarian Samuel Seyer, who associated this feature with the earthwork remains of the Roman road visible further to the W.*

*However, comparison of the previous excavation results with the profile of the road where it crossed the pipeline easement revealed marked differences in terms of construction and, although it adhered closely to the presumed alignment of the road as it travelled E towards Westbury Road, this latter section, in its present form, appeared more likely to represent a trackway of medieval or post-medieval date built on the line of the Roman road, although it could well have incorporated metalling from the original Roman road construction.*

*It is possible that the track may have been disturbed or partially exposed by activity associated with the construction of the nearby Water Tower on Stoke Road in 1954*



### 5.3.1 Topsoil strip of easement

Following the excavation of the inspection pits, a topsoil strip was undertaken along the easement of the proposed pipeline route to a pre-determined engineering depth of approximately 0.20m (**Fig. 3**). The pipeline easement extended approximately 450m from the Bristol Water Site Compound in a SSE direction turning SW at roughly ST 57303 75063 and continuing for a further 200m to its termination at the Water Tower on Stoke Road. An access way was also excavated from the eastern side of the Compound onto the easement. This revealed no archaeological deposits (**Plate 16**).

Within the easement, topsoil (001) overlay all deposits. Natural silty clays (002) and the limestone bedrock (003) formed the majority of the deposits below topsoil (001). All features were cut into these deposits, although other areas of natural, such as (004), (009) and (085), were also present.

Two distinct areas of metalling were revealed along the course of the topsoil strip and these were subject to separate programmes of archaeological investigation and are discussed separately below.

Area 1 (NGR ST 57230 75395) consisted of a metalled surface (067) running NNW/SSE across the easement at its northern end, immediately S of the Site Compound,

Area 2 (NGR ST 57230 74955) comprised a roughly metalled surface (082) oriented WNW-ESE, as revealed initially in Inspection Pit 3, which lay in the immediate vicinity of the known course of the Roman road, to the E of the concrete Water Tower constructed in 1954.



*Plate 16: View E showing access way from the Compound onto the easement*



The uppermost deposit (001) was a modern topsoil consisting of humic, moderately compact or loose dark brownish-black silty clay with frequent root intrusions and occasional small angular stones, extending to a depth of 0.05-0.15m. A subsoil deposit (063) was also exposed over much of the excavated area, consisting of moderately compact mid brown clayey silt. A number of finds were recovered from this deposit. These included a partially intact, debased Spanish colonial silver *real* coin of King Philip II, minted in Potosi (Bolivia), Potosi being the location of the Spanish colonial mint and the coin being minted exclusively for colonial use. The date was missing but analysis of the remaining detail appears to suggest a date range of c.1575-1580 (**Plate 17; Appendix 4**).



*Plate 17: partially intact debased Spanish colonial silver real coin (reverse)*

A very heavily worn copper halfpenny of George III (probable date of issue 1798 or 1799) and a heavily defaced copper third farthing of Queen Victoria probably issued in 1844 and minted exclusively for use in Malta were also recovered. None of these finds was recovered from a stratified deposit.

A number of scattered flint finds were also recovered, seven from deposit (063) and two from the topsoil strip (**Plate 18; Appendix 3**). These appear to include a small Mesolithic component including a heavily patinated blade/bladelet, a bi-directional core and the bladelet found within the topsoil. One particularly interesting pieces (SF5) (*pictured below left*) shows some evidence of retouch along one lateral edge. The long narrow negative flake scars observable on its dorsal side could indicate Late Upper Palaeolithic flint working, although the thickness of this piece would appear not to be consistent with other tools in this tradition and there is a distinct lack of patination. Alternatively, the piece may be Neolithic, when the use of blade technology was still very much in use.



*Plate 18: Selection of flint finds recovered from the pipeline easement (SF5 on left)*

Underlying (063) was a plastic light yellowish-green silty clay (002) comprising an undulating natural clay deposit. Where bedrock (003) was revealed this was found to be overlain in places by moderately compact light yellowish-brown silty clay containing occasional large angular stones (004), which appeared to have formed in natural undulations in the bedrock.



*Fig. 4: Plan of miscellaneous features revealed during topsoil strip of easement on Durdham Down (A3 page)*



*Fig. 5: Sections through miscellaneous features identified during topsoil strip of easement on Durdham Down (A3 page)*

### 5.3.2 Miscellaneous late 19<sup>th</sup>-20<sup>th</sup> century features identified during topsoil strip of easement

A small number of cut features/debris spreads of late 19<sup>th</sup>-20<sup>th</sup> century date, viewed as being of low significance in archaeological terms, were recorded during the course of topsoil removal underlying (001); these were all located along a short section of the easement opposite Durdham Park, roughly midway between the Site Compound and the Water Tower (**Figs. 4 & 5**).

The first of these was a loose spread of dark brownish-black clayey silt (005) (**Plate 19**) measuring approximately 5m x 3.5m containing frequent angular stones together with a mixed deposit of glass, oyster shell and late post-medieval glazed ceramics and china, the material being very similar to the spreads of domestic refuse revealed during topsoil removal in the Compound area.



*Plate 19: View W showing spread of domestic refuse (005)*

Service trench [008] (**Plate 20**) was orientated NE/SW across the NE end of Durdham Down and parallel to drainage trench [011]. The lower fill (007) was of re-deposited natural while the upper fill (006) was a dipping of the topsoil into the hollow in the top of [008]. Drainage trench [011] (**Plate 21**) was orientated NE/SW across the NE end of Durdham Down and parallel to service trench [008]. It measured some 0.5m wide. The lower fill (064) was re-deposited natural while the upper fill (010) was again a dipping of the topsoil into the hollow in the top of [011].



*Plate 20: Service trench [008]*



*Plate 21: Drainage trench [011]*



Modern linear [014] ran W/E towards the centre NE of Durdham Down and measured 8m (as visible within the width of the easement) x 0.56m x 0.28m. The feature revealed a sharp break of slope top and bottom, vertical sides and a flat base. The fill (015) was of re-deposited material, consisting of moderately compact dark yellow silty clay with brown and greenish mottling, with occasional stones, these becoming more frequent to the W. This appeared to be backfill for a service trench, although no pipe was encountered. Concrete deposit (016) was located close to [014]. The deposit was of broken modern concrete, road-stone and broken glass which appeared to have been dumped in recent years.

Modern, tarmac-filled postholes [017], [019], [021], [023], [025], [027], [029], [031], [033], [035], [037], [039], [041], [043], [045], [047], [049], [051], [053], [055], [057], [059] and [061] were distributed in a roughly linear N/S arrangement towards the centre-NE of Durdham Down. These ranged from 0.18 to 0.56m across. Although not always visible, due to the features having been backfilled and packed with re-deposited natural, the postholes were generally similar in form, although [023] and [025] were squarer in plan and larger, measuring 0.50m N/S x 0.56m E/W x 0.22m [023] and 0.44m N/S x 0.40m E/W x 0.26m [025]. The upper part of a post pipe was clearly visible as a circular patch of tarmac within the centre or off-set with respect to the centre of the square postholes. The silty lower limits of the post-pipe were visible in places, although re-deposited natural packing had often collapsed back into the space.

It is likely that these postholes related to recent structures on the Downs associated with a temporary event such as the annual Bristol Flower Show. It is probable that they were dug, the post set-in and the hole backfilled with the up-cast material. The area around was then likely surfaced with road-stone and tarmac. Before the packing material had consolidated, the posts were removed and much backfilled material collapsed back into the post-pipe void. However, a depression remained at the top of the post-pipe and this was filled by the tarmac deposits that were subsequently so noticeable. The fills, (018), (020), (022), (024), (026), (028), (030), (032), (034), (036), (038), (040), (042), (044), (046), (048), (050), (052), (054), (056), (058), (060) and (062), respectively, encompassed both the re-deposited packing backfill and the tarmac central post-pipes.

A feature interpreted as a modern flower bed or garden display fixture (012, [013]), was identified towards the centre of Durdham Down, near to an alignment of brick (**Plates 22 & 23**). This consisted of a circular, stone-lined vertical cut [013] of 2.5m diameter apparently associated with the remains a semi-circular brick construction immediately to the S and an alignment of modern brick to the E. Cut [013] was filled by loose, very humic dark brownish-black clayey silt leavened with bark mulch and containing occasional stones (012). A plastic label identifying a shrub and bearing a price was found within (012) and suggests a very recent date, probably within the last decade. Another such feature consisted of a circular cut of roughly 1.0m in diameter and 0.28m depth with a moderate break of slope at the top and concave sides breaking to a flat base [066]. Pit [066] was located towards the central section of the easement and was close enough to the presumed garden feature [013] to suggest that the modern fill (065), consisting of a moderately compact mid yellow silty clay with brown/red mottling and containing occasional polystyrene fragments and frequent charcoal (**Plate 24**), related to a similar event(s).



Plate 22: Feature [066]



Plate 23: View E showing circular feature [013]





*Plate 24: View E of feature [013] partially excavated to reveal stone base*

### 5.3.3 Area 1: Investigation of metalled roadway (067) (Figs. 6 & 7)

An earlier feature comprising a metalled surface (067) located at the NE end of the easement was subject to further archaeological investigation and is interpreted as a track of probable mid-19<sup>th</sup> century date linking a former quarry site on Durdham Down with Westbury Road to the E. This interpretation is based both on the archaeological evidence and historic mapping, in particular the Westbury tithe map of 1844 and Ashmead's plans of 1855 and 1874. Surface (067) appears likely to have been re-laid multiple times and was clearly extended to the SW in the Victorian period and resurfaced with (081), a 6m x 3m area of compact dark grey silty sand containing very frequent small angular (though worn) stones, towards the end of its life (**Plate 25**).



*Plate 25: View NW of metalled surface (067) showing linear features [070] & [075]*

The road ran NNW/SSE, with a smooth, firm upper surface (067) of angular stone cobbles. This surface measured approximately 6.0m in width and some 0.10m thick and was composed of very frequent angular stone up to 0.08m in size but generally around 0.04m. Post-medieval finds, including iron nails and late Victorian pottery recovered from the silty sand incorporated within the stones, probably date the latest reworking of the upper surface (067), which appears to have been re-laid on a number of occasions, especially following extension of the road to the SW and NE during the early Victorian period (as attested by the finds assemblages recovered from the associated deposits). A stony layer (068) below the surface cobbles (067) comprised the bulk of the road construction material and was likely to represent the earliest part of the road, with multiple phases of resurfacing, as represented by (067).



Underlying (068) was a deposit of road foundation material (069), comprising moderate to firm dark yellowish-brown silty sand with very occasional stones measuring 8.0m wide and 0.20m thick. Finds of dark blue bottle glass were recovered from the NE side of the feature rather than from the main body of the material and thus might not serve to date the deposit in its entirety, although an 18<sup>th</sup> century date has been assigned. However, such an early date would appear to conflict with the historic map evidence suggesting that the metalled surface was associated with a quarry road of mid-19<sup>th</sup> century date.

Two contemporary linear features [070], [075] were clearly visible in the surface of (067) (**Plates 25 & 26**). The first of these [070] ran NW/SE and was 0.80m wide with a depth of 0.50m. The break of slope at the top of the feature was sharp and the sides near vertical at around 70° breaking gradually to a concave base. Four fills were identified, the basal fill (071) being roughly 0.20m thick and consisting of moderately compact dark yellowish-brown sandy silt with occasional small stones. Overlying this was (072), a 0.20m-thick consolidated mid yellowish-white gritty coarse sand with patches of dark grey and blue and moderate stone inclusions. Above this was (073), a moderately compact dark reddish-brown silty sand with moderate stone inclusions and again a thickness of around 0.20m. The upper fill (074) consisted of consolidated light brownish-grey silty sand with occasional stones.



*Plate 26: View NW of slot through metalled surface (067)*

Linear [075] was again aligned NW/SE and was 0.70m wide and 0.50m deep. The profile was similar to that of [071], although the sides were perhaps closer to 80° than 70°. They differed to the extent that, with respect to [075], no scar line was visible in (067) and [075] was also situated on the side of the Victorian extension. Additionally, the SW side of [075] was difficult to define. The basal fill of [075] was a moderately compact dark yellowish-brown sandy silt (076) of 0.30m thickness with occasional small and large stones. The silty nature of



this basal deposit suggests [075] might have been open for some time. This fill appeared to merge with (080), a moderately compact to firm dark yellowish-brown silty sand with occasional stones and measuring around 0.30m thick. It may be that (080) was another fill of [075]; however, it appears more likely that it represents a deposit rather than a fill and may well be a continuation of (068).

Above (076) was (077), a consolidated light grey gritty coarse sand with dark grey patches of 0.20m thickness with moderate stone inclusions. Overlying (077) was (078), a moderately compact to firm light red silty sand with moderate stone inclusions and a depth of around 0.10m. Overlying (080) was (079), a moderately compact dark grey to black silty sand incorporating fine mortar particles and charcoal together with a very mixed assemblage of post-medieval pottery, CBM, glass and metal and a small quantity of fragmented animal bone. This appears to have been make-up or hard-core material deposited prior to the laying of (067) on the SW side of the road, the nature of the finds suggesting an early Victorian date. It is probable that [075] cut the deposit, thereby removing the edge of the extension where it would have met (068)/(067).

The precise relationship of [070] and [075] to the road surface is not entirely clear. Their function too presents something of a puzzle. They do not appear to have contained any form of pipework or cabling and they are rather too deep to be wheel ruts; the vertical sides also militate against this interpretation. The basal fills (071), (076) were of a silty composition, as if accumulated within an open ditch. However, their position with respect to the surfacing and make-up material suggests they did not represent roadside ditches; moreover, they were only 1.0m apart. It is not even certain that they were contemporary; although their fills were similar, they were not identical. However, they were clearly backfilled when the roadway was still in use. The fills of hardcore (072), (073), (074), (077), (078) attest to the importance of retaining the road as a solid surface.

Deposit (005) was located towards the NE end of Durdham Down, just to the SW of metalled surface (067). Early 20<sup>th</sup> century domestic waste predominated and the spread appeared to be the result of tipping as the easement ran close by and parallel to the modern road at this point.

The track is clearly shown on Ashmead's 1855 plan as broadly a linear feature linking a quarry immediately to the W with Westbury Road. Interestingly, however, the map evidence would appear slightly inconsistent with the archaeological results. Whilst the quarry is shown on the earlier tithe map of Westbury parish dated 1844, no indication of a track is shown; moreover, by the time of Ashmead's 1874 plan neither the track nor the quarry is present (*Plate 49*). It would thus appear either that the track did not exist at the time of the tithe survey or that the feature was simply not recorded, perhaps because of its evidently temporary and ephemeral nature. What seems more certain is that by 1877, the track was no longer visible. As Ashmead drew up both the 1855 and 1874 plan, it would appear unlikely that he would have omitted the track from his later survey had it been an extant feature at this time. In this case, the late Victorian finds impressed into the silty material within (067) may be regarded as intrusive.



*Fig. 6: Area 1 - Plan showing metallated trackway (067) and adjacent features identified in easement to S of Site Compound (A3 page)*



*Fig. 7: Area 1 - Section through metalled trackway (067) identified in easement to S of Site Compound (A3 page)*



#### 5.3.4 Area 2: Investigation of metalled surface (082) to E of Water Tower (Figs. 8 & 9)

A second metalled surface (082) was identified within the southern part of the study area on Durdham Down, close to the known alignment of the Roman road linking Bath (*Aquae Sulis*) to the port at Sea Mills (*Abonae*). A section of road survives as an earthwork approximately 240m W of the pipeline route and is a Scheduled Monument. This stretch of road has been subject to both excavation and earthwork survey and several watching briefs and evaluations have sought to identify its eastward continuation.

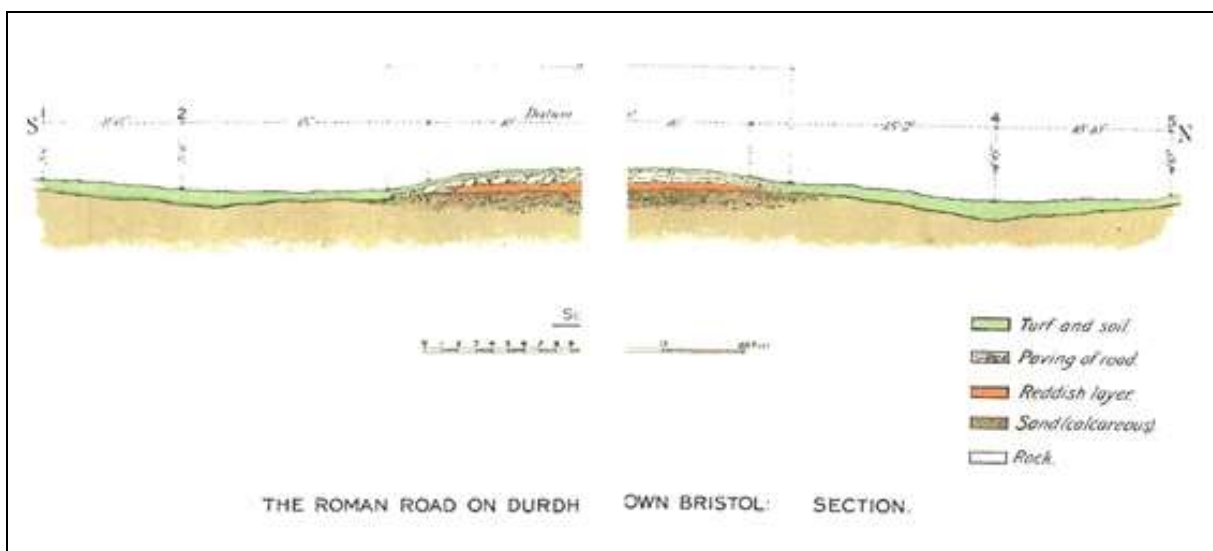


Plate 27: Section through the Roman road on Durdham Down recorded during excavations by C. Trice-Martin in 1899

Details of its construction were reported in 1900 following fieldwork investigations of the earthwork feature in 1899 (Trice-Martin 1900, 309-11) (**Plate 27**). It was reported that 'here immediately under the turf, or some three inches [7.6cm] below the surface, we found a continuous layer of rough, big stones, of somewhat varying size, the actual measurements of a fairly representative stone being 10in. by 8in. by 7in. [25.5 × 20.3 × 17.8cm]. These stones were firmly bedded, with occasional smaller stones set up on end between them, on a layer some six inches [15.2cm] deep of reddish-looking earth. Under this reddish soil again was a foot [0.3m] of sandy earth with fragments of limestone embedded in it' (Trice-Martin, 1900, 310).

Several sections were taken through the road and all revealed broadly similar results. The sandy material was found only beneath the roadway and it was thus concluded that it had been intentionally laid as foundation material. The estimated width of the road was 20-25ft (7-7.6m).



*Plate 28: View WNW showing section through surface (082)*

The section of roadway (082) identified crossing the present easement to the E of the Water Tower appeared to run on a similar alignment to the earthwork remains located to the W of the pipeline route and thus appeared possibly to represent an eastward continuation (**Plates 28 & 29**).

Subsequent investigation however initially cast some degree of doubt on the antiquity of the remains. The surface (082) was aligned approximately WNW/ESE and comprised moderately compact to loose grey limestone fragments ranging in size and form from large rounded stones of some 40cm diameter to small angular components around 2cm in size. The majority of the surfacing material however comprised sub-angular stones of approximately 8cm in size. The deposit was 20cm thick and 6-7m wide, being slightly wider at the NW end, and the exposed section extended for approximately 12m across the easement.

Two 'wheel-ruts' were clearly visible on the eastern side of the surface which contained an assemblage of exclusively modern finds, including china, glass iron nails, aluminium tags and wire (no plastic was present) embedded in the topsoil deposit compressed into the ruts (**Plates 29 & 30**). The roadway was truncated to the S by modern service trenching and was heavily impacted to the W by the dumping of modern building rubble. What appeared to be original irregularities were noted on the eastern side of (082). Allowing for these truncations, the position of the ruts off-centre to the E was confirmed; the features showed no evidence of infilling or repair.





*Fig. 8: Area 2 - Plan showing metalled trackway (082) and adjacent features identified in easement to E of Water Tower (A3 page)*



*Fig. 9: Area 2 - Section through metalled trackway (082)  
identified in easement to E of Water Tower (A3 page)*



*Plate 29: View NW of section through (082) showing detail of construction*

Underlying upper surface (082) was what appeared to be a layer of re-deposited natural (083), a moderately compact to firm yellowish-red sandy clay characterised by brown mottling and devoid of inclusions except for possible manganese flecking (**Plates 29 & 30**). The deposit was 20-30cm thick and 7m wide, extending the full length of the exposed section of roadway. The width of (083) slightly exceeded that of (082).

Beneath (083) was a further deposit of construction material (084) consisting of moderately compact to loose stone-free light yellow clayey sand possibly exhibiting slight charcoal flecking although the flecks may well have been manganese rather than charcoal. The high sand content of (084) suggested this material had been deliberately laid for construction purposes and was not merely the result of water action reworking natural. The natural itself (085) consisted of compact orangey-red sandy clay containing no inclusions. Thus it would appear that (084) was laid above (085) and that re-deposited natural (083) was then placed over (084) and a single layer of stones (082) bedded-in to form a surface

The form and composition of the road and the absence of any trace of roadside ditches cast some doubt on (082) being of Roman date. Furthermore, the exclusively modern finds assemblage recovered from the surface material, which indicate the possibility of a mid-20<sup>th</sup> century construction date, are of concern and may be regarded as somewhat problematic. A possible hypothesis is that the metalled surface was laid down to accommodate site traffic during construction of the Water Tower in 1954, and the absence of repairs or infilling of the wheel ruts suggests a limited life consistent with it being a temporary metalled road or track.



*Plate 30: View WNW showing composition of deposits underlying surface (082)*

**However, other strands of evidence very much militate against this interpretation.** The finds could represent a date at which the surface was last exposed and perhaps when the wheel-ruts were formed, as they appear to have been found only within these wheel tracks. It is thus quite possible that these finds were intrusive, resulting from modern ground disturbance.

The road's existence at a considerably earlier date is attested in two early 19<sup>th</sup> century antiquarian accounts. The earliest of these is a description given in Coxe's survey of 1801, which details the course of the 'Roman street' as it travels past Redland Court and up onto Durdham Down, crossing en route the road from Clifton, probably identifiable with Upper Belgrave Road close to its intersection with modern Westbury Road, and heading W to intersect with present-day Stoke Road.

The second account of the road by the local antiquary Samuel Seyer, vicar of Horfield (written in 1821) provides a more detailed topographic description. Seyer describes 'an ancient road' crossing the Down in roughly the location of (082) (where he notes a coin of Constantine had previously been found). The road was 'a stony track on the open down having much the appearance of an old causeway, ten or twelve yards wide [9.1-10.9m]' (Seyer 1821, 150), which is somewhat wider than the 7m width of (082), although it should be noted that (082) had evidently been truncated to the S by modern service trenching. In terms of location and alignment, he states that the track left Westbury Road (then described as the turnpike road from Bristol to Westbury) at an oblique angle to run westwards in the direction of Sea Mills. This location is very much consistent with the course of (082).

Moreover, the historic map evidence appears to support an earlier origin for the road. The 1885 OS plan shows the presumed alignment of the 'via Julia' as a dotted line over much of its length but in the location of (082) the alignment is depicted as a double dotted line of the same width as the hachured area representing the scheduled earthwork section of road approximately 240m to the W. This suggests that a linear feature of some description was visible in the location of (082) at the time of the 1885 OS. Taken together, these sources of evidence clearly indicate that the road must be earlier than 1800 and that in 1821 it was regarded as a feature of antiquity although its precise date remains uncertain.

#### 5.3.4 *Archaeological Observation of Pipe Trenching on Durdham Down*

Following the topsoil strip and excavation of all revealed features located on Durdham Down, the pipe trench was excavated to a depth of 1.6m (1.3m below the level of the topsoil strip) under archaeological observation to ensure that any archaeology impacted by the pipeline was identified and recorded. Sample sections were recorded at intervals of 10m along the length of the trench. The excavations exposed subsoil (002) and (063), with natural clays (009) and (004) occurring at around 0.60m with limestone bedrock recorded at between 0.50m and 1.10m, although it was markedly shallower in places (at roughly ST 57241 75475, for example, the bedrock was observed to rise sharply). No features of archaeological significance were revealed, although further spreads of modern material were noted.

## 5.4 STANLEY FARM / BONNINGTON WALK

### Summary

*The substantial remains of a stone-built culvert aligned NNE-SSW were identified in trenching immediately SE of the Council Offices at Stanley Farm. It was not possible to conclusively establish the date of the culvert, although the nature of its construction suggests either a medieval or early post-medieval date.*



Fig. 10: Scheme location plan showing area of groundworks monitored at Stanley Farm/Bonnington Walk

### Results

Archaeological Observation was carried out in the Stanley Farm area from March 6<sup>th</sup> to March 8<sup>th</sup> 2012 (**Fig. 10**). Recorded in trenching adjacent to the Council Offices (NGR ST 60947 77960) were the remains of a well-constructed masonry water culvert [204] of dry-stone construction, aligned NNE-SSW across the NE-SW trench, with a decline to the NNE of  $\pm 5^\circ$  (**Plates 31 & 32, Fig. 11**).



Culvert [204] was cut through natural (209), which underlay subsoil (202). This in turn directly underlay topsoil (201). The base of the feature (208) utilised the natural bedrock, with two dry-stone walls (206) and (207) above. The feature was sealed by limestone capping slabs (205) of rough quarried limestone, presumably from the bedrock base. The walls were randomly coursed from selected, but not dressed limestone which appears to have been sized to fit (**Plate 31; Fig. 11**).

The interior of the culvert (**Plate 32**) was 0.24m high and 0.16m wide and showed evidence of a calcite build-up of +/- 5mm on the bedrock base (208), indicating that the feature had been active, with a low but steady flow rate probably extending over a period of several hundred years. No sediment was noted in the base or cracks between the stones, pointing towards [204] being a spring-fed feature. This suggests domestic rather than industrial usage.

Although no direct dating evidence was recovered, the presence of a calcite accretion and the roughly hewn construction of the culvert suggest that it may have been of medieval or early post-medieval date.



*Plate 31: View SW of masonry culvert [204] (20cm scale)*



*Plate 32: View S showing internal E wall construction of masonry culvert (20cm scale)*

Recording was constrained by the depth of trenching and the presence of shuttering. However, within these constraints it was noted that the uppermost deposit (201) was a moderately compact dark pinkish-brown silty clay with occasional small sub-angular stones, rare medium well-rounded stones and occasional charcoal flecking. The thickness of the topsoil varied across the easement from 0.05-0.13m.

Underlying (201) was a compact undated subsoil (202) composed of mid grey, fading to brown (mottled) clayey silt containing no evident inclusions; the deposit varied in thickness between 0.25m and 0.38m. The cut for the culvert [204] had been made 1.18m deep but was filled by 0.40m of fill (203) above the stone roof (205). The backfill (203) of the culvert feature, which was revealed underlying the subsoil, consisted of firm mid greyish-brown clay, with occasional small to medium very angular limestone fragments towards the lower extent of the fill, above the level of the capping stones (205). This material was seen in section only, extending some 0.70m x 1.35m. The construction cut for the culvert [204] was oriented SSW-NNE and measured 1.18m x +/- 3m. The break of slope at the top was near-vertical (+/- 80°), with sides roughly 80°, becoming vertical towards the base, at which point there was a sharp break to a flat base, as dictated by the form of the bedrock plane (208). Indeed, the use of the bedrock as a base precluded any definite relationship being established between the recorded cut and its use as a construction cut for the culvert.



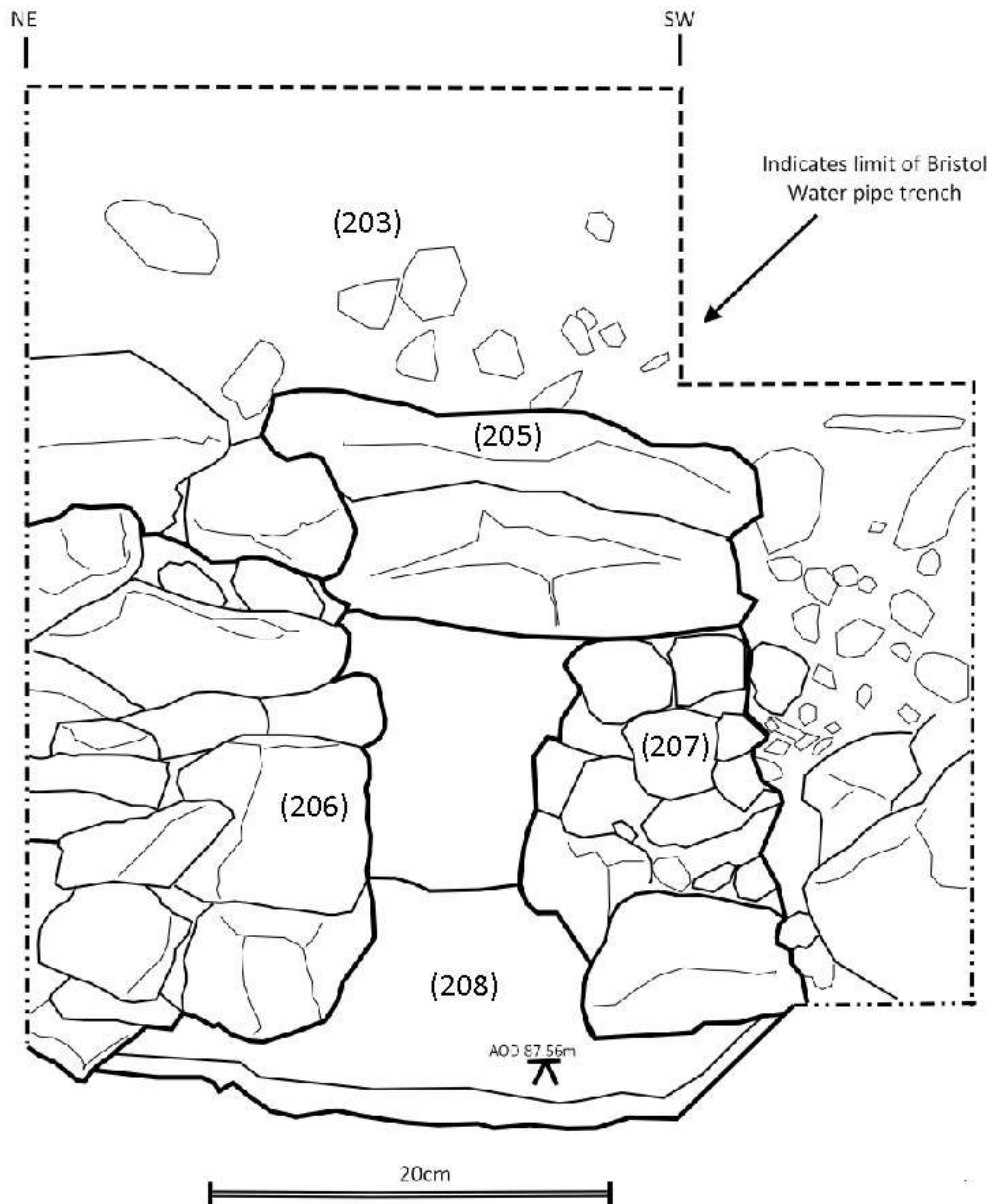


Fig. 11: Elevation of masonry culvert showing detail of construction

## 5.5 HORFIELD LEISURE CENTRE

### Summary

Topsoil stripping around Horfield Leisure Centre recreation grounds was conducted on July 17<sup>th</sup> 2012 and subsequently on August 24<sup>th</sup>, 25<sup>th</sup> and 26<sup>th</sup> 2012. Removal of the 0.15m deep soil cover revealed a number of post-medieval features, the majority evidently being of 19<sup>th</sup> and 20<sup>th</sup> century date. A free-standing 'garden' wall, rubbish pits and a linear ditch were revealed, the presence of which suggest the ground was in use in the late 19<sup>th</sup> century, whilst late 20<sup>th</sup> century postholes, modern plant disturbance and a spread of surfacing materials represent a second period of relatively low-level usage.

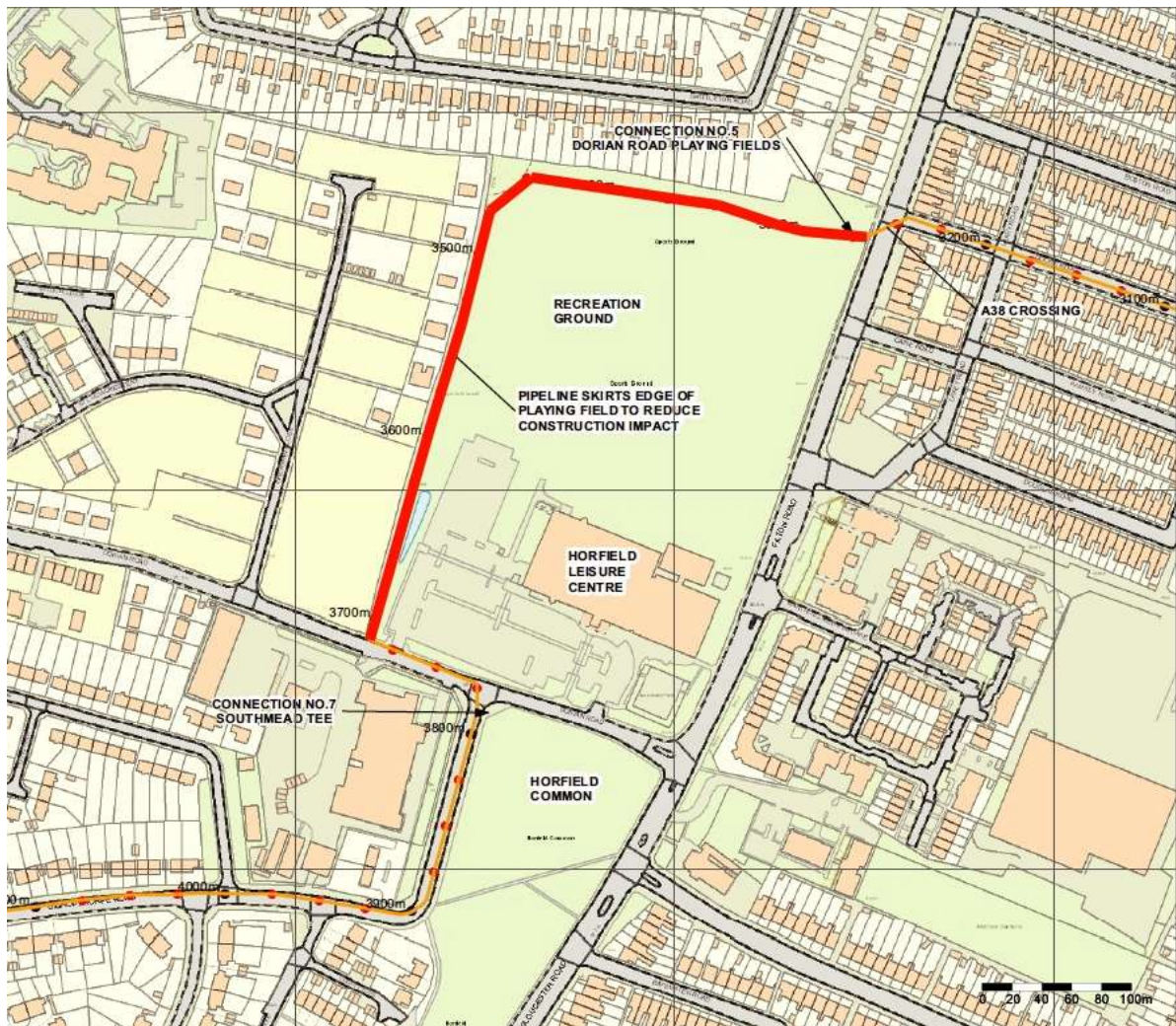


Fig. 12: Scheme location plan showing the location of pipeline works monitored at Horfield Leisure Centre recreation grounds (indicated by a red line)

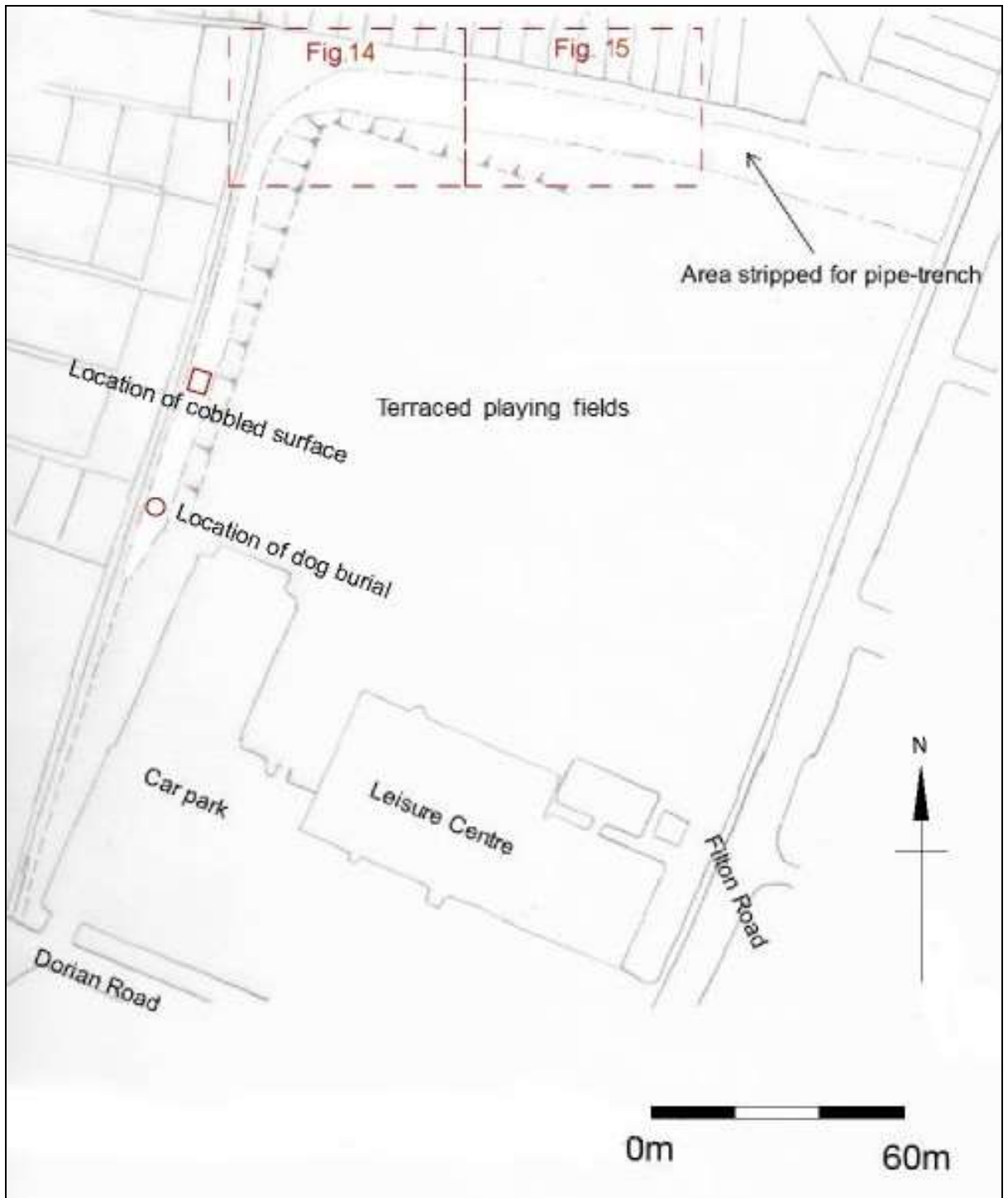


Fig. 13: Plan showing location of features identified during ground works at Horfield Leisure Centre recreation grounds



## Results

This section of the pipeline route followed an 'L'-shaped course between ST 59775 77525 and ST 59450 77321 extending around the northern and western extent of a terraced playing-field area, close to its crest, down the western flank of a moderate slope (**Figs. 12 & 13**). At the northern/eastern end, ground level was consistent with that of the football pitches but, as the route proceeded downhill, it ran along the base of an increasingly steep bank forming the edge of the built terrace above which the football pitches are raised.

A wide strip of topsoil (up to 13m) was removed along the northern part of the route under archaeological supervision. Along the western/southern part of the route, the area stripped area was considerably narrower, up to a maximum of 6m wide (**Plate 33**). The cut of the pipe trench itself was generally >1.5m, with vertical sides, although, at the far NE end, the trench was cut wider with sloping sides to facilitate access to connections with the existing main.

The section of pipe that lay furthest to the SW (running alongside the current car park) was laid without the prior stripping of an area of topsoil to either side. Here, modern disturbance and truncation was prevalent and observation was hampered by very wet ground and the somewhat restricted working area, conditions easing as the pipeline ran N beyond the limits of the car park and around the football pitches.

It became clear that the entire area had been landscaped for the creation of the raised playing-field terrace. The present surface soil (101), which was virtually stone-free and devoid of artefacts, had clearly been laid over a thin layer (102) of loam containing frequent coarse debris. Layer (102) was 0.10m thick or less and contained frequent fragments of 19<sup>th</sup> century ceramic, coal, oyster shell and other domestic debris. It was present across the whole of the observed area and directly overlaid the clean, natural clay substrate (103).



*Plate 33: View SW showing initial topsoil strip in the NE corner of the playing fields. Clean turf and thin topsoil (101) removed to reveal layer (102) (old loam/subsoil & 19<sup>th</sup> century debris)*



Layer (102) had clearly been truncated and probably spread/levelled by machine as part of wider 20<sup>th</sup> century landscaping activity. At the NE extent of the route, near the crest of the hill, this levelling had truncated the underlying clay to some extent, exposing deeper patches of grey clay, into which 20<sup>th</sup> century debris (e.g. glass bottle, brick fragments, plastic cord) had been compressed. Further down-slope, the yellowish weathered upper clay horizon remained intact, with only overlying layer (102) being truncated/levelled. It is probable that layer (102) had been specifically removed due to the frequency of 19<sup>th</sup>-century debris, with the intention of laying clean, good loam for the playing fields.

Layer (102) appeared to be the remains of the earlier topsoil after modification during 20<sup>th</sup>-century landscaping activity and had evidently not been introduced to create made ground (**Plate 34**). The debris within it was spread evenly and was very much of a character that would be expected as a result of manuring or the disposal of waste in agricultural fields (or comparable activities). Land drains were also present, consisting both of shallow 19<sup>th</sup> century terracotta pipe and c. post-1940s clay-filled deep drains dug by mechanical 'chain-trenchers'. This indicates that the immediate area had been in agricultural use or was otherwise a 'green-field' site during this period (*Plate 34*).

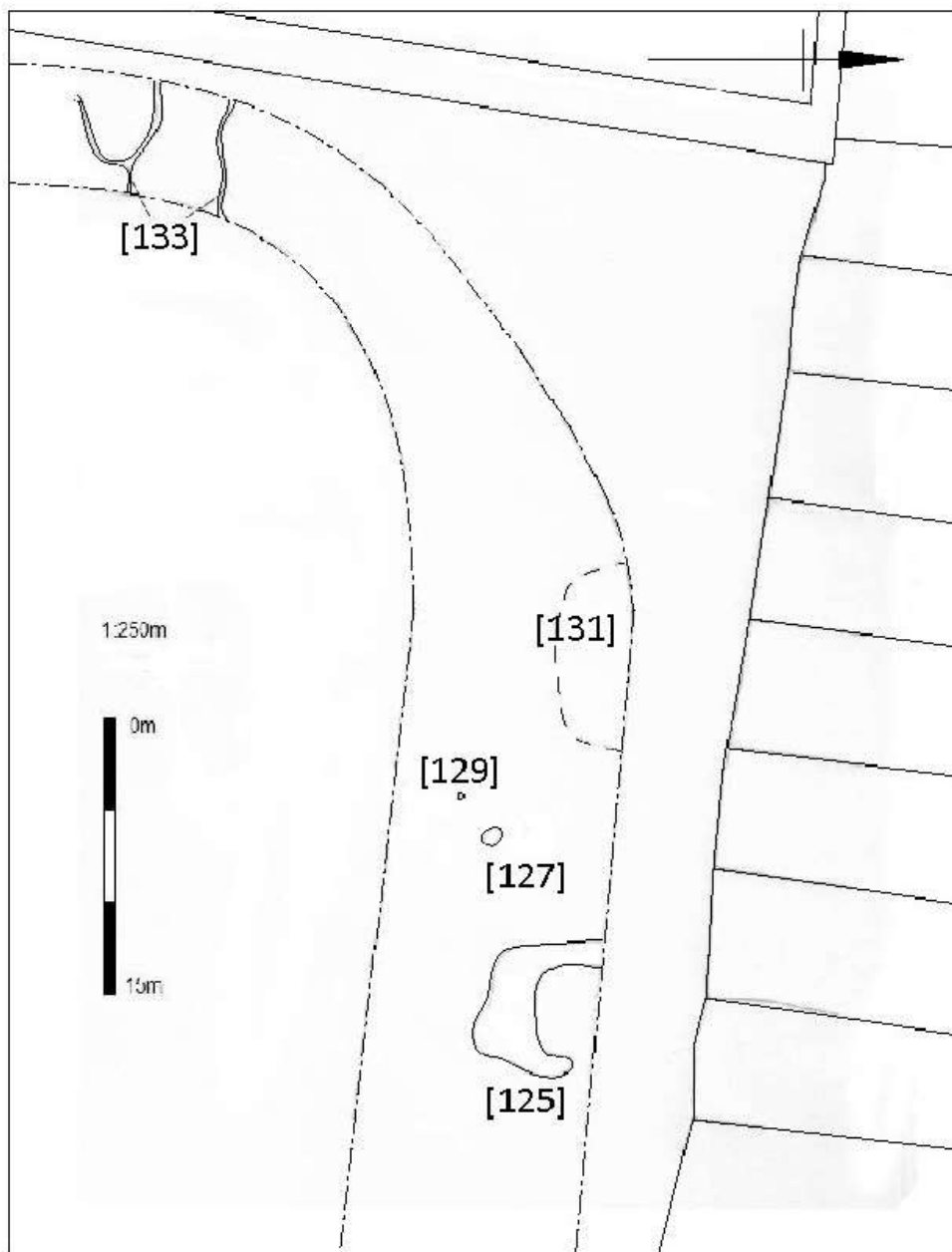


*Plate 34: View N showing detail of (102)*

There was no identifiable subsoil layer (B-horizon) between layer (102) and the natural clay substrate (103). The artefacts in layer (102) were also evenly distributed and present down to the interface with (103), suggesting the area had been heavily disturbed, either by intensive ploughing or landscaping activity before the 20<sup>th</sup> century, creating a mixed A/B (rather than A over B) soil horizon and dispersing artefacts both horizontally and vertically. This phase of activity appears to have predated the levelling/landscaping works associated with the establishment of the existing playing fields in the mid-20<sup>th</sup> century. It should further be noted that, if the artefacts in layer (102) were from 19<sup>th</sup> century manuring (or similar activity), there was no significant evidence for similar activities in earlier periods, as all finds were of 19<sup>th</sup> century or later date, with the exception of a very small number of mid-late 18<sup>th</sup> century ceramic sherds.



A series of archaeological features of late post-medieval date was observed and recorded along the route. All could be adequately characterised and dated by finds in the upper fills, with minimal test excavation required. These features were all of low significance and indicative of features generally associated with waste ground, gardens, parks, allotments and similar types of land-use (see below). There were also some discrete areas of more intense disturbance located in the NW corner of the playing fields, consisting of irregular pits and spreads ([125], [131]), with mixed backfills containing some structural debris, such as slate, 19<sup>th</sup> century brick and concrete. In the western section of the route, areas of clear 20<sup>th</sup> century disturbance were also evident, including irregular patches /channels [133] filled with loam containing obvious late 20<sup>th</sup>-century artefacts, such as a plastic comb, glass bottles & plastic drainpipe (**Fig. 14**).



*Fig. 14: Plan showing detail of topsoil strip in NW corner of recreation grounds at Horfield Leisure Centre*

Feature [135], however, was possibly more noteworthy, comprising a NW-SE aligned boundary ditch, extending N beyond the stripped area and terminating near the centre of the pipe trench itself (**Plate 35**). The ditch was c. 1m wide and the terminus was test-excavated, showing a depth of only 0.15m. No finds were recovered but coal fragments were present, generally suggesting a post-medieval date. Additionally, a single fragment of possible pre-19<sup>th</sup> century brick (probably of 17<sup>th</sup> /18<sup>th</sup> century date) was recovered from the surface fills. Only its terminus was impacted by the actual pipe, with the majority of this linear feature being unaffected by the engineering ground works.

The reason for the termination of [135] at this point remained unclear. Although not marked on any historic maps of the area, the earliest consulted plan being the OS surveyors' drawing of 1826, the feature is clearly shown on an RAF vertical photograph of 1946 and appears to relate to a zig-zag pattern of linear features extending to the W, possibly representing military practice trenching associated with the Gloucestershire Regiment barracks immediately to the SE or, as would appear more likely, the result of ground disturbance and landscaping associated with the construction of housing along Grittleton Road in late 1930s.



*Plate 35: View NW of excavated terminus of late post-medieval boundary ditch [135]*

A range of other features, all associated with 19<sup>th</sup> century ceramics, were present and well-defined once layer (102) had been removed along the N edge of the playing fields; none, however, was of archaeological significance (*Figs. 11*). They included [104], a single posthole feature with a stone-packed fill, which was partially excavated to recover dating evidence, including a fragment of 19<sup>th</sup>-century brick and a lump of concrete (**Plate 36**). Also revealed were two postholes [106], [108] with post-pads formed from 19<sup>th</sup>-century brick, located approximately 6.80m apart. These appeared to have supported fence posts or similar simple structure, or possibly even to have been sports-related, perhaps containing goalposts.



*Plate 36: Single posthole feature with a stone-packed fill [104]*

A 5m foundation for an isolated free-standing brick wall of 20<sup>th</sup>-century brick [114] was also identified, comprising a feature exhibiting the typical garden-wall construction characteristic of parks or other similar non-building function (**Plate 37**). A scorched area [122] associated with 19<sup>th</sup>-century ceramic material was interpreted as a shallow fire-pit for the disposal of non-woody 'green-waste', as it contained virtually no identifiable charcoal. A very small pit [129] postdating a mechanically excavated 20<sup>th</sup>-century land drain was revealed, which contained a part cemented/vitrified, very ashy fill (130). The origin of this material was unclear but it was clearly 20<sup>th</sup>-century in date.

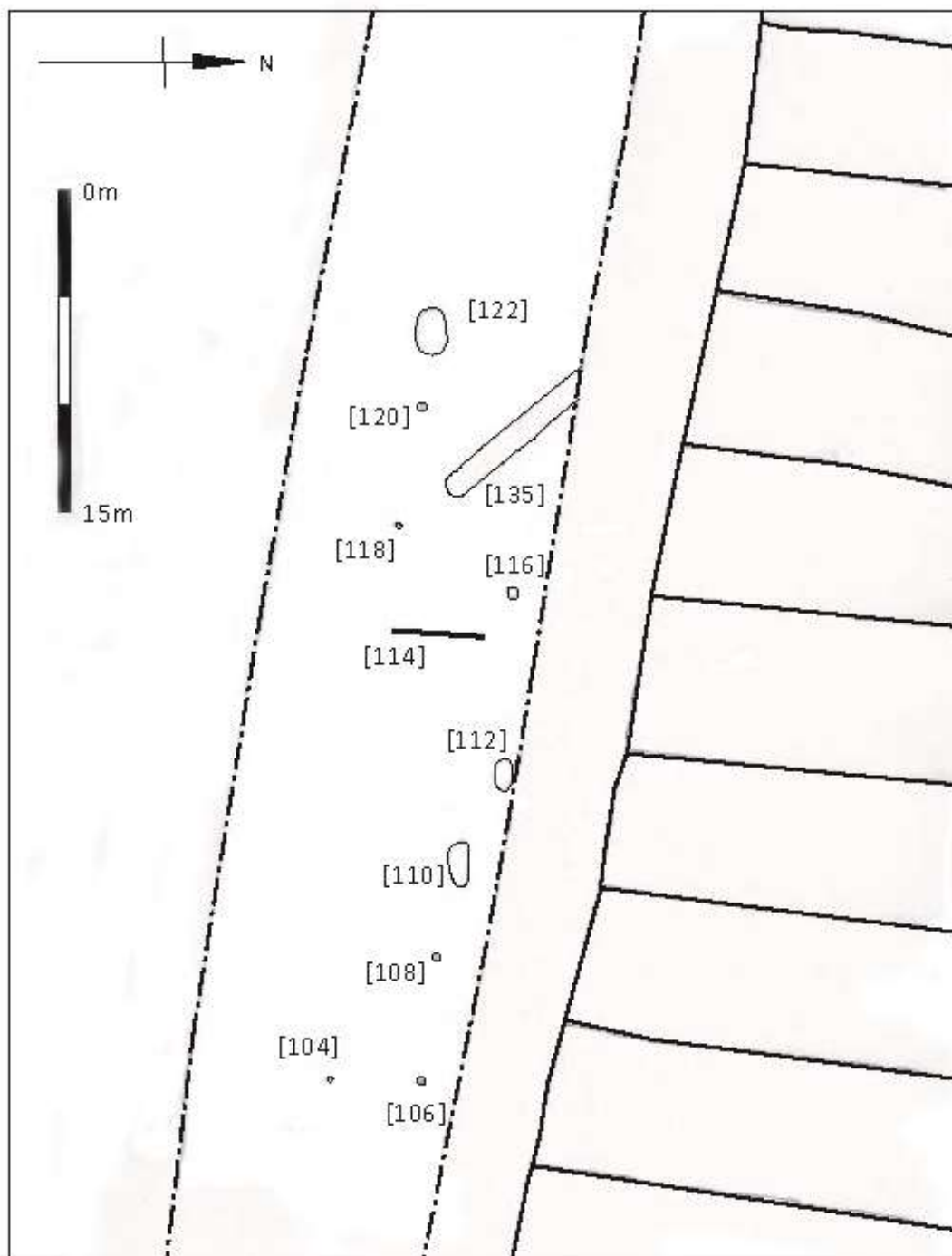


*Plate 37: View NW showing brick wall footings of probable early 20<sup>th</sup> century date [114]*





Two postholes [118], [120] located some 7m apart were found to contain 19<sup>th</sup>-century brick and stone packing and the decayed remnants of wooden posts (**Fig. 15**). These features were comparable to [106]/[108] but were located some distance away and did not form part of same structure. Several small rubbish pits [110], [112], [116], [127] were identified and these were generally sub-rectangular in form, with loamy backfills and 19<sup>th</sup>-century ceramics. None was especially artefact-rich, suggesting garden waste or similar disposal. Pit [112] contained discarded chicken wire.



*Fig. 15: Plan showing detail of topsoil strip along N edge of recreation grounds at Horfield Leisure Centre*



A section of cobbled surfacing (140) measuring some 1.60m x 0.5m (maximum), as revealed, was recorded towards the SW extent of the easement (**Plate 38**). Some 32m to the S of the cobbles, adjacent to the Leisure Centre car park, the cut for a dog inhumation [137] was revealed approximately 0.25m below the ground surface which contained a fully articulated skeleton (138) within backfill material (139) (**Plate 39**).



*Plate 38: Cobbled surface of late post-medieval date (140)*



*Plate 39: Dog burial [137]*



## 5.6 GRANNY DOWN

### Summary

*No significant archaeological finds, features or deposits were identified during the course of topsoil removal on Granny Down. A spread of late post-medieval domestic refuse, similar in composition to those noted within the Site Compound area and easement strip on Durdham Down, was noted.*



Fig. 16: Plan showing location of pipeline ground works on Granny Down (NGR ST 57344 75718- ST 57270 75548)

### Results

Topsoil was removed under archaeological observation within an easement extending NNW/SSE from ST 57344 75718 for approximately 120m, traversing Granny Down to its intersection with Westbury Park at ST 57354 75637, where it turned SW to cross Westbury Road at ST 57270 75548 (Fig. 13).

The topsoil (0100) consisted of dark brown humic clay containing frequent small stones and roots extending to a maximum depth of 0.15m. This overlay a sterile light greenish-yellow silty clay (0101) (**Plate 40**). A spread of post-medieval domestic refuse (0102) was noted (**Plates 41 & 42**); this consisted of a loose spread of mid greyish-brown silty clayey silt containing frequent angular stones and measuring approximately 5.25m x 3.2m. The material comprised glass, oyster shell and late post-medieval glazed ceramics and china.



*Plate 40: View SSE along Granny Down showing area of topsoil removal*



*Plate 41: Spread of post-medieval domestic refuse (0102) below topsoil on Granny Down*



*Plate 42: Spread of domestic refuse (0102)*



*Plate 43: View S of easement parallel to Westbury Walk*



## 5.7 CLIFTON DOWN

### Summary

*No significant archaeological features were recorded during the topsoil strip and trenching observations on Clifton Down. Much of the deposition observed in this area consisted of make-up/landscaping deposits of probable modern date.*



Fig. 17 Plan showing extent of pipeline ground works on Clifton Down from NGR ST 57147 74915 to ST 57186 74717

### Results

Topsoil removal and subsequent trenching operations were observed extending across the NE corner of Clifton Down between Stoke Road (ST 57147 74915), adjacent to the Water Tower, and Upper Belgrave Road (ST 57186 74717) (**Plates 44 & 45; Fig. 17**).



Approximately 0.30m of topsoil (301) was removed from the easement, exposing a moderately compact dark greyish-brown silty clay subsoil deposit containing frequent small angular limestone fragments with fragmentary post-medieval CBM noted in places (302). No significant archaeological features were revealed during stripping of the easement.



*Plate 44: View NW towards Stoke Road and the Water Tower showing topsoil strip on Clifton Down*

Trenching was subsequently carried out using a 0.6m bucket to a depth of 1.30m below the level of subsoil or to bedrock. Sample trench sections were recorded at 10m intervals or at any point along the easement where a distinct change in the nature of the deposits was identified. Beneath the topsoil in some locations was a moderately compact light yellow sand (303) above bedrock (304); the subsoil may also be characterised as moderately compact dark brownish-black silty clay with occasional small stones (305). Underlying the subsoil in places was a loose light grey silty clay and moderately compact mid orangey-brown clayey silt containing no inclusions (306). Undulations in the limestone bedrock were identified in places and these were filled with natural deposits of compact mid brownish-yellow/yellowish-brown silty clay (307).

The only features identified were of modern date (**Figs. 18 & 19**). A refuse pit [308] at ST 57157 74743 cut into natural beneath the subsoil. This was sub-circular in plan with a sharp break of slope at the top and concave sides and base. It was filled by loose light brownish-grey sandy clay with occasional charcoal and small angular stone (319) and a moderately compact mid greyish-brown silty clay with frequent small and medium stones (309). A second such pit [310] was identified at ST 57161 74766. This revealed a very similar profile and contained a basal fill (311) of compact dark greyish-brown silty clay containing a lens of loose light grey silty clay. Above this was a deposit of compact mid brownish-red silty clay containing occasional brick fragments (312), which also contained a loose light grey silty clay lens. Overlying (312) was a fill of moderately compact dark brownish-grey silty clay with occasional stone, brick & charcoal (313). The upper fill was a moderately compact dark



brownish-grey silty clay containing occasional stone, brick and charcoal (314). Lenses of loose light grey silty clay were also present.



*Plate 45: View SW towards Upper Belgrave Road*

Modern disturbance was noted extending S along much of the easement between Stoke Road and the WNW-ESE aligned footpath (NGR ST 57151 74851), consisting of made ground. This consisted mainly of mixed light greyish-white and dark brownish-black silty clays with frequent small stones and occasional brick fragments and slate (315). The subsoil in this location was a moderately compact dark brownish-black silty clay with occasional small stones (316), which overlay a moderately compact mid orangey-brown clayey silt containing no inclusions (317). At the base of the excavation was a natural deposit of mid brownish-yellow silty clay with no inclusions (318).





*Fig. 18 Plan showing features identified in northern section of easement on Clifton Down (A3 page)*



*Fig. 19 Plan showing features identified in southern section of easement on Clifton Down (A3 page)*



## 6. Discussion & Conclusions

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This section will discuss in greater detail the results of the archaeological programme of work, with reference to available sources of archaeological information, documentary and cartographic evidence.

### *1/Site Compound at the junction of Parry's Lane and Westbury Road (NGR ST 57236 75505)*

Observation of groundworks to establish a Site Compound at the junction of Parry's Lane and Westbury Road (centred on ST 57236 75505) exposed a number of features of post-medieval date, most of which were probably associated with limestone quarrying activity which took place across Durdham Down throughout the 18<sup>th</sup> and most of the 19<sup>th</sup> century. The features may be characterised as signalling areas of refuse disposal, where amorphous, heavily mixed spreads of pottery, charcoal, bone and oyster shell had been deposited, probably over a fairly lengthy period during the 18<sup>th</sup> and 19<sup>th</sup> centuries. One piece of reasonably firm dating evidence was recovered from within a stratified context (489), namely, a child's lead toy cannon dating roughly between 1800 and 1900.

The bulk of the pottery was identified as comprising post-medieval wares of the 17<sup>th</sup> and 18<sup>th</sup> centuries together with later material (not retained) and included products typical of excavations in Bristol. These were Bristol/Staffordshire slip wares, 'tiger'-glazed local stoneware and black basalt stoneware (1750s-1820s), with plain lead-glazed wares being the most common forms. Only two sherds of medieval pottery were found. These are Ham Green coarse wares of the 12<sup>th</sup>-13<sup>th</sup> centuries, unglazed and with clear evidence of sooting/burning.

The western portion of the Site Compound area was characterised by a concentration of limestone rubble, presumed to represent spoil resulting from the nearby quarrying activity as shown by the historic map evidence. *It was from this material that an especially significant find in this area was recovered, this being a near complete rotary quern stone of probable early Roman date. It would appear from petrological analysis that the quern was a piece of worked quartz conglomerate from the Devonian of the Bristol/Forest of Dean Area, this material being quarried for the manufacture of rotary querns and distributed over much of southern and western Britannia (Shaffrey 2006) from the 1<sup>st</sup> century AD onwards.*

### *2/Durdham Down – Results of Inspection Pits and Topsoil Stripping of the Easement*

The easement for the pipeline excavations across Durdham Down extended immediately S of the Compound area towards the Water Tower and Stoke Road. Evidence for an extensive field system of probable prehistoric and Romano-British date, as noted from aerial reconnaissance (Grinsell 1958, 142) and possibly extending up to the W side of Westbury Road, was lacking. Indeed, no conclusively early features were revealed during the course of the ground works, whether topsoil removal or trenching.

It is worth noting that a small quantity of prehistoric worked flint was recovered from the topsoil and subsoil deposits along the easement, including a blade and core fragment of probable Mesolithic date. However all this material was unstratified and should probably be viewed as a 'background scatter'; there is good reason to believe that a significant



proportion of this material may have been imported to the site from elsewhere, especially as there is documentary evidence indicating that soil was imported from the widening of the banks of the Avon at Hotwells for in-filling quarries on Durdham Down between 1867 and 1870 (BRO Ref. 40353/49a).

No evidence was identified within the pipeline easement for the survival of features associated with the medieval Chapel of the Holy Cross (WA44), which is documented in the 1480s and which appears to be situated close to the pipeline route near the Water Tower on Durdham Down (Wessex Archaeology 2011). The footings of a heavily truncated limestone masonry wall were identified in Inspection Pit 4 (located immediately to the S of Stoke Road) however these appeared more likely to be of early post-medieval date and were located well to the S of the location of the chapel as indicated on OS mapping of the area. No cartographic evidence was found to indicate the presence of a building in this specific location (the earliest map consulted being Wilstar's map of 1746); although it is possible that the footings could relate to a temporary structure in this location (such as a limekiln) perhaps associated with post-medieval quarrying activity.

Again, the majority of features and deposits encountered were post-medieval or modern in date and comprised several stone or brick settings of probable late 19<sup>th</sup>-20<sup>th</sup> century date, presumably relating to the staging of temporary events. Some of these are large-scale events, such as the Bristol Flower Show, which attracts some 18,000 visitors and could be expected to leave substantial traces of stands and display features; indeed, the fill of one such feature yielded a plastic botanical identification label. Other features included modern service or drainage trenching and numerous tarmac-filled postholes.

Of greater interest were two metalled road surfaces (067) and (082) revealed at either end of the pipeline easement on Durdham Down which were subject to more detailed investigation and recording.

### *3/ Area 1: Metalled trackway (067) on Durdham Down to W of Westbury Road (NGR ST 57230 75395)*

Feature (067) comprised a metalled road or track oriented NNW/SSE and located at the NE end of the pipeline easement on Durdham Down, approximately 30m W of Westbury Road. The feature exhibited evidence of several phases of repair and resurfacing. The archaeological evidence suggests that the track was extended to the SW at some point during the Victorian period and resurfaced with (081), a 6m × 3m area of compact dark grey silty sand containing very frequent small angular (though worn) stones, towards the end of its life.

Two contemporary linear features [070, 075] were clearly visible in the surface of (067). Their function remains unclear: although parallel, they appeared too straight sided and deep to have formed as a direct result of the passage of wheeled transport. It is possible that they may have contained rails forming part of a tramway of 19<sup>th</sup> century date linking Westbury Road (a long established road from Bristol via Clifton towards Westbury on Trym turnpiked in the early 18<sup>th</sup> century) with a quarry site situated on Durdham Down to the W of the road. At roughly 1.0m (3ft 3in.), the gauge would perhaps be a little wide for a tramway of mid-19<sup>th</sup> century date, the standard being around 2ft 6in. The silty composition of the basal fills of these two linears (071, 076) suggested the possibility of open ditches; however, at only 1.0m apart, these features could not be roadside ditches or similar; neither did they contain pipework or cabling suggestive of service trenching.



The evidence for the renewal of (067) on several occasions suggests that it could possibly have represented part of a long-standing trackway extending across Durdham Down. However the cartographic evidence strongly indicates that the track was probably associated with a quarry site to the W of Westbury Road which was in use for a limited period during the middle decades of the 19<sup>th</sup> century. The Westbury tithe map of 1844 (**Plate 47**) marks the quarry site as a large, elongated sub-oval feature oriented roughly NNE-SSW, located W of Westbury Road and bordered to the S and SW by a linear avenue running NW-SE from Down House to Westbury Road, close to the junction with Redland Hill. No indication is given on the tithe map of a trackway linking the quarry site to Westbury Road, although the possibility that it may have not been recorded on the tithe map cannot be discounted.



*Plate 47: Extract from the Westbury parish tithe map of 1844 showing the location of the quarry and Bristol Water's Site Compound  
(Reproduced courtesy of Bristol Record Office)*

Ashmead's map of Bristol dated 1855 (**Plate 48**) clearly indicates the existence of a trackway on the alignment of (067), running approximately NNW-SSE from the NE corner of the quarry site to Westbury Road. Significantly, the subsequent edition of Ashmead's map dated 1874 shows neither the quarry nor the track, suggesting that the quarry had been in-filled at some point before 1874 and that the associated trackway had fallen out of use by that date (**Plate 49**).

The cartographic evidence thus would appear to suggest that the track was in use for only a limited period during the mid-19<sup>th</sup> century, as evidenced by Ashmead's 1855 plan, which clearly shows the feature, although it is possible that it was simply not recorded on the



earlier title map. However, its absence from Ashmead's later plan of 1874 provides a reasonably conclusive *terminus post quem* for the feature, which would appear to have passed out of use at some point between 1855 and 1874.



Plate 48: Extract from Ashmead's plan of 1855 showing location of track (067)  
(Reproduced courtesy of Bristol Record Office)

The several limestone quarries which had been established on Durdham Down from the 18<sup>th</sup> century onwards were gradually closed by the Bristol Corporation following their purchase of the property from the lords of Henbury manor in 1861, the last, Black Rock Quarry, being closed in 1877 (Goldthorpe, 2006, . 28). In a record of proposals submitted by Alderman Proctor to the Downs Committee (responsible for the management of Clifton and Durdham Downs) in February 1869 for the laying out of a new road on Durdham Down, reference is made to the filling in of a quarry adjacent to Parry's Lane, which can almost certainly be identified with the quarry site to the W of Westbury Road (Goldthorpe, 2006, 27). It would thus appear that the quarry (and by implication the trackway associated with it) was still in use in 1869; however the quarry had almost certainly been filled in by no later than 1874.



Plate 49: Extract from Ashmead's 1874 map showing neither the quarry nor the track  
(Reproduced courtesy of Bristol Record Office)

4/ Area 2: Section of metalled trackway (082) on the alignment of the 'Roman road' on Durdham Down (NGR ST 57230 74955)

Confirmation that a section of the 14-mile stretch of Roman road linking Bath and Sea Mills survives as a low earthwork feature (HER No. 2084M) running WNW/ESE to the W of the Water Tower (WA 21) was obtained by means of fieldwork investigations carried out in 1899 (Trice-Martin 1900, 309-11; HER Event No. 20441).

The proximity of this feature to the course of the pipeline route strongly suggested the possibility of finding further remains where the historic alignment crossed the easement and it did indeed transpire that a section of metalled roadway (082) was revealed in roughly the projected location. This was found to be truncated to the S by modern service trenching and to have been heavily impacted to the W by the dumping of modern building rubble.

The results of Border Archaeology's subsequent investigation cast some doubt on the antiquity of the remains and there are marked differences in terms of construction between the two sections of road. The profile as recorded by Trice-Martin shows clear evidence of an *agger* surviving as a continuous low ridge flanked by ditches to the N and S (Trice-Martin, 1900), neither feature being discernible in the present investigation. There are, however, several points of comparison. In both cases, the road metalling comprised a mixture of large and smaller stones, although the larger stones found in the earlier investigation are described as around 25.5 × 20.3 × 17.8cm in size and 'rough' whilst those uncovered within the easement were more rounded in form and up to 40cm in size. Moreover, where the 1899 results described occasional smaller stones set on end between the larger ones, the recent investigation showed a predominance of smaller stones of some 8cm in size.



Beneath the metalling, Trice-Martin revealed a bedding deposit some 15.2cm thick composed of reddish earth beneath which was around 30cm of a sandy deposit containing fragments of limestone. The underlying soil (083) beneath (082) was not dissimilar consisting of mottled yellowish-red sandy clay largely devoid inclusions, which was interpreted as a layer of re-deposited natural (083). The deposit was thicker than that found previously (20-30cm) but similarly extended the full width of the exposed section of roadway.

Where Trice-Martin identified a 'sandy deposit', the present excavation also revealed a deposit of sandy construction material (084) consisting of moderately compact to loose stone-free light yellow clayey sand possibly exhibiting slight charcoal/manganese flecking. It was suggested that the high sand content of (084) suggested this material had been deliberately laid for construction purposes and was not merely the result of water action reworking natural. Trice-Martin concluded that his sandy deposit had resulted from the deliberate 'crushing and levelling' of *in-situ* bedrock to create a suitable bed for the roadway. The natural itself (085) consisted of compact orangey-red sand clay containing no inclusions, similar to that revealed along much of the pipeline easement.

Unlike the results of the 1899 investigation, BA's excavation revealed two clear 'wheel-ruts' positioned off-centre towards the E side of surface (082). These showed no evidence of infilling or repair and produced only modern finds, including china, glass, iron nails, aluminium tags and wire, which were found embedded in a compressed topsoil deposit within the ruts.

Several factors thus appear to militate against the road (082) being of Roman origin, at least in its present form, these being principally the absence of any pronounced *agger* and associated roadside scoop ditches together with a complete absence of any finds predating the modern era. However, it does appear that (082) preserves the approximate line of the original road, as projected in relation to the confirmed section of Roman road to the W. Based on the finds, which were exclusively of modern date, it initially appeared that (082) might represent a modern construction dating from the middle part of the 20<sup>th</sup> century, laid on an existing alignment as an access road during construction of the Water Tower, with which it is also aligned; the absence of repair work or infilling of the wheel ruts may offer support to the view that (082) was a temporary surface with a limited life.

However, whilst it may be the case that (082) was last exposed during the mid-20<sup>th</sup> century, which may be when the wheel-ruts were formed, its actual construction, which is in some respects comparable with the post-medieval metalled surface (067) revealed to the S of the Compound at Westbury Road, suggests an earlier date. Both may be described as lightly metalled surfaces composed of a relatively thin covering of small stones overlying bedding material; however, with regard to (082), this would appear far too insubstantial a surface to support heavy construction traffic.

Post-medieval maps of the study area provide little or no evidence for the existence of a metalled road or trackway in this location corresponding to the alignment of (082). Jacob Wilstar's plan of the manor of Clifton (1746) which includes the southern fringes of Durdham Down, does not show a trackway in this location; neither is one depicted on the Westbury tithe map of 1844 (the trackway lies just NE of the boundary between the parishes of Westbury and Clifton), nor does it appear on Frederick Ashmead's plans of 1855 and 1874. The OS 1<sup>st</sup> edition map of 1885 is the earliest map to indicate the alignment of a feature denoted as a Roman road ('Via Julia') in this specific location, but it is not clear whether the



surveyor was recording an extant visible trackway or if he was in fact depicting the *presumed* alignment of the Roman road based on historical evidence or antiquarian observations.



Plate 50: Extract from the OS 1<sup>st</sup> edition map of 1885 showing the line of the Roman road heading NW from Westbury Road towards the reservoir (indicated as a dotted line)  
(Reproduced courtesy of Bristol Record Office)

An account by the late 18<sup>th</sup> century Bristol antiquary William Barrett makes reference to an area of 'rose-up ground, like an old Roman road' on Durdham Down, which almost certainly corresponds to the scheduled section of the Roman road (HER No. 2084M) situated further to the NW on the S side of Stoke Road between Ladies Mile and Rockleaze, but makes no reference to the section of trackway further to the SE (Barrett, 1789, 10).

However, records of observations by two distinguished early 19<sup>th</sup> century antiquarians, William Coxe and Samuel Seyer, strongly suggest that metalled trackway (082) was still visible in about 1800 and was regarded as a feature of antiquity.

The earliest description of the trackway occurs in 'An Historical Tour through Monmouthshire' compiled by the clergyman and antiquary William Coxe (1801), although his description lacks the precise detail given in Seyer's later account. Coxe describes the route of the 'via Julia' as it passed Redland Court, 'nearly in the track of a small road', ascending towards Durdham Down and crossing 'the road from Clifton to Redland' (presumably to be identified with present-day Upper Belgrave Road where this intersects with Westbury Road). At this point, the road is 'tolerably conspicuous' as far as present-day Stoke Road (identified by Coxe as 'the turnpike from Shirehampton'). It then continues to the W of Stoke Road between 'Durdham Lodge and Stable' where the remains are 'still raised and visible' (Coxe 1801, 14). This follows precisely the line indicated on the OS 1<sup>st</sup> edition map of 1885. Presumably, this latter section refers to the scheduled area whilst the stretch he describes as 'tolerably conspicuous' may well be the section represented by (082).

The fullest and most valuable in terms of topographical detail is the account by the local antiquary Samuel Seyer, vicar of Horfield (writing in 1821), which contains a passage strongly



suggesting that (082) was a visible feature that was regarded as being of some antiquity in the early 19<sup>th</sup> century.

Seyer described 'an ancient road' crossing the Down in roughly the location of (082) where he notes a coin of Constantine had previously been found. The road was 'a stony track on the open down having much the appearance of an old causeway, ten or twelve yards wide[9.1-10.9m]' (Seyer 1821, 150); this is rather wider than the 7m width of (082), although it should be noted that (082) had evidently been truncated to the S by modern service trenching. In terms of location and alignment, he states that the track left Westbury Road (then described as the turnpike road from Bristol to Westbury) at an oblique angle to run westwards in the direction of Sea Mills. At a distance of about 'a furlong', the road crossed 'very obliquely' the road from Bristol to Shirehampton (present-day Stoke Road) after which point it was visible as a raised, stony earthwork of similar width.

While it was not possible, based on the available archaeological evidence, to determine conclusively the date of this feature, it is evident that it represents a routeway of considerable antiquity, which was still visible as a feature in the early 19<sup>th</sup> century. While its construction form differs markedly from the raised section of the Roman road investigated in 1899 (suggesting that in its existing form it may not be of Roman date) it could possibly represent a medieval or early post-medieval trackway which succeeded a previously existing section of Roman road on the same alignment, possibly incorporating material from the original construction of the Roman road.

#### *5/ Stanley Farm, Stoke Gifford (NGR ST 60826 77882)*

No conclusive evidence of medieval settlement around Stanley Farm Stoke Gifford (WA39) was identified during the course of archaeological observation in this area. However, a possible feature of medieval or early post-medieval date in the form of a drystone water culvert was found and subsequently investigated in the vicinity of the Council Offices at NGR ST 60947 77960. Although no firm dating evidence was recovered, the culvert still functioned to carry water at a slow but steady rate and it is possible, if not likely that the calcite build-up identified within the structure represents a period of several hundred years of use and that the culvert construction could therefore be of medieval or early post-medieval date.

It is worth noting that the culvert appears to run parallel and very close to the SE boundary of the farmstead at Stanley Farm as marked on an OS surveyor's drawing of 1826 and the OS 1<sup>st</sup> edition 25 inch map of 1881. The earliest documentary reference to Stanley Farm (as 'Stanlegh', denoting a 'stony clearing') occurs in a reference in the Hundred Rolls of 1275 (Smith, 1964, 140), which suggests that the site had been occupied since the 13<sup>th</sup> century, although the existing 'model-farm' buildings were constructed between in 1860 by George Godwin for Thomas Proctor of nearby Wallscourt Farm (Verey & Brooks, 2002, 693). The culvert certainly appears to predate the mid-Victorian rebuilding of Stanley Farm however it is difficult to be more precise regarding its date.

#### *6/ Playing Fields adjacent to Horfield Leisure Centre (ST 59707 77525 -ST 59448 77317)*

The playing fields flanking Horfield Leisure Centre to the N and W also revealed archaeological features and deposits; however, these reflected several periods of low-level activity of late 19<sup>th</sup> or early 20<sup>th</sup> century date comprising rubbish pits, wall footings and a cobbled surface. The marked lack of evidence for earlier archaeological features may suggest



that the land now occupied by Horfield Leisure Centre and recreation grounds remained as undeveloped open ground until the late 19<sup>th</sup>–early 20<sup>th</sup> century, which appears to be confirmed by the evidence of the Horfield tithe map of 1843, which depicts the site as being occupied by a large rectilinear field enclosure (listed as Plot No. 158 in the tithe apportionment) which was laid out to pasture.

The OS 2<sup>nd</sup> edition map of 1903 shows a series of small rectangular outbuildings located along the western boundary of the field, which appears by that date to have been used as a recreation ground associated with the nearby Horfield Barracks. It is possible that cobbled surface (140) recorded in this area may have been constructed to provide an access to these small outbuildings from a larger oblong range building aligned N-S which is depicted on the 1903 map in the NW corner of the field. Both the oblong range and the associated outbuildings along the W edge of the field appear to have been demolished at some point before 1946; an RAF vertical photograph shows that extensive suburban housing development had encroached upon the N and W boundaries of the field.

#### *7/ Granny Down (NGR ST 57344 75718 -ST 57270 75548)*

Where the pipeline route traversed Granny Down between ST 57344 75718 and ST 57270 75548 no significant archaeological features or deposits were revealed, only occasional spreads of late post-medieval domestic refuse.

#### *8/Clifton Down (NGR ST 57147 74915 – ST 57186 74717)*

No evidence of the pre-medieval field system (1779M) recorded on Clifton Down was found during the topsoil strip and trenching observations ST 57147 74915 and 57186 74717. Much of the deposition observed in this area consisted of extensive late post-medieval or modern make-up/landscaping deposits.



## 7. Copyright

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## 8. Bibliography

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### 8.1 Secondary Sources

Bristol City Historic Environment Record – HER Printout

National Monuments Record – NMR Printout and Backup Files

Portable Antiquities Scheme – [www.finds.org.uk](http://www.finds.org.uk)

Atkyns, R., 1712, *The Ancient and Present State of Gloucestershire*, Gloucester

BaRAS, 2006, *Archaeological Desk based Assessment of land at No. 40A Whiteladies Road, Clifton, Bristol*, BaRAS Report No. 1738/2006

Barrett, W., 1789, *The History and Antiquities of the City of Bristol*, Bristol

Bristol City Council, 2010, *Conservation Area 5 Clifton and Hotwells – Character Appraisal and Management Proposals*

Coxe, W., 1801, *An Historical Tour in Monmouthshire*, London

Ellis, A.S., 1878-9, 'On the Manorial History of Clifton', *Transactions of the Bristol and Gloucestershire Archaeological Society*, Vol. 3, 211-31

Jones, D, 1992, *History of Clifton*, Chichester

Latimer, J., 1891-92, 'The Manor of Clifton', *Transactions of the Bristol and Gloucestershire Archaeological Society*, Vol. 16, 201-207

Latimer, J., 1900, 'Clifton in 1746', *Transactions of the Bristol and Gloucestershire Archaeological Society*, Vol. 23, 312-22

Latimer, J., 1900, *The Annals of Bristol in the Seventeenth Century*, Bristol

Neale, F. (ed.), 2000, *William Worcestre: the topography of medieval Bristol*, Bristol Record Society, Vol. 51



Nicholls, J.F. & Taylor, J., 1881-82, *Bristol Past and Present*, 3 vols., Bristol

Pascoe, M., 1985 *The Clifton Guide*, Redcliffe Press

Prowse, A.B., 1892-93, 'Some Ancient British Remains on Clifton Down', *Proceedings of the Bristol Naturalists Society*, Vol. 7 pt. 2, 93-104

Ross, C.D. (ed.), 1959, *Cartulary of St Mark's Hospital, Bristol*, Bristol Record Society, Vol. 21

Rudder, S., 1779, *A New History of Gloucestershire*, Cirencester

Russell, J., 1999, 'The Archaeology of the Parish of Clifton, with a Note on the 833 AD Boundary Survey of Stoke Bishop', *Bristol and Avon Archaeology*, Vol. 16, 73-87.

Seyer, S., 1821-3, *Memoirs, Historical and Topographical, of Bristol and its Neighbourhood*, Bristol

Smith, A.H., 1964, *The Place Names of Gloucestershire Part III*, Cambridge

SSEW, 1983, Soil Survey of England and Wales, Silsoe

Tratman, E.K., 'Prehistoric Bristol', *Proceedings of the University of Bristol Spelaeological Society*, Vol. 5 (3), 162-82

Tratman, E.K., 1962, 'Some ideas on Roman Roads in Bristol and North Somerset', *Proceedings University of Bristol Spelaeological Society* Vol. 9 (3), 159-72

Trice-Martin, A., 1900-03, 'The Roman Road on Durdham Down', *Proceedings of the Clifton Antiquarian Club*, Vol. 5, 75-7

Verey, D. & Brooks, A., 2002, *The Buildings of England: Gloucestershire 2: The Vale and the Forest of Dean*, Yale

Way, L.J.U., 1913, 'The 1625 Survey of the Smaller Manor of Clifton', *Transactions of the Bristol and Gloucestershire Archaeological Society*, Vol. 26, 220-50

## 8.2 Cartography

### Bristol Record Office

07770/1 – Plan of the City of Bristol surveyed and drawn by John Rocque - 1742

SMV/6/5/4/3 - Survey of the Manor of Clifton by Jacob de Wilstar - 1746

Plan of the manor of Clifton by G.H. Hammersley - 1746

SMV/6/4/7/11 - Plan of the manor of Clifton – 1806



9389/7 – Donne’s Plan of Bristol, Clifton and the Hotwells - 1826

04481 – Map of Bristol by J. Plumley & G.C. Ashmead – 1828

EP/A/32/41– Tithe map of the parish of Westbury on Trym - 1844

EP/A/32/12– Tithe map of Clifton parish - 1845

SMV/6/4/14/16 – Map of Bristol by G.C. Ashmead – 1855

40870/Map - Map of Bristol by G.C. Ashmead - 1874

OS 1<sup>st</sup> edition 1:500 map - 1885

OS 1<sup>st</sup> edition 25 inch map - 1886

OS 2<sup>nd</sup> edition 25 inch map - 1903

OS 3<sup>rd</sup> edition 25 inch map - 1912

OS 1:2500 map - 1949



## 9. Context Register

### 9.1 Site Compound

(486)	Generally humic, moderately compact mid-brown clayey silt. Moderate small to medium angular & sub-angular stones, occasional rounded stones, chalk fragments and charcoal; root disturbance was also evident. Occasional pottery, CBM, glass fragments and fragmentary clay pipe
<i>INTERPRETATION:</i>	<i>Topsoil</i>
(487);	Friable mid greyish-brown clayey silt containing occasional small rounded stones
<i>INTERPRETATION:</i>	<i>Subsoil</i>
(488)	Light yellowish-brown clayey silt subsoil, few or no inclusions was revealed..
<i>INTERPRETATION:</i>	Subsoil deposit possibly relating to a period of use contemporary with the granting of leases for small-scale post-medieval industrial extractive activity, including lead-mining and limestone quarrying
(489)	Compacted medium to large angular and sub-angular limestone fragments within friable dark greyish-brown clayey silt and this produced occasional pottery, clay pipe and copper alloy coins/tokens. A child's lead toy cannon was also recovered suggesting a date range of c.1800 to c.1900. Measured approximately 2.2m (N-S) × 2.3m (E-W) × 0.2m
<i>INTERPRETATION:</i>	<i>Possible post-pad or other structural support</i>
(490)	Mid to dark greyish-brown clayey silt. Frequent small-medium sub-angular stones, incorporating chalk inclusions, moderate pottery and charcoal. Measured approximately 2.9m (N-S) × 2.5m (E-W).
<i>INTERPRETATION:</i>	<i>Poorly defined, roughly ovoid stony spread</i>
(491)	Roughly ovoid spread of medium to large angular and sub-angular limestone fragments within a friable mid-greyish-brown clayey-silt matrix. Occasional post-medieval pottery and CBM. Measured 3.20m (N-S) × 1.70m (E-W).
<i>INTERPRETATION:</i>	<i>Dump of domestic refuse</i>
(492)	Moderately compact to firm dark greyish-brown clayey silt. Frequent charcoal inclusions, small to medium sized angular and sub-angular stones, post-medieval pottery, CBM & oyster shell, occasional clay pipe fragments.
<i>INTERPRETATION:</i>	<i>Dump of post-medieval domestic refuse.</i>
(493)	Moderately compact to firm dark greyish-brown clayey silt containing frequent charcoal, post-medieval glazed pottery, willow pattern porcelain and CBM, moderate oyster shell and occasional animal bone. This measured approximately 3.50m (NNE-SSW) × 2.80m (WNW-ESE) × 0.10-0.15m
<i>INTERPRETATION:</i>	<i>Spread of post-medieval domestic refuse</i>
(494)	Compacted mid brownish-grey clayey silt interspersed with isolated 1-2mm charcoal fragments. Frequent oyster shell, fragmentary post-medieval pottery & clay-pipe stem to give the character of a typical household waste deposit. Measured 9m × 5m × 0.24m
<i>INTERPRETATION:</i>	<i>Sub-ovoid spread of post-medieval domestic waste</i> <i>Absence of a cut suggests the material had been dispersed and compressed into the underlying soil by subsequent activity</i>
(495)	Large angular blocks of some 0.20-0.70m diameter and a maximum width of 18m × 3.5m
<i>INTERPRETATION:</i>	<i>Roughly linear deposit of limestone rubble</i>



(496)	Large angular blocks of some 0.20-0.70m diameter and a maximum width of maximum width 44m × 7m. A complete lower rotary quern was found at the southern end of (496)
<i>INTERPRETATION:</i>	<i>Roughly linear deposit of limestone rubble</i>
(497)	Plastic green silty clay some 400mm below ground level.
<i>INTERPRETATION:</i>	<i>Natural deposition at base of water pipe trench from Parry's Lane into Site Compound</i>
(498)	<i>VOID</i>
(499)	Limestone rubble within a moderate to firm dark reddish-brown clayey silt. Occasional CBM & rare post-medieval pottery. Extended approximately 4.50m (NNE-SSW) × 3.20m × (WNW-ESE) × 0.15m
<i>INTERPRETATION:</i>	<i>Part of a metalled path or track or possibly as an area of modern hard-standing.</i>

### 9.5 Durdham Down

CONTEXT	DESCRIPTION
(001)	Moderate to loose compaction, dark brown-black silty clay. Frequent roots, occasional small angular stones. 0.05m to 0.15m thick.
<i>INTERPRETATION:</i>	<i>Topsoil</i>
(002)	Compact light yellowish-green silty clay.
<i>INTERPRETATION:</i>	<i>Natural</i>
(003)	Loosely consolidated bedrock.
<i>INTERPRETATION:</i>	<i>Bedrock natural</i>
(004)	Moderate compaction, light yellowish-brown silty clay. Occasional large angular stones. Located towards southern end of Durdham Down. Possibly same as (063).
<i>INTERPRETATION:</i>	<i>Subsoil natural</i>
(005)	Loose dark brownish-black clayey silt. Frequent angular stones, glass, oyster shells and ceramics. 5m in length, 3.5m in width.
<i>INTERPRETATION:</i>	<i>Post medieval spread</i>
(006)	Loose dark brownish-grey clayey silt with white clay mottling. Occasional small angular stones. 1m in width.
<i>INTERPRETATION:</i>	<i>Upper fill of linear service trench [008]</i>
(007)	Firm bright yellow and blue silty clay. No inclusions. 1m in width, 0.5m thick. Redeposited natural within service trench.
<i>INTERPRETATION:</i>	<i>Lower fill of linear service trench [008]</i>
[008]	Linear NE/SW, vertical sides. 0.62m wide, 0.55m deep. Parallel to linear [011]. Filled by (006) and (007).
<i>INTERPRETATION:</i>	<i>Cut of linear service trench</i>
(009)	Firm light brownish-yellow silty clay. 1.06m thick. Overlies bedrock (003).
<i>INTERPRETATION:</i>	<i>Subsoil natural</i>
(010)	Moderate mid brownish-grey clayey silt with occasional white yellow clay mottles. Occasional stones. 1.5m in width, 0.5m thick.
<i>INTERPRETATION:</i>	<i>Upper fill of drainage linear [011]</i>
[011]	Linear NW/SE, shallow concave sides, flat base. 1.5m wide, 0.5m deep. Parallel to linear [008]. Filled by (010) and (064).
<i>INTERPRETATION:</i>	<i>Cut of drainage linear</i>
(012)	Loose dark brown-black clayey silt. Frequent roots and bark mulch, occasional stones. Includes plastic POS label for a shrub.





<i>INTERPRETATION:</i>	<i>Fill of garden feature [013]</i>
[013]	Circular shape in plan, vertical sides, irregular flat base. 2.5m diameter. Cut lined with stone. Associated with brick lines. Filled by (012).
<i>INTERPRETATION:</i>	<i>Cut of garden feature</i>
[014]	Linear W/E, near vertical sides, flat base. 8m length visible, .56m wide, 0.28m deep. Filled by (015).
<i>INTERPRETATION:</i>	<i>Cut of modern W/E linear</i>
(015)	Moderate dark yellow silty clay with brown and green mottles. Occasional stones. 8m length visible, .56m wide, 0.28m deep.
<i>INTERPRETATION:</i>	<i>Fill of modern W/E linear [014]</i>
(016)	Hard greyish-brown silty clay with 50% pink broken concrete. Also includes glass and roadstone. Approx. 2m diameter.
<i>INTERPRETATION:</i>	<i>Concrete deposit spread</i>
[017]	Square shape in plan, vertical sides, flat base but highly visible post pipe is circular shape in plan, shallow concave sides and base. Post pipe 0.32m diameter, 0.04m deep. Filled by (018).
<i>INTERPRETATION:</i>	<i>Cut of posthole</i>
(018)	Post pipe fill of loose tarmac fragments. Packing for square post hole of re-deposited natural. Post pipe fill of 0.32m diameter, 0.04m depth.
<i>INTERPRETATION:</i>	<i>Fill of posthole [017]</i>
[019]	Square shape in plan, vertical sides, flat base but highly visible post pipe is circular shape in plan, shallow concave sides and base. Post pipe 0.20m diameter, 0.02m deep. Filled by (020).
<i>INTERPRETATION:</i>	<i>Cut of post hole</i>
(020)	Post pipe fill of loose tarmac fragments. Packing for square post hole of re-deposited natural. Post pipe fill of 0.20m diameter, 0.02m deep.
<i>INTERPRETATION:</i>	<i>Fill of posthole [019]</i>
[021]	Square shape in plan, vertical sides, flat base but highly visible post pipe is circular shape in plan, shallow concave sides and base. Post pipe 0.30m diameter, 0.02m deep. Filled by (022).
<i>INTERPRETATION:</i>	<i>Cut of posthole</i>
(022)	Post pipe fill of loose tarmac fragments. Packing for square post hole of re-deposited natural. Post pipe fill of 0.30m diameter, 0.02m deep.
<i>INTERPRETATION:</i>	<i>Fill of posthole [021]</i>
[023]	Square shape in plan, vertical sides, flat base but highly visible post pipe is circular shape in plan, shallow concave sides and base. Square post hole 0.5m N/S and 0.56m W/E, 0.22m deep. Filled by (024).
<i>INTERPRETATION:</i>	<i>Cut of posthole</i>
(024)	Post pipe fill of loose tarmac fragments. Packing for square post hole of re-deposited natural. Square post hole fill 0.5m N/S and 0.56m W/E, 0.22m deep.
<i>INTERPRETATION:</i>	<i>Fill of posthole [023]</i>
[025]	Square shape in plan, vertical sides, flat base but highly visible post pipe is circular shape in plan, shallow concave sides and base. Square post hole 0.44m N/S and 0.40m W/E, 0.24m deep. Filled by (026).
<i>INTERPRETATION:</i>	<i>Cut of posthole</i>
(026)	Post pipe fill of loose tarmac fragments. Packing for square post hole of re-deposited natural. Square post hole fill 0.44m N/S and 0.40m W/E, 0.24m deep.
<i>INTERPRETATION:</i>	<i>Fill of posthole [025]</i>
[027]	Square shape in plan, vertical sides, flat base but highly visible post pipe is



	circular shape in plan, shallow concave sides and base. Post pipe 0.20m diameter. Filled by (028).
<i>INTERPRETATION:</i>	<i>Cut of posthole</i>
(028)	Post pipe fill of loose tarmac fragments. Packing for square post hole of re-deposited natural. Post pipe fill of 0.20m diameter.
<i>INTERPRETATION:</i>	<i>Fill of posthole [027]</i>
[029]	Square shape in plan, vertical sides, flat base but highly visible post pipe is circular shape in plan, shallow concave sides and base. Post pipe 0.18m diameter. Filled by (030).
<i>INTERPRETATION:</i>	<i>Cut of posthole</i>
(030)	Post pipe fill of loose tarmac fragments. Packing for square post hole of re-deposited natural. Post pipe fill of 0.18m diameter.
<i>INTERPRETATION:</i>	<i>Fill of posthole [029]</i>
[031]	Square shape in plan, vertical sides, flat base but highly visible post pipe is circular shape in plan, shallow concave sides and base. Post pipe 0.20m diameter, 0.12m deep. Filled by (032).
<i>INTERPRETATION:</i>	<i>Cut of post hole</i>
(032)	Post pipe fill of loose tarmac fragments. Packing for square post hole of re-deposited natural. Post pipe fill of 0.20m diameter, 0.12m deep.
<i>INTERPRETATION:</i>	<i>Fill of posthole [031]</i>
[033]	Square shape in plan, vertical sides, flat base but highly visible post pipe is circular shape in plan, shallow concave sides and base. Post pipe 0.24m diameter. Filled by (034).
<i>INTERPRETATION:</i>	<i>Cut of posthole</i>
(034)	Post pipe fill of loose tarmac fragments. Packing for square post hole of re-deposited natural. Post pipe fill of 0.24m diameter.
<i>INTERPRETATION:</i>	<i>Fill of posthole [033]</i>
[035]	Square shape in plan, vertical sides, flat base but highly visible post pipe is circular shape in plan, shallow concave sides and base. Post pipe 0.20m diameter, 0.30m deep. Filled by (036).
<i>INTERPRETATION:</i>	<i>Cut of post -hole</i>
(036)	Post pipe fill of loose tarmac fragments. Packing for square post hole of re-deposited natural. Post pipe fill of 0.20m diameter, 0.30m deep.
<i>INTERPRETATION:</i>	<i>Fill of posthole [035]</i>
[037]	Square shape in plan, vertical sides, flat base but highly visible post pipe is circular shape in plan, shallow concave sides and base. Post pipe 0.26m diameter, 0.44m deep. Filled by (038).
<i>INTERPRETATION:</i>	<i>Cut of posthole</i>
(038)	Post pipe fill of loose tarmac fragments. Packing for square post hole of re-deposited natural. Post pipe fill of 0.26m diameter, 0.44m deep.
<i>INTERPRETATION:</i>	<i>Fill of posthole [037]</i>
[039]	Square shape in plan, vertical sides, flat base but highly visible post pipe is circular shape in plan, shallow concave sides and base. Post pipe 0.12m diameter. Filled by (040).
<i>INTERPRETATION:</i>	<i>Cut of posthole</i>
(040)	Post pipe fill of loose tarmac fragments. Packing for square post hole of re-deposited natural. Post pipe fill of 0.12m diameter.
<i>INTERPRETATION:</i>	<i>Fill of posthole [039]</i>
[041]	Square shape in plan, vertical sides, flat base but highly visible post pipe is



	circular shape in plan, shallow concave sides and base. Post pipe 0.18m diameter. Filled by (042).
<i>INTERPRETATION:</i>	<i>Cut of post hole</i>
(042)	Post pipe fill of loose tarmac fragments. Packing for square post hole of re-deposited natural. Post pipe fill of 0.18m diameter.
<i>INTERPRETATION:</i>	<i>Fill of posthole [041]</i>
[043]	Square shape in plan, vertical sides, flat base but highly visible post pipe is circular shape in plan, shallow concave sides and base. Double post hole. Filled by (044).
<i>INTERPRETATION:</i>	<i>Cut of post hole</i>
(044)	Post pipe fill of loose tarmac fragments. Packing for square post hole of re-deposited natural. Double posthole.
<i>INTERPRETATION:</i>	<i>Fill of posthole [043]</i>
[045]	Square shape in plan, vertical sides, flat base but highly visible post pipe is circular shape in plan, shallow concave sides and base. Post pipe 0.18m diameter, 0.14m deep. Filled by (046).
<i>INTERPRETATION:</i>	<i>Cut of post hole</i>
(046)	Post pipe fill of loose tarmac fragments. Packing for square post hole of re-deposited natural. Post pipe fill of 0.18m diameter, 0.14m deep.
<i>INTERPRETATION:</i>	<i>Fill of posthole [045]</i>
[047]	Square shape in plan, vertical sides, flat base but highly visible post pipe is circular shape in plan, shallow concave sides and base. Post pipe 0.20m diameter, 0.10m deep. Filled by (048).
<i>INTERPRETATION:</i>	<i>Cut of post hole</i>
(048)	Post pipe fill of loose tarmac fragments. Packing for square post hole of re-deposited natural. Post pipe fill of 0.20m diameter, 0.10m deep.
<i>INTERPRETATION:</i>	<i>Fill of posthole [047]</i>
[049]	Square shape in plan, vertical sides, flat base but highly visible post pipe is circular shape in plan, shallow concave sides and base. Post pipe 0.20m diameter, 0.08m deep. Filled by (050).
<i>INTERPRETATION:</i>	<i>Cut of posthole</i>
(050)	Post pipe fill of loose tarmac fragments. Packing for square post hole of re-deposited natural. Post pipe fill of 0.20m diameter, 0.08m deep.
<i>INTERPRETATION:</i>	<i>Fill of posthole [049]</i>
[051]	Square shape in plan, vertical sides, flat base but highly visible post pipe is circular shape in plan, shallow concave sides and base. Post pipe 0.48m diameter, 0.26m deep. Partner post pipe of 0.56m N/S, 0.34m W/E and 0.12m deep. Filled by (052).
<i>INTERPRETATION:</i>	<i>Cut of posthole</i>
(052)	Post pipe fill of loose tarmac fragments. Packing for square post hole of re-deposited natural. Post pipe fill of 0.48m diameter, 0.26m deep. Partner post pipe fill of 0.56m N/S, 0.34m W/E and 0.12m deep.
<i>INTERPRETATION:</i>	<i>Fill of posthole [051]</i>
[053]	Square shape in plan, vertical sides, flat base but highly visible post pipe is circular shape in plan, shallow concave sides and base. Post pipe 0.48m diameter, 0.40m deep. Filled by (054).
<i>INTERPRETATION:</i>	<i>Cut of posthole</i>
(054)	Post pipe fill of loose tarmac fragments. Packing for square post hole of re-deposited natural. Post pipe fill of 0.48m diameter, 0.40m deep.



<i>INTERPRETATION:</i>	<i>Fill of posthole [053]</i>
[055]	Square shape in plan, vertical sides, flat base but highly visible post pipe is circular shape in plan, shallow concave sides and base. Post pipe 0.50m diameter, 0.12m deep. Filled by (056).
<i>INTERPRETATION:</i>	<i>Cut of posthole</i>
(056)	Post pipe fill of loose tarmac fragments. Packing for square post hole of re-deposited natural. Post pipe fill of 0.50m diameter, 0.12m deep.
<i>INTERPRETATION:</i>	<i>Fill of posthole [055]</i>
[057]	Square shape in plan, vertical sides, flat base but highly visible post pipe is circular shape in plan, shallow concave sides and base. Post pipe 0.54m diameter, 0.14m deep. Filled by (058).
<i>INTERPRETATION:</i>	<i>Cut of posthole</i>
(058)	Post pipe fill of loose tarmac fragments. Packing for square post hole of re-deposited natural. Post pipe fill of 0.54m diameter, 0.14m deep.
<i>INTERPRETATION:</i>	<i>Fill of posthole [057]</i>
[059]	Square shape in plan, vertical sides, flat base but highly visible post pipe is circular shape in plan, shallow concave sides and base. Post pipe 0.50m diameter. Filled by (060).
<i>INTERPRETATION:</i>	<i>Cut of post hole</i>
(060)	Post pipe fill of loose tarmac fragments. Packing for square post hole of re-deposited natural. Post pipe fill of 0.50m diameter.
<i>INTERPRETATION:</i>	<i>Fill of posthole [059]</i>
[061]	Square shape in plan, vertical sides, flat base but highly visible post pipe is circular shape in plan, shallow concave sides and base. Post pipe 0.54m diameter. Filled by (062).
<i>INTERPRETATION:</i>	<i>Cut of post hole</i>
(062)	Post pipe fill of loose tarmac fragments. Packing for square post hole of re-deposited natural. Post pipe fill of 0.54m diameter.
<i>INTERPRETATION:</i>	<i>Fill of posthole [061]</i>
(063)	Moderate compaction, mid brown clayey silt. Possibly same as (004).
<i>INTERPRETATION:</i>	<i>Subsoil natural</i>
(064)	Hard yellow and blue silty clay. 0.5m wide, 0.6m thick. Re-deposited natural within drain.
<i>INTERPRETATION:</i>	<i>Lower fill of drainage linear [011]</i>
(065)	Moderately compact yellow silty clay with brown and red mottles. Occasional polystyrene, frequent charcoal. 1m in diameter, 0.28m deep. Re-deposited natural.
<i>INTERPRETATION:</i>	<i>Fill of pit [066]</i>
[066]	Circular shape in plan, shallow sides and flat base. 1m in diameter, 0.28m deep. Filled by (065).
<i>INTERPRETATION:</i>	<i>Cut of pit [066]</i>
(067)	Firm to hard very dark grey silty sand. Very frequent stones up to 0.08m in size but averaging 0.04m, angular although smoothed on top surface. Occasional post medieval/late Victorian nails, CBM and pottery. 6m in width ENE/WSW, 0.10m thick. Deposit is linear NNW/SSE.
<i>INTERPRETATION:</i>	<i>Metalled surface</i>
(068)	Firm dark yellow brown silty sand. Frequent angular stones. 8m in width ENE/WSW, 0.30m thick. Deposit is linear NNW/SSE. Underlies metalled surface (067).



<i>INTERPRETATION:</i>	<i>Make up material for metalled surface (067)</i>
(069)	Moderately compacted to firm dark yellow brown silty sand. Very occasional stones and dark blue glass bottle bottom. 8m in width ENE/WSW, 0.20m thick. Deposit is linear NNW/SSE. Underlies make up material (068).
<i>INTERPRETATION:</i>	<i>Foundational material for metalled surface (067)</i>
[070]	Linear NW/SE, near vertical sides, concave base. 0.80m wide, 0.50m deep. Filled by (071), (072), (073) and (074). Parallel to linear [075] within (067).
<i>INTERPRETATION:</i>	<i>Cut of NE linear within (067)</i>
(071)	Moderately compact dark yellowish-brown sandy silt. Occasional small stones. 0.45m wide, 0.20m thick. Silty basal fill of [070].
<i>INTERPRETATION:</i>	<i>Basal fill of linear [070]</i>
(072)	Hard yellowish-white gritty coarse sand with dark grey and blue patches. Moderate stone inclusions. 0.35m wide, 0.20m thick. Hardcore fill of [070].
<i>INTERPRETATION:</i>	<i>Mortary fill of linear [070]</i>
(073)	Moderately compact, dark red brown silty sand. Moderate stone inclusions. 0.65m wide, 0.20m thick. Softer hardcore fill of [070].
<i>INTERPRETATION:</i>	<i>Red sandy fill of linear [070]</i>
(074)	Firm to hard light brown grey silty sand. Occasional stones. 0.80m wide, 0.15m thick. Upper fill of [070].
<i>INTERPRETATION:</i>	<i>Upper fill of linear [070]</i>
[075]	Linear NW/SE, sides at 80°, concave base. 0.70m wide, 0.50m deep. Filled by (076), (077), (078) and possibly (080). Parallel to linear [070] within (067).
<i>INTERPRETATION:</i>	<i>Cut of SW linear within (067)</i>
(076)	Moderately compacted dark yellow brown sandy silt. Occasional small stones, occasional large stones. 0.50m wide, 0.30m thick. Silty basal fill of [075].
<i>INTERPRETATION:</i>	<i>Basal fill of linear [075]</i>
(077)	Hard light grey gritty coarse sand with dark grey patches. Moderate stone inclusions. 0.60m wide, 0.20m thick. Hardcore fill of [075].
<i>INTERPRETATION:</i>	<i>Mortary fill of linear [075]</i>
(078)	Moderately compacted to firm light red silty sand. Moderate stone inclusions. 0.80m wide, 0.10m thick. Softer hardcore fill of [075].
<i>INTERPRETATION:</i>	<i>Red sandy fill of linear [075]</i>
(079)	Moderately compact dark grey to black silty sand. Includes mortar dust and burnt material. Occasional stones, frequent post medieval/Victorian pottery, metal, bone, glass and CBM. 0.50m wide, 0.06m thick. Probable Victorian road extension to (067).
<i>INTERPRETATION:</i>	<i>Charcoal deposit below metalled surface (067)</i>
(080)	Moderately compact to firm dark yellowish-brown silty sand. Occasional stones. 0.60m wide, 0.30m thick. Probable deposit below Victorian road extension (079) although may be fill of [075].
<i>INTERPRETATION:</i>	<i>Fill of linear [075] or make up material for metalled surface (067)</i>
(081)	Hard dark grey silty sand. Very frequent small stones up to 0.06m in size and angular but with rounded tops. 3m wide, 0.04m thick. Re-surfacing of (067).
<i>INTERPRETATION:</i>	<i>Re-surfacing of metalled surface (067)</i>
(082)	Moderately compact to loose stones of local grey limestone forming a single layered metalled surface. Stone size varies from rounded big ones of 0.40m and small angular ones of 0.02m, mostly sub angular at 0.08m. Deposit 6m to 7m wide and visible for at least 12m NW/SE, 0.20m thick. Deposit orientated NW/SE. Two parallel wheel ruts aligned NW/SE with the road but on the NE side



	were pressed into the metallated surface. Amongst the stones were modern finds of pottery, glass, nails, wire and aluminium building tags.
<i>INTERPRETATION:</i>	<i>Metallated surface. Possible later resurfacing of an earlier, possibly Roman, roadway. The surface yielded an assemblage of exclusively modern finds but the lack of plastics suggests an early to mid-20<sup>th</sup> century date. However, the finds evidence cannot be taken as conclusive</i>
(083)	Moderately compact to firm yellowish-red sandy clay with brown mottles. No inclusions. 7m wide NE/SW, 0.20m to 0.30m thick.
<i>INTERPRETATION:</i>	<i>Re-deposited natural below metallated surface (082)</i>
(084)	Moderately compact to loose light yellow clayey sand. No inclusions. 7m wide NE/SW, 0.20m thick.
<i>INTERPRETATION:</i>	<i>Sandy band between (083) and (085)</i>
(085)	Firm rich orange red sandy clay. No inclusions.
<i>INTERPRETATION:</i>	<i>Natural</i>

### 9.3 Stanley Farm/Bonnington Walk

CONTEXT	DESCRIPTION
(201)	Moderately compact dark greyish-brown silty clay. Occasional sub angular small stones, rare rounded medium stones, occasional charcoal flecks. 0.05m to 0.13m thick.
<i>INTERPRETATION:</i>	<i>Topsoil</i>
(202)	Compact mid grey to mottled brown clayey silt. No inclusions. 0.38m to 0.25m thick.
<i>INTERPRETATION:</i>	<i>Subsoil</i>
(203)	Firm mid grey brown clay. Occasional angular limestone closest to culvert structure (005). 1.35m wide, 0.70m thick.
<i>INTERPRETATION:</i>	<i>Fill of culvert [004]</i>
[204]	NNE/SSW linear culvert cut. Sides near vertical, flat base, sharp breaks of slope. Filled by culvert structure (005), (006), (007) and (008) with upper fill of (003).
<i>INTERPRETATION:</i>	<i>Cut of culvert</i>
(205)	Rough quarried undressed single coursed limestone roof slabs. No bonding material. Up to 0.60m wide.
<i>INTERPRETATION:</i>	<i>Stone roof slabs to culvert [004]</i>
(206)	Rough quarried undressed randomly coursed limestone. No bonding material. 0.40m tall. Eastern wall of culvert [004].
<i>INTERPRETATION:</i>	<i>Stone wall to culvert [004]</i>
(207)	Rough quarried undressed randomly coursed limestone. No bonding material. 0.40m tall. Western wall of culvert [004].
<i>INTERPRETATION:</i>	<i>Stone wall to culvert [004]</i>
(208)	Bedrock base to culvert [004]. Calcite build up would suggest culvert has been in use for some time.
<i>INTERPRETATION:</i>	<i>Stone base to culvert [004]</i>
(209)	Compact mid grey clay.
<i>INTERPRETATION:</i>	<i>Natural clay</i>



## 9.4 Horfield Leisure Centre

CONTEXT	DESCRIPTION
(101)	Friable dark greyish-brown silty clay. Rare small stones. 0.15m depth. Suggested that topsoil (001) has been relaid after landscaping with (102).
<i>INTERPRETATION:</i>	<i>Topsoil</i>
(102)	Firm to friable compaction, mid greyish-brown silty clay. Frequent post medieval material throughout, including coal, oyster shell, ceramic, CBM and domestic debris. 0.05m thick. Overlies (103).
<i>INTERPRETATION:</i>	<i>Post medieval debris deposit used as levelling material prior to relaying of topsoil (101)</i>
(103)	Firm compaction, pale greenish-brown yellow silty clay. No inclusions. Overlies natural grey clay to a thickness of 0.3m. Underlies (102) and (101).
<i>INTERPRETATION:</i>	<i>Natural subsoil. Probable surface weathering of natural grey clays</i>
[104]	Sub circular shape in plan, 0.3m diameter, 0.35m depth, vertical sides and flat to concave base. Filled by (105).
<i>INTERPRETATION:</i>	<i>Cut of modern posthole</i>
(105)	Compact mid greyish-grey clay. Frequent sandstone, brick and concrete packing material. 0.3m diameter, 0.35m depth, singular fill of [104].
<i>INTERPRETATION:</i>	<i>Fill of modern posthole [104]</i>
[106]	Sub circular shape in plan, 0.45m diameter. Unexcavated. Filled by (107).
<i>INTERPRETATION:</i>	<i>Cut of modern posthole</i>
(107)	Compact yellow-brown-grey clay. Frequent brick and stone packing material. 0.45m diameter. Unexcavated. Fill of [106].
<i>INTERPRETATION:</i>	<i>Fill of modern posthole [106]</i>
[108]	Sub circular shape in plan, 0.45m diameter. Unexcavated. Filled by (109).
<i>INTERPRETATION:</i>	<i>Cut of modern posthole</i>
(109)	Compact yellow-brown-grey clay. Frequent brick and stone packing material. 0.45m diameter. Unexcavated. Fill of [108].
<i>INTERPRETATION:</i>	<i>Fill of modern post hole [108]</i>
[110]	Sub rectangular shape in plan with rounded corners. 2.4m length, 1.1m width. Unexcavated. Truncated by land drain. Filled by (111).
<i>INTERPRETATION:</i>	<i>Cut of pit</i>
(111)	Friable dark brownish-grey silty clay. Occasional small to medium stones, rare coal fragments and ceramic. 2.4m length, 1.1m width. Unexcavated. Truncated by land drain. Fill of [110].
<i>INTERPRETATION:</i>	<i>Fill of pit [110]</i>
[112]	Sub rectangular shape in plan with squared corners. 2.1m length, 1.1m width. Unexcavated. Truncates land drain. Filled by (113).
<i>INTERPRETATION:</i>	<i>Cut of pit</i>
(113)	Friable dark brown grey silty clay. Occasional small stones, occasional coal fragments and chicken wire. 2.1m length, 1.1m width. Unexcavated. Fill of [112].
<i>INTERPRETATION:</i>	<i>Fill of pit [112]</i>
(114)	Singular line of bricks lined edge to edge N/S for 5.1m. Bricks of 0.23m x 0.11m, strongly mortared in place with white gritty concrete like material. Width of brick line 0.35m.
<i>INTERPRETATION:</i>	<i>Foundations of short free-standing wall within foundation cut [115].</i>



[115]	Linear N/S cut for wall (014). 5.1m in length, 0.35m in width. Entirely filled by (114).
<i>INTERPRETATION:</i>	<i>Foundation cut for wall (114)</i>
[116]	Sub circular shape in plan, 0.6m diameter. Unexcavated. Filled by (117).
<i>INTERPRETATION:</i>	<i>Cut of pit</i>
(117)	Friable mid greyish-brown silty clay. Occasional brick fragments, occasional small stones, occasional coal fragments and ceramic. 0.6m diameter. Unexcavated. Fill of [116].
<i>INTERPRETATION:</i>	<i>Fill of pit [116]</i>
[118]	Sub circular shape in plan, 0.45m diameter. Unexcavated. Filled by (119).
<i>INTERPRETATION:</i>	<i>Cut of modern posthole</i>
(119)	Friable to firm compaction, mid greyish-brown clay. Frequent medium to large stones packing. 0.45m diameter. Unexcavated. Fill of [118].
<i>INTERPRETATION:</i>	<i>Fill of modern posthole [118]</i>
[120]	Sub circular shape in plan, 0.45m diameter. Unexcavated. Filled by (121).
<i>INTERPRETATION:</i>	<i>Cut of modern posthole</i>
(121)	Friable to firm compaction, mid greyish-brown clay. Frequent medium to large stones packing. Includes remains of rotted wooden post. 0.45m diameter. Unexcavated. Fill of [120].
<i>INTERPRETATION:</i>	<i>Fill of modern posthole [120]</i>
[122]	Sub circular to oval shape in plan, 2.5m in length, 1.5m in width. Unexcavated. Filled by (124) with in situ burning (123), dimensions given are actually limits of in situ burning, (124) dimensions given as 1.75m length and 1m width.
<i>INTERPRETATION:</i>	<i>Cut of burnt pit</i>
(123)	Firm reddened clay. No inclusions. 2.5m in length, 1.5m in width. Unexcavated.
<i>INTERPRETATION:</i>	<i>Fill/burning associated with burnt pit [122]</i>
(124)	Friable dark greyish-brown silty clay. Occasional small to medium stones, occasional coal fragments and ceramic. 1.75m in length, 1m in width. Unexcavated. Fill of [122].
<i>INTERPRETATION:</i>	<i>Fill of burnt pit [122]</i>
[125]	Irregular in plan, extending over an area of some 5m diameter. Filled by (128)
<i>INTERPRETATION:</i>	<i>Irregular spread representing a discrete area of more intense disturbance</i>
(126)	Friable dark greyish-brown silty clay. Occasional small & medium stones, occasional coal fragments and 19 <sup>th</sup> -century ceramics
<i>INTERPRETATION:</i>	<i>Fill of [127]</i>
[127]	Sub-rectangular in plan. 2m length, 1.3m width. Unexcavated. Filled by (126).
<i>INTERPRETATION:</i>	<i>One of several small rubbish pits [110], [112], [116], [127]. None was especially artefact-rich, suggesting garden waste or similar disposal.</i>
(128)	Loose mid greyish-brown clayey silt. Frequent slate, 19 <sup>th</sup> century brick & concrete. Fill of [125]
<i>INTERPRETATION:</i>	<i>Fill composed largely of structural debris</i>
[129]	Sub rectangular shape in plan with rounded corners. 0.4m length, 0.25m width. Unexcavated. Filled by (130)
<i>INTERPRETATION:</i>	<i>Very small pit postdating a mechanically excavated 20<sup>th</sup>-century land drain</i>
(130)	Friable greyish-brown part cemented/vitrified, very ashy material. Fills [129]
<i>INTERPRETATION:</i>	<i>Fill of [129]. The origin of this material was unclear but it was clearly 20<sup>th</sup>-century in date and thus the feature was not investigated further.</i>
[131]	Irregular sub circular shape in plan, 8m length, 5m width and maximum 0.1m thick. Unexcavated.





<i>INTERPRETATION:</i>	<i>Spread between topsoil (101) and natural (103). Limits of spread of modern debris</i>
(132)	Firm to loose compaction, black loam. Frequent coal fragments, gravel, concrete rubble and tarmac. 8m length, 5m width and maximum 0.1m thick. Unexcavated
<i>INTERPRETATION:</i>	<i>Spread of modern debris between topsoil (101) and natural (103).</i>
[133]	Irregular linear patches up to 0.5m wide and extending for at least 6.5m. Generally W/E or NE/SW. Filled by (134).
<i>INTERPRETATION:</i>	<i>Modern disturbance</i>
(134)	Friable very dark greyish-brown clayey silt. Frequent 20 <sup>th</sup> century debris such as plastic, glass, cans, brick and concrete. Up to 0.5m wide and extending for at least 6.5m.
<i>INTERPRETATION:</i>	<i>Fill of modern disturbance [133]</i>
[135]	Linear NW/SE, 1.2m wide, 0.15m deep and extending for at least 7.1m. Concave base and sides. Filled by (136).
<i>INTERPRETATION:</i>	<i>Cut of linear ditch</i>
(136)	Firm mid grey to brownish-grey silty clay. Occasional small to medium stones, rare brick fragments. 1.2m wide, 0.15m deep and extending for at least 7.1m. Fill of [135].
<i>INTERPRETATION:</i>	<i>Fill of linear ditch [135]</i>

## 9.5 Granny Down

CONTEXT	DESCRIPTION
(0100)	Dark brown humic clay, frequent small stones & roots, maximum depth 0.15m.
<i>INTERPRETATION:</i>	<i>Topsoil</i>
(0101)	Sterile light greenish-yellow silty clay
<i>INTERPRETATION:</i>	<i>Subsoil</i>
(0102)	Loose mid greyish-brown silty clayey silt. Frequent angular stones, glass, oyster shell & late post-medieval glazed ceramics and china. Measures approximately 5.25m x 3.2m
<i>INTERPRETATION:</i>	<i>Mixed spread of post-medieval domestic refuse</i>

## 9.6 Clifton Down

CONTEXT	DESCRIPTION
(301)	Moderately compact to loose, dark brown-black silty clay. Frequent roots, occasional small angular stones. 0.30m to 0.15m thick.
<i>INTERPRETATION:</i>	<i>Topsoil</i>
(302)	Moderately compact dark greyish-brown silty clay, frequent small angular limestone fragments, fragmentary post-medieval CBM.
<i>INTERPRETATION:</i>	<i>Subsoil deposit</i>
(303)	Moderately compact light yellow sand.
<i>INTERPRETATION:</i>	<i>Subsoil</i>
(304)	Hard light orangey-grey to brownish-grey limestone
<i>INTERPRETATION:</i>	<i>Bedrock</i>
(305)	Moderately compact dark brownish-black silty clay, occasional small stones.
<i>INTERPRETATION:</i>	<i>Subsoil</i>
(306)	Loose light grey silty clay & moderately compact mid orangey-brown clayey silt,



	no inclusions.
<i>INTERPRETATION:</i>	<i>Deposit underlying the subsoil in places</i>
(307)	Firm mid brownish-yellow/yellowish-brown silty clay.
<i>INTERPRETATION:</i>	<i>Natural deposition filling undulations in the limestone bedrock</i>
[308]	Cut, sub-circular in plan, sharp break of slope at the top, concave sides and base. Filled by (309), (319)
<i>INTERPRETATION:</i>	<i>Modern refuse pit</i>
(309)	Loose light brownish-grey sandy clay, occasional charcoal & small angular stone
<i>INTERPRETATION:</i>	<i>Basal fill of [308]</i>
[310]	Cut, sub-circular in plan, sharp break of slope at the top, concave sides and base. Filled by (311), (312), (313), (314)
<i>INTERPRETATION:</i>	<i>Modern refuse pit</i>
(311)	Firm dark greyish-brown silty clay & lens of loose light grey silty clay.
<i>INTERPRETATION:</i>	<i>Basal fill of [310]</i>
(312)	Firm mid brownish-red silty clay, occasional brick fragments (312) , loose light grey silty clay lens
<i>INTERPRETATION:</i>	<i>Secondary fill of [310]</i>
(313)	Moderately compact dark brownish-grey silty clay, occasional stone, brick & charcoal.
<i>INTERPRETATION:</i>	<i>Tertiary fill of [310]</i>
(314)	Moderately compact dark brownish-grey silty clay, occasional stone, brick & charcoal, lenses of loose light grey silty clay.
<i>INTERPRETATION:</i>	<i>Upper fill of [310]</i>
(315)	Mixed light greyish-white & dark brownish-black silty clays, frequent small stones, occasional brick fragments and slate.
<i>INTERPRETATION:</i>	<i>Modern disturbance extending S along much of the easement between Stoke Road and the WNW-ESE aligned footpath</i>
(316)	Moderately compact dark brownish-black silty clay, occasional small stones
<i>INTERPRETATION:</i>	<i>Subsoil</i>
(317)	Moderately compact mid orangey-brown clayey silt, no inclusions
<i>INTERPRETATION:</i>	<i>Natural deposition</i>
(318)	Firm mid brownish-yellow silty clay, no inclusions
<i>INTERPRETATION:</i>	<i>Natural deposition</i>
(319)	Moderately compact mid greyish-brown silty clay, frequent small & medium stones
<i>INTERPRETATION:</i>	<i>Upper fill of [308]</i>



## 10. Appendices: Assessment Reports

### 10.1 APPENDIX 1: POTTERY ASSESSMENT

*Dr Alejandra Gutiérrez (ASUD)*

A total of 22 pottery sherds were retained from the watching brief. The pottery was only examined by eye in order to date the group and identify any possible medieval wares.

Twenty sherds (837g) were identified as post-medieval wares of the 17<sup>th</sup> and 18<sup>th</sup> centuries. These include typical products frequently found from excavations in Bristol: Bristol/Staffordshire slip wares, 'tiger'-glazed local stoneware and black basalt stoneware (1750s-1820s), although plain lead-glazed wares are the most numerous.

Only two sherds of medieval pottery were found. These are Ham Green coarse wares of the 12<sup>th</sup>-13<sup>th</sup> centuries, unglazed and with clear evidence of sooting/burning.

### 10.2 APPENDIX 2: LITHIC ASSEMBLAGE

*Caroline Rosen BSc, MA*

In total nine pieces of flint were recovered from the archaeological works carried out by Border Archaeology at Durdham Downs. Seven pieces were recovered from context (063) (subsoil) and two pieces from the topsoil strip. Each of the nine pieces were discovered in isolation and retained based on their intrinsic value. Flint does not occur naturally in the region and therefore all pieces were deposited in the area as a result of human agency.

The assemblage consists primarily of debitage with only one piece evidencing some retouch. Of the nine pieces three have been assigned a registered small finds number (Table 1).

S.F. no.	Context	Item	Description
2	063	Blade	A small blade/bladelet which is heavily patinated. There is much edge damage and evidence for platform preparation.
3	063	Core	A bi-directional core. Negative scars indicate the removal of 2 bladelets 6mm wide. The core appears to be an expedient piece evidenced by the absence of patination on the negative blade scars and the small number of removals. Interestingly, there also appears to be an older more heavily patinated flake scar with evidence for platform preparation.
5	063	Knife/blade	A large and thick knife/blade which has some retouch along one lateral edge. The negative scars on the dorsal edge evidence the prior removal of long thin blades. Half of the dorsal side still contains some cortex



S.F. no.	Context	Item	Description
-	063	Core	A poor quality piece of flint with evidence of fractures and crushing. Due to these faults it would appear that the core is exhausted. The core is lightly patinated.
-	063	Flake (broken)	The dorsal side of this piece has been abraded probably by fluvial processes.
-	063	Flake (broken)	Small broken flake with some cortex remaining
-	063	Flake (broken)	Small broken flake with some cortex remaining
-	Topsoil	Bladelet	The dorsal side of this piece has been abraded probably by fluvial processes. There is no evidence for retouch. There is light patination and some cortex remains at the distal end.
-	Topsoil	Unclassifiable	Broken, lightly patinated piece with some abrasion

*Table 1 – Catalogue of lithics found at Durdham Downs*

As the assemblage was not found as a concentration in a particular area and given its small size it is difficult to assign an accurate date. However, some suggestions can be made about individual more diagnostic pieces. There seems to be a small Mesolithic component to this assemblage, principally SF 2 heavily patinated blade/bladelet; SF 3 the bi-directional core; and the bladelet found within the topsoil. SF 5 is an interesting piece that shows some evidence of retouch along one lateral edge. The long narrow negative flake scars observable on its dorsal side could indicate Late Upper Palaeolithic flint working, however the marked thickness of this piece is not in line with other tools from this period and there is a distinct lack of patination. It is also possible that this piece is of a Neolithic date when the use of blade technology was still very common. Ultimately, the date of SF 5 is indeterminate.

### 10.3 APPENDIX 3: ASSESSMENT OF STONE ARTEFACTS

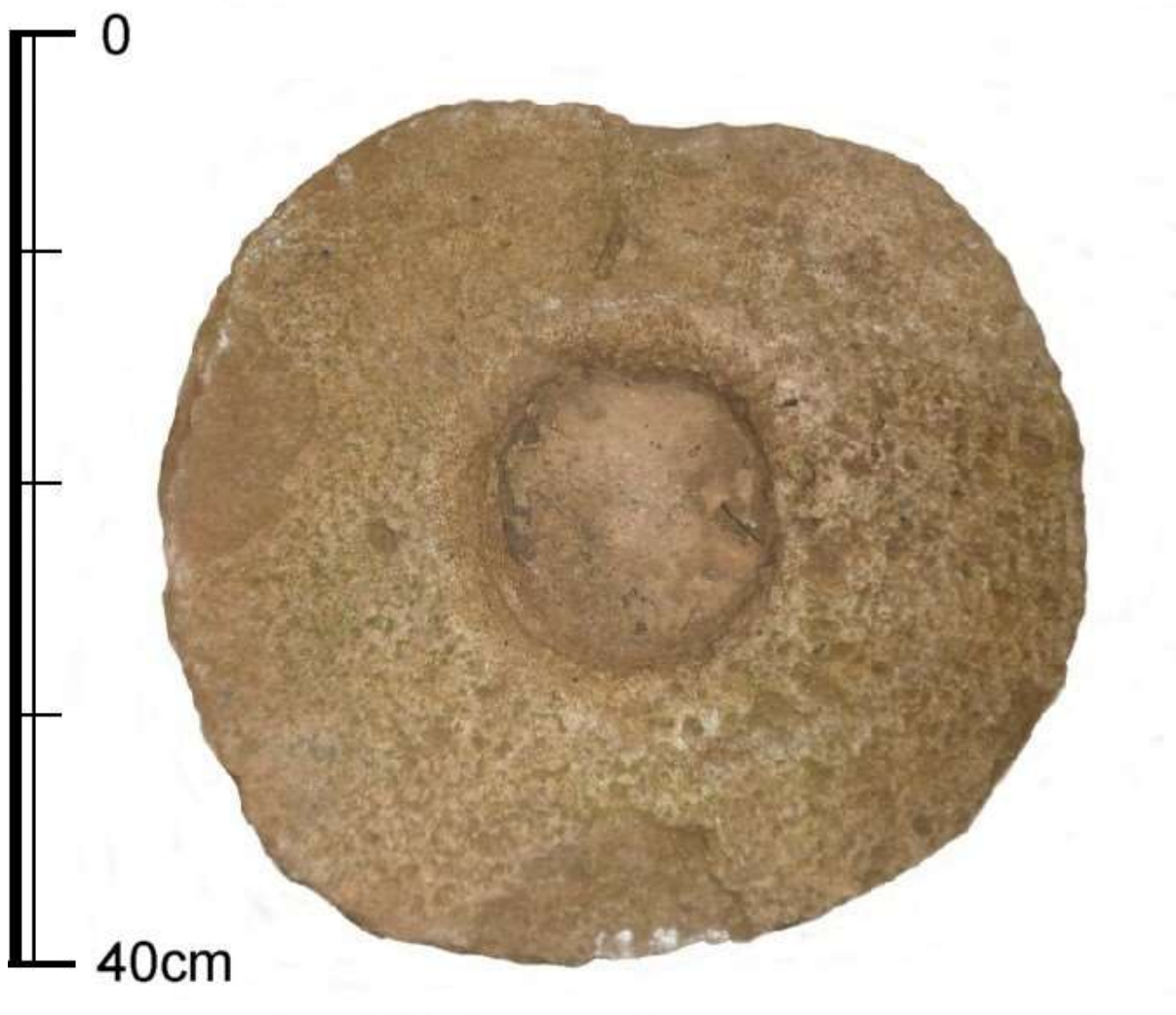
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#### 10.3.1 INTRODUCTION

This report summarises the findings arising out of the environmental archaeological assessment undertaken by Quaternary Scientific (QUEST), University of Reading, for Border Archaeology in connection with samples taken during archaeological excavations at Durdham Down, Avon, where a quern stone (15kg) was discovered. The aim of the petrographic investigation was (1) to ascertain the nature and the function of this stone artefact in particular identify the fabric of the stone to determine its geological character and source; (2) make reference to its form in comparison with known texts; (3) to make recommendations for further study if necessary.

### 10.3.2 METHODS

The stone was examined using the specialists own reference collection of geological samples from southern and western England. The application of a 1kg masons hammer and sharp chisel to each example ensured that a small fresh fabric surface was exposed. Treatment of dilute Hydrochloric acid determined whether or not the rock had a calcareous composition. The fabric was examined at x20 magnification using a long arm stereomicroscope or hand lens (Gowland x10). Consultation of local geological memoirs (Whitakker & Green 1983) and articles on quern manufacture, form and source (esp. Shaffrey 2006; Curwen 1937) provided an additional source of reference material.



*Plate 50: Vertical view of upper surface of Roman quern stone*



*Plate 51: Side view of quern stone*

### 10.3.3 RESULTS AND INTERPRETATION

#### *Local geology*

Durdham Down lies in an area of upland dominated by hard grey Lower Carboniferous limestones (especially the Gully oolite) and calcareous mudstones (Lower Limestone Shales) (Kellaway & Welch 1993, 48-50). At Clifton, 1 km to the SW, the outcrop is cut by the River Avon, forming a steep sided gorge. Older folded Devonian sandstones and conglomerates are, however exposed just 2km to the N including outcrops of Woodhill Bay Conglomerate (Kellaway & Welch, 1993, 17 plate 2). Capping both the Devonian and Carboniferous sediments in this area are younger, softer Triassic sandstones and marls (Keuper Marl) and conglomerates (Dolomitic Conglomerate).

The estuary of the Avon, alongside which the Roman seaport of *Abonae* is sited, links this part of Britannia to outcrops of hard stone from the Forest of Dean (Quartz Conglomerate) and South Wales (Millstone Grit).

Locally, only the hard quartz rich conglomeratic horizons would be suitable for quern stone manufacture; however the sites proximity to the Avon/Severn means the outcrops of Millstone Grit and Quartz Conglomerate need to be considered.

#### *Petrology*

*Quartz Grit stone – pale grey – red fairly well cemented quartz grit stone very occasional pebbles of fractured quartz up to 10mm across, weathering out leaves a pitted surface; occasional very small (<1mm) red sandstone fragments and a black lithic inclusion. Mica. No calcite cement.*

*Source Quartz Conglomerate Basal Upper Devonian Local - nearest outcrop 2km N (Woodhill Bay Conglomerate) also identified S of Avonmouth at Kilkenny Bay, Portishead. Area 3 of Shaffrey (2006).*



In hand specimen, it is not the classic basal quartz conglomerate, typical of the examples from the Forest of Dean - which contains large angular inclusions of fractured quartz, old red sandstone and acid igneous lithic fragments. Rather it has a finer, grittier appearance and on first inspection appears similar to Millstone Grit with its sugary and open texture. It can be described as a slightly pebbly quartz cemented sandstone. However, it has very occasional small (5-10mm) inclusions of fractured quartz a feature only of older Devonian Conglomerate and one small black lithic fragment. These small angular laths have been weathered out on the smooth outer surface giving the rock a distinctive pitted appearance. It is possible that this could have been a boulder picked up from a river bed or from the beach, and then roughly fashioned into a large bun-shaped quern. It does not react with dilute Hydrochloric acid.

It is most probably a local outcrop of Quartz Conglomerate, the nearest source being the Woodhill Bay Conglomerate (Kellaway & Welch, 1993, 17 plate 2) just 2km away. Quartz conglomerates from the Bristol area (Area 3 of Shaffrey 2006) tend not have exotic pebbles and are much finer grained. However, those from the Mendips (Area 5 of Shaffrey 2006) region 30km (SW) have these characteristics as well. Furthermore, there is a great deal of lithological variation within this unit and defining a more precise geological source may only be possible with a more extensive reference collection or thin-section analysis. However, examples of quartz conglomerate recovered from nearby Sea Mills are described by Shaffrey as only *slightly pebbly with all quartz pebbles* (Shaffrey 2006, 114) and are probably from the Bristol area.

#### *Typology*

This complete lower rotary quern is exceptionally thick (110mm), with a very slightly convex base and splayed edges so that the quern is uniform in thickness. The quern is partially perforated with dimensions 120mm x 120mm x 25mm. This form is comparable to the type 1 beehive querns (classified on the basis of their thickness in relation to diameter) (Shaffrey 2006, 41). It is particularly comparable with type 1b (Shaffrey 2006; Figure 4.19) which is similar to Wessex type identified by Curwen (1937; Figure 6). Bee-hive querns are mostly found in early Roman contexts and nothing beyond the 2<sup>nd</sup>-3<sup>rd</sup> century (Shaffrey, 2006, 42).

### **10.3.4 CONCLUSIONS**

Hand specimen petrological analysis of a near complete rotary quern lower stone from Durdham Down, Avon is comparable in its geological character with a type of quartz conglomerate from the Devonian of the Bristol/Forest of Dean Area. These basal conglomerates were quarried and worked in to rotary querns and supplied over a large tract of southern and western Britannia (Shaffrey 2006) from the first century AD onwards. Although not the most ideal material for grinding (when compared with thinner millstone grits, Lodsworth Greensands and lavastones) this pebbly heterogeneous gritstone was nevertheless hard enough to withstand excessive wear.

This rock does not outcrop at Durdham Down (where the underlying geology consists of younger Paleozoic limestones), and instead would have needed to have been brought in from outcrops at least 5km away to the W at Lydiard Trigorze or Wootton Bassett. Both examples were recovered from different pit fills at the base of the sequence and were probably contemporary. They could both have originally been post pads or pot boilers. Its bun-shaped form would indicate that it is probably Early Roman in date.



### 10.3.5 RECOMMENDATION

This near complete lower rotary quern stone from Durdham Down requires illustration.

### 10.3.6 REFERENCES

British Geological Survey (1978) Sheet 264 (Bristol) Geological map. 1:50 000 scale (Keyworth, Nottingham: British Geological Survey)

Curwen, E.C. (1937) *Querns. Antiquity* **11**, 133-51

Hayward, K.M.J. (2013) *Assessment of stone Banwell BWB12*. Unpublished assessment report for Border Archaeology

Kellaway, G.A. & Welch, F.B.A. (1993) Geology of the Bristol District. *Memoir of the British Geological Survey*

Shaffrey, R. (2006) *Grinding and Milling: A study of Romano-British rotary querns and millstones made from Old Red Sandstone*. BAR British Series 409, Archaeopress

## 10.4 APPENDIX 4: ASSESSMENT OF COINS

*Stephen Priestley MA*

Three coins were recovered during the course of the archaeological programme of work, none of which was found in a stratified context. The following comprises a brief assessment of the finds.

1. Debased Spanish colonial silver *real* coin (probably of Philip II, minted in Potosi [Bolivia]) widest date range c.1575-1580). Coin only partially intact (date missing)

Obverse: Crown and shield displaying the royal arms of Philip II Habsburg of Spain (in use up to 1580). To the left of the shield are the initials P (the mintmark denoting it was minted in Potosi) and B (denoting the surname of the Assayer – full name unknown). Only partial legend intact – [HISPANIAR]UM . ET.

Reverse: Greek cross set within an eight-lobed border, quartered with lions and castles (Arms of Castille and Leon). Date missing. Only partial legend intact – [INDIA]RUM REX

(Nesmith, 1947, 39-43; Portable Antiquities Scheme [www.finds.org.uk](http://www.finds.org.uk))





*Plate 52: Spanish colonial silver real coin (obverse depicting the royal arms of Philip II)*



*Plate 53: Spanish colonial silver real coin (Reverse depicting the arms of Castille and Leon)*

2. Copper halfpenny George III probable date of issue 1798 or 1799 (very heavily worn, inscription only barely visible) Diameter 30mm

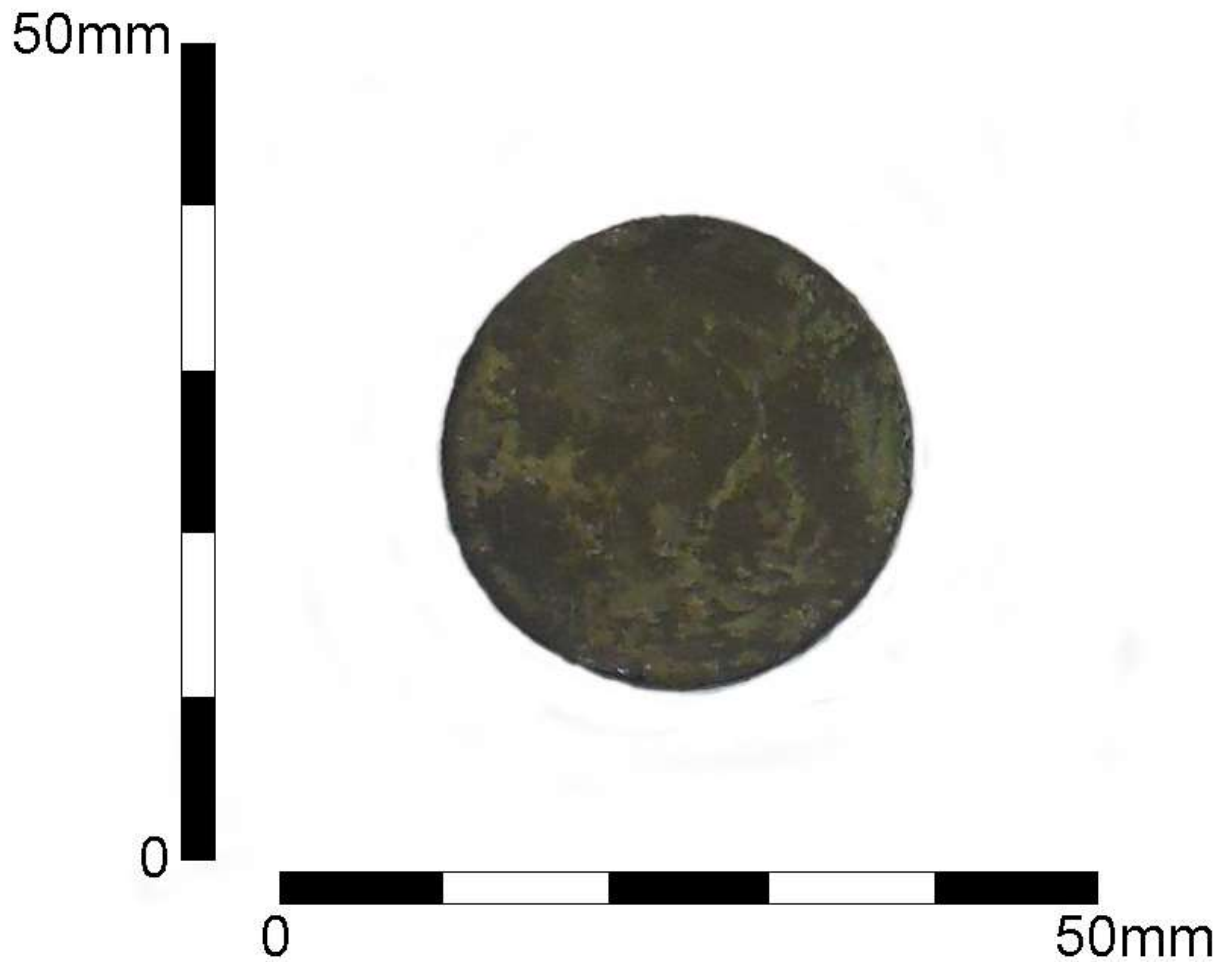
Obverse inscription: [GEORG]IUS III DEI GRATIA [REX] Bust heavily defaced, appears to be draped right

Reverse inscription: [BRI]TANNIA Britannia depicted seated left holding sprig aloft; date in exergue defaced and not visible

(Bradley 1982, 17-18)



*Plate 54: Copper halfpenny of George III (obverse)*



*Plate 55: Copper halfpenny of George III (reverse)*

3. Copper third farthing of Queen Victoria Probable date of issue 1844 (Heavily defaced) & minted exclusively for use in Malta

Diameter 15mm

Obverse: Inscription largely defaced [VICTO]RIA [DEI GRATIA]; Bust of Victoria facing left. Date on exergue defaced and not visible

Reverse: Inscription partially defaced BRITANNIAR [REG. FID. DEF.] Britannia depicted facing right

(Mackay 1984, 127)



*Plate 56: Copper third farthing of Queen Victoria (obverse)*



*Plate 57: Copper third farthing of Queen Victoria (reverse)*



## REFERENCES

Bradley, H.W., 1982, *A Handbook of Coins of the British Isles*, Hale London

Mackay, J.A., 1984, *A History of Modern English Coinage Henry VII-Elizabeth II*, London Longman

Nesmith, R.I., 1947, 'The Spanish Colonial Coinage of Philip II 1556-1598 Part 3', *The Coin Collectors Journal*, Vol. 14, 39-43

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