## B1914 OLD SARUM TRUNK MAIN REPLACEMENT WILTSHIRE

## ARCHAEOLOGICAL ASSESSMENT AND MITIGATION STRATEGY

Prepared on behalf of

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## B1914 OLD SARUM TRUNK MAIN REPLACEMENT WILTSHIRE ARCHAEOLOGICAL ASSESSMENT AND MITIGATION STRATEGY

#### 1 INTRODUCTION

#### 1.1 Project Background

- 1.1.1 Wessex Water propose to replace the existing water main which crosses the Woodford Valley and is situated to the north of Old Sarum, Salisbury, Wiltshire (the Scheme). The Scheme is located in an area of archaeological significance and Wessex Archaeology (WA) has been commissioned to assess the archaeological implications of the Scheme and prepare and implement proposals to mitigate any archaeological impacts.
- 1.1.2 The proposed pipeline (The Scheme Route) will extend from the Camp Hill Reservoir in the west (Grid Ref 411150 133675) and Castle Hill reservoir in the East (Grid Ref 414750 132375) (Fig. 1).
- 1.1.3 Earlier desk-based assessments (WA May 2001 and WA June 2001) identified various levels of archaeological potential within the Scheme. The later assessment recommended that this potential be further defined by carrying out a detailed magnetometer survey along the pipeline easement. In some areas, where there is potential for minor adjustment to the route, a wider corridor would be examined.

## 1.2 Scope of Document

- 1.2.1 This document comprises three principal elements:
  - An updated version of the Desk-based Assessment (WA June 2001) incorporating changes necessitated by finalisation of the Scheme Route
  - A summary of the results of the geophysical survey.
  - A strategy and methodology for undertaking further evaluation and archaeological mitigation works that may prove necessary in advance of and during pipeline construction, including any ancillary works.

## 1.3 The Scheme

1.3.1 The proposed pipeline extends for approximately 4.5km, of which some 4.0km will be new construction. To reduce archaeological and environmental impact an existing length of pipeline (c.0.5km) will be re-used where it crosses River Avon flood plain and water meadows. The new pipe will be connected to the old at existing junctions outside the floodplain, avoiding any new ground disturbance in this sensitive location.

- 1.3.2 Before construction commences a 15m wide easement will be defined along the length of the entire route, with vehicular access from existing roads and track-ways (Fig 1). Both boundaries of the easement will be demarcated by temporary fencing.
- 1.3.3 Three areas (Compounds A, B and C) have been identified for use as compounds two of which will be used, covering a combined area of some 7,000m<sup>2</sup>.
- 1.3.4 The pipeline will be laid in a c1.5m wide trench within the 15m wide easement. It is proposed that a 10m width of the easement will be top/subsoil stripped with the spoil temporarily bunded on the remaining 5m.
- 1.3.5 Three routes for the pipeline are shown on Fig. 1. The route of the existing main was used in the first Desk-Based Study (WA May 2001) to scope the extent of the archaeological study. In the light of these results a new pipeline route (Revised Route) was established for assessment (WA June 2001). As a consequence of this assessment further revisions to the route were established and it is this route which comprises the Scheme Route. Only the Scheme Route is shown on subsequent figures.

#### 1.4 Data Sources

- 1.4.1 Three principal sources of data have been consulted during the preparation of this report;
  - Wiltshire County Sites and Monuments Record (SMR) (Consulted May 2001)
  - Oblique and vertical aerial photographs held at the National Monuments Record Office at Swindon (NMR) (Consulted June 2001).
  - Published and unpublished fieldwork reports and desk-based assessments from work in the vicinity.
- 1.4.2 No new fieldwork or survey has been undertaken in preparing the desk based assessment.

## 1.5 Assessment Methodology

- 1.5.1 SMR entries from an area approximately 4.5km by 1.5km broadly centred on the existing pipeline route have been plotted (Figs. 2, 3 & 4)) and tabulated (Appendix 1).
- 1.5.2 Some 300 photographs held by the NMR were assessed of which approximately 30 (Appendix 2) were selected for further detailed study. From these 30 photographs all well defined crop and soil marks (which were not obviously of modern origin) and extant monuments (excepting Old Sarum) broadly within the 4.5km by 1.5km area were geo-referenced and plotted (Figs. 2, 3 &4).

1.5.3 All accessible reports on previous work within the vicinity of the pipeline have been studied and relevant information collated (See Bibliography).

#### 1.6 Data Limitations

- 1.6.1 The distribution of SMR entries does not necessarily reflect the true distribution of the archaeological resource. It more accurately reflects the extent and location of recent/modern development where there has been associated archaeological investigation. The absence of SMR data for any particular location cannot therefore be taken as an indication of absence of archaeology.
- 1.6.2 The presence and distribution of crop/soil-marks identified from aerial photographs is largely determined by both the nature of the underlying geology and landuse/time of year when photographs were taken. An absence of marks is not necessarily an indication of absence of archaeology.
- 1.6.3 Much of the land on which crop/soilmarks have been recorded is under arable cultivation. Continued ploughing since the photographs were taken may have further degraded or completely destroyed the archaeological deposits which form these marks.

#### 2 ARCHAEOLOGICAL RESOURCE

#### 2.1 Introduction

- 2.1.1 Sections 2.2 and 2.3 are updated versions of those found in the earlier Desk-Based Assessment (WA June 2001).
- 2.1.2 Before considering the Scheme in detail (Sect 2.3) a thumbnail sketch of its archaeological context is presented below (Sect 2.2).

## 2.2 Archaeological Background

Topography and Geology

- 2.2.1 The proposed route is founded on solid geology of Upper Chalk, which in places is capped with clay and flint, and crosses the Woodford Valley from west to east, just to the north of the Scheduled Monument of Old Sarum (Fig. 1).
- 2.2.2 Its western terminus, at Camp Hill Reservoir, is the Scheme's highest point at *c*.137m above Ordnance Datum (AOD). From here it descends the steep western side of the chalk valley to the floodplain and water meadows of the River Avon at a level of some 52m AOD. Eastwards the route rises out of the floodplain, passing to the north of the chalk prominence on which Old Sarum is founded. The Scheme's eastern terminus crosses a ridge at a height of some 110m AOD.

## The Archaeological Landscape

2.2.3 The Scheme area forms part of a rich archaeological landscape dating from at least the late prehistoric period. There is good evidence of activity from the Neolithic (4,000–2,400 BC), Bronze Age (2,400-700BC), Iron Age (700BC-AD43), Roman (AD 43-410) and Medieval (AD1066-1499) periods. This includes evidence for Neolithic settlement and a long barrow, Bronze Age barrow cemeteries and field systems: Roman, Iron Age and Medieval settlements.

#### Old Sarum

- 2.2.4 Immediately south of the eastern half of the Scheme is the Scheduled Monument (SM) of Old Sarum (SM26717), the Scheme lies fully outside the SM boundary. Old Sarum is founded on the west end of Bishopsdown Hill, a westward facing spur overlooking the river Avon. As with the rest of the Scheme the underlying geology of Old Sarum is Upper Chalk.
- 2.2.5 The site of Old Sarum was first occupied during the Early Iron Age when a hillfort was constructed. Occupation continued in the Roman period, with activity concentrated within the area of the hillfort. Four Roman roads met outside the east gate, of which three cross the Scheme area, and a fourth entered the monument via the west gate.
- 2.2.6 Old Sarum was extensively occupied in the Saxon period and greatly remodelled after the Norman conquest with construction of a motte and bailey castle. The 11<sup>th</sup> century church was enlarged to form a cathedral and the castle defences strengthened.
- 2.2.7 The process of abandonment and decay of Old Sarum began in the 13<sup>th</sup> century with the church establishing the new city of Salisbury to the south.

## 2.3 Defining the Resource

- 2.3.1 For ease of reference and definition within this study the Scheme has been sub-divided into nine areas (Figs. 1, 2, 3 & 4) based on field and road boundaries as well as the overall nature of the archaeological record.
- 2.3.2 It should be noted that these area designations are different to those given in the earlier studies (WA May and June 2001) and take into account the revised Scheme Route.
- 2.3.3 The following sections provide a brief description of the recorded and potential archaeological resource in each Area, which is further summarised in **Table 1**. Numbers in brackets denote the SMR reference (Appendix 1) which are located on Figures 2, 3 & 4. Not all plotted SMR references are discussed.

#### 2.4 Area 1

- 2.4.1 There is a concentration of archaeology in the centre of this Area (Figs. 2 & 3), where construction of the Camp Hill Reservoir in 1933 revealed the presence of Iron Age and Romano-British Settlement with pits containing a wide variety of artefacts. Further excavation in 1992 by AC Archaeology uncovered an enclosure ditch for the settlement, although it is not clear whether the full extent of the settlement has been located and excavated (200,300 & 650).
- 2.4.2 Extensive field systems are represented to the north, north-east and west of Camp Hill by linear features both recorded in the SMR and visible on the aerial photographs studied as part of this assessment. The field systems appear to be a continuation of those mentioned in Area 2. These systems are probably of various dates, as they differ in the size and regularity of the fields formed as well as the width and form of the linear mark itself.
- 2.4.3 A single find of a Mesolithic pick (050) was found in a chalk pit on the northern boundary of Area 1 in 1874; there is very little probability of any further archaeology being found in relation to this.

#### 2.5 Area 2

- 2.5.1 As with Area 1 there is a high concentration of archaeological activity mapped in the centre of this area (Figs. 2, 3 & 5), north of the new pipeline and discovered during the excavation of the original water-pipe trench in 1972. No further work has been carried out on this area since.
- 2.5.2 Fifteen features were located along this part of the pipe of trench, most of which were small pits containing pottery dating to the Late Bronze Age/Early Iron Age (151 & 209). This activity has been interpreted as a settlement, and is therefore highly likely to extend out from this point with varying feature types and concentrations. A possible field system (641) has been located to the north and west of these features: this may be related to the settlement but is undated. The aerial photographic study records a number of linear and curvilinear soil-marks, probably representing a field system, extending across the north-east corner of this field. There is potential for both the settlement and the field system to extend further south.
- 2.5.3 In a deposit overlying the LBA/EIA features found in the pipe trench was a scatter of Romano-British pottery (318), which was not associated with any further features within the narrow confines of the trench.
- 2.5.4 To the north of Area 2 are located extensive crop and soil marks visible on many of the aerial photographs, mainly in the form of linear features. These appear to form extensive field systems, many of which may be defined as 'celtic field systems' in terms of layout and shape, with a possible enclosure located on the ridge at Camp Down. In the field immediately to the north of Area 2 can also be seen at least one small circular enclosure, possibly a ringditch, with other less distinct marks similar in size and shape.

#### 2.6 Area 3

- 2.6.1 Area 3 is an area of arable land with almost no recorded development work, other than the previous water pipe trench, and therefore the archaeology is largely undated and unexplored (Figs. 2 & 3).
- 2.6.2 There are no sites recorded on the SMR within the northern half of the area, but to the south part of a field system (649) has been located. The full extent of this system is unknown but cropmarks newly plotted from aerial photographs show it extending across the area of the proposed pipeline. Further field systems are located not far to the south of this area. A linear feature interpreted as a possible droveway crosses this field system (642), running roughly east-west for nearly 900m along the southern boundary of this area.
- 2.6.3 Immediately to the south of Area 3 is a small rectangular enclosure (616), which is also undated. A long curving ditch partly encloses it to the south, which appears to form part of a circular enclosure, which may extend into the south section of Area 3. On the aerial photograph the existing hedgerows seem to follow a pre-existing boundary in the field to the east of these soil marks, reinforcing the impression of a larger sub-circular enclosure.
- 2.6.4 There are two find spots of medieval masonry recorded in the SMR, located immediately to the east of Area 3 (451 & 516). This indicates the possibility of a medieval building located in the vicinity, but the type and location of the site are completely unknown if it does indeed exist.

#### 2.7 Area 4

- 2.7.1 This Area does not have any recorded SMR data, and consists of the flat bottom of the Woodford Valley (Figs. 2 & 3). Two barrow cemeteries (606-611 & 612-615) are recorded, one of which is a Scheduled Monument (SM 218) just to the north of the area, both on the west facing slope of the valley on higher ground.
- 2.7.2 The River Avon runs south along the valley bottom through Area 4, at this point with two channels that converge further downstream. A number of drains are marked on the Ordnance Survey maps, and the aerial photographs confirm that extensive water meadow systems exist over the whole of this area. The preservation of the water meadows is excellent, and is consistent for much of the Woodford Valley as far south as Bemerton, creating a set of features with considerable group value.
- 2.7.3 There is considerable potential for preservation of archaeo-environmental material in the waterlogged deposits of the Woodford Valley, though none have been recorded within Area 4.
- 2.7.4 The easternmost part of the area lies beyond the water meadows and immediately south of a barrow cemetery (607-611)

#### 2.8 Area 5

- 2.8.1 Two crop-marks identified in the SMR as a ring-ditch and a linear feature, which may be part of a field-system, have been picked up from aerial photographs, running NEE-SWW across the southern boundary of this area (630 & 654) (Figs. 2, 4 & 6). These are undated but possibly Bronze Age in origin. Crop marks have previously been recorded to the north, but have subsequently been removed from the SMR. There is an interrupted linear immediately to the north of 654, running north-east to south-west as well as a possible incomplete enclosure in the north-east corner of the field. One very clearly visible linear feature runs south-west to north-east across this whole area, and continues into Area 6; this could represent a trackway of any date.
- 2.8.2 Pits and ditches containing 12<sup>th</sup> Century pottery have been excavated in a pipe trench immediately to the south of this area, forming part of the western suburb of Old Sarum known as Nyweton Westyate (456). Aerial photographs clearly show a number of linear features to the north of Phillips Lane. These are almost certainly medieval in origin, and may represent burgage plots.
- 2.8.3 There are no SMR entries for the northern part of this area, however approximately 150m to the east the SMR records four ploughed out ring ditches and a ploughed out round barrow (632-636). These may be considered to be part of a cemetery possibly associated with a linear feature (631) to the north.
- 2.8.4 Study of the aerial photographs has added significantly to the record for the central and northern part of Area 5 and the land to the east, including part of Area 6. Additional ring ditches have been identified associated with the eastern cemetery (632-636) and what has been interpreted as a previously unrecorded, more dispersed, cemetery in the central/northern part of Area 5.
- 2.8.5 A number of linear features have also been recorded. These appear to form a series of complete or partial enclosures within and to the east of Area 5. The previously recorded linear (631) is 'completed' to form a c10ha rectilinear enclosure centred on and enclosing cemetery 632-636. A less complete, though possibly similar enclosure can be identified round the dispersed cemetery in Area 5.
- 2.8.6 Although ring ditches/barrows may be assumed to be of Late Neolithic Bronze Age Date enclosures cannot be dated, though there remains the possibility that they are contemporary.

#### 2.9 Area 6

- 2.9.1 Area 6 is located immediately to the north and north-east of the SM of Old Sarum (Figs. 2, 4 & 6).
- 2.9.2 The SMR records two Neolithic pits containing a variety of artefacts on the southern edge of the field (104) which were discovered during the excavation of the original water pipe trench. The discovery of two such features in a

- limited area of stripping may indicate good potential for the presence of further archaeology in the immediate vicinity.
- 2.9.3 To the north east the area contains three SMR references (156, 664 & 665) from an evaluation conducted in 1999, including two probable recent/modern linear features (664 & 665) and Bronze Age pottery (156).
- 2.9.4 A number of linear cropmarks of differing size can be recognised from aerial photographs, extending over a wide area within and to the north of Area 6. These represent possible field systems and enclosures, the differing forms and size indicating systems of different date. These can be seen to extend south close to the proposed pipeline.
- 2.9.5 Associated with these field systems are two barrow cemeteries, located on the SMR as No.'s 632-636 (discussed above with Area 5) and 637-640, 648, 653 and 658. The majority of these are round barrows, but there is also one recognised long barrow. The aerial photographs appear to show a number of less distinct, and less complete small, sub-circular enclosures scattered around the area of these recorded cemeteries. These are far from conclusive, but indicate that activity may not be confined to the two small barrow groups and could extend into the area of the pipeline.
- 2.9.6 The Roman road from Old Sarum to Mildenhall forms the eastern boundary of the Area, including the point where this road meets the Portray Roman road. The convergence of the five Roman roads in this general area to the east of Old Sarum indicates a likelihood of a Roman military presence in the vicinity, with the possibility of an, as yet, unlocated settlement. Roadside cemeteries may also be present.
- 2.9.7 It is believed unlikely that there are any medieval suburbs to the north of Old Sarum as the city wall here ran along the base of the defences. However the extent of the eastern suburbs have not yet been fully defined and there is a small possibility that they may continue into Area 6.

#### 2.10 Area 7

- 2.10.1 This area shows a high potential for the presence of archaeology with a number of sites and finds of various date (Figs. 2 & 4).
- 2.10.2 Three small pits (103) containing Neolithic pottery sherds and a fragment of beaker were exposed in a pipe trench in 1957, close to the line of the existing water pipe?, as is a ditch containing a human burial that is thought to be Iron Age in date (210).
- 2.10.3 The linear marks interpreted as field systems in Area 6 have not been identified on aerial photographs from this area, although this may be explained by poorer photographic coverage of these fields. The extensive linears marked on the SMR however, may extend south-west into the northern parts of Area 7.

- 2.10.4 The area is bounded to the west by the Old Sarum–Mildenhall road mentioned above, to the south by the Old Sarum –Winchester road, while the Portray Roman road runs north-west part through the Area (301, 319 & 320). As stated above there is the possibility of related Roman military and/or settlement and burial activity in this area, road surfaces and associated ditches may also be present, such as ditch SMR No.306.
- 2.10.5 In the south and western part of this Area is a high concentration of Later Medieval settlement. In 1540 Leyland recorded the presence of an eastern suburb, and excavations by Musty and Rahtz in the late 1950s-early1960s confirmed this, with the discovery of Medieval roads, pits and mass graves (493), as well as a number of buildings of 12<sup>th</sup>-14<sup>th</sup> century date, indicated by stone foundations, timber slots and postholes. The site of St Johns Hospital (499), a probable Leper Hospital first recorded in the 12<sup>th</sup> Century, is within this Area 51though the exact site has not yet been located, and the Chapel of the Holy Cross is thought to be sited along this Area 7's south-west boundary (485) or west of Area 8.
- 2.10.6 While no medieval remains have been uncovered in the eastern part of this Area, it has been suggested that the Roman roads continued in use as trackways throughout the Medieval period and there is the potential for the discovery of isolated findspots (Such as in Area 9) or outlying structures or settlements of this date along these routes.
- 2.10.7 There would therefore be a very high potential for uncovering archaeology in the western half of this Area, with a lowering of potential towards the northeast, where any remains may be expected to concentrate along the line of the Roman roads.

#### 2.11 Area 8

- 2.11.1 There are a small number of recorded features and finds in this Area dating from the Iron Age through to the Late Medieval periods (Figs. 2 & 4).
- 2.11.2 On the south-west boundary is a Bronze Age barrow, later reused for as an Anglo-Saxon cemetery with 14 skeletons excavated from it (404 & 621). There is one ditch supposed to be Iron Age in date (206), although no dating evidence was found in the fills. This is near the Roman road in the north corner of this area, and there is no record of the feature's alignment.
- 2.11.3 The Roman road to Winchester, mentioned above, runs along the north edge of this Area, and a ditch containing a human burial has been found to the south that also appears to be Romano-British in date.
- 2.11.4 In the western corner of the Area a Late Medieval lime-kiln site has been excavated (494), consisting of a small quarry, the kiln and a number of pits defined by a surrounding ditch. This industrial site is likely to be on the outskirts of the eastern suburbs mentioned above, but there is the possibility of other industrial sites being located in the vicinity. Many of the medieval

- sites and features mentioned above are equally close to this area, with the main area of the suburb occurring to the west and south-west of the kiln site.
- 2.11.5 Aerial photographs show a long straight linear feature running across this area, most probably showing the line of the existing pipeline.
- 2.11.6 The main potential of this Area is again within the western half, with Late Iron Age/ Romano-British and late Medieval finds most common.

#### 2.12 Area 9

- 2.12.1 There are few recorded features and finds from this Area which appears to reflect the small amount of archaeological work which has taken place, rather than the lack of potential (Figs. 2 & 4). A small area of test-pitting by Wessex Archaeology in 1997, which the line of the proposed new pipe crosses, revealed two features; a ditch and a pit (660) possibly of prehistoric date. Both these features were sealed with a colluvium containing burnt and worked flint with some Medieval and Post-Medieval pottery and CBM. The flints and the ceramics were highly abraded and appear to be a plough assemblage (154), but other flint scatters of Bronze Age date including flakes, cores and burnt flint were found in evaluations by AC Archaeology in the area to the east of this (153) which is also directly within the route of the pipeline. These are associated with a small enclosure located immediately north of the eastern end point of the proposed pipeline. The extent and nature of the Bronze Age remains is at present unclear, and may well extend north into the south-west corner of Area 7.
- 2.12.2 Another small enclosure is located on the south-west edge of Area 9, where ditches and rubbish pits of Iron Age date have been excavated, with Romano-British ceramics also found within some features.
- 2.12.3 Again the Area is bounded by the Roman road (320) to the north, but the only Roman material recorded is a small scatter of ceramics and flint to the south of Area 9 (311). Immediately adjacent to the road has been found a small number of Later Medieval CBM fragments and flint, contained within a possible pit, and it is suggested that the line of the Roman roads were used as trackways throughout the Medieval period.
- 2.12.4 A number of undated cropmarks have been recognised from aerial photographs both to the east and south of Area 9. Many seem to stop abruptly along the edges of field boundaries making up the area, and it is evident that the ability to distinguish these marks depends upon the land usage/crop type in place at the time. These take the form of linears forming extensive field systems, together with a possible small enclosure on the south-east corner of Area 9. There is high potential for the linear features continuing into the area, as well as for other features being buried beneath the colluvium mentioned above.

#### 3 ARCHAEOLOGICAL POTENTIAL

## 3.1 Definition of potential

- 3.1.1 Within the desk-based assessment archaeological potential of each Area was qualitatively assessed using the following parameters:
  - The certainty with which archaeology can be anticipated
  - The potential significance of any archaeology
- 3.1.2 Four levels of archaeological potential were defined for describing the archaeological potential of the Scheme.
  - HIGH
  - MODERATE-HIGH
  - MODERATE
  - LOW

## 3.2 Mapping of archaeological potential

3.2.1 Levels of archaeological potential have been assigned to all parts of the Scheme and mapped on Figure 7 and summarised in **Table 1**. Boundary definition between different levels of potential can only be considered as indicative at this stage.

#### Area 1

3.2.2 The central part of the area has been designated as having **High** potential with the recorded presence of Romano-British and Iron Age settlement surrounding the reservoir. The periphery of the area is of **Moderate** potential with crop mark evidence for field systems, though there remains some evidence for further settlement activity.

## Area 2

- 3.2.3 The northern part of Area 2 has been designated as being of **High** potential with significant evidence for Late Bronze Age and Iron Age settlement found during the construction of the existing pipeline. Cropmark evidence to the north suggests significant potential for field systems, further settlement and burial mounds, though undated this activity is probably of Late Bronze Age and Iron Age origin.
- 3.2.4 There is no direct evidence for similar activity extending into the southern part of this area, though the possibility remains, consequently it has been designated as being a zone of **Moderate** potential

#### Area 3

3.2.5 The principal determining factor for Area 3 is topography. Located on a steeply sloping part of the valley side the potential for archaeological activity in this location is significantly reduced. With the exception of newly identified (undated) crop-marks, probably representing field-systems and a subcircular enclosure, on the southern boundary there is little previously recorded activity. The subcircular enclosure and land to the south have been designated as of **Moderate** potential and the remainder as of **Low** potential.

#### Area 4

3.2.6 The group value of a well preserved water meadow system and potential for preservation of archaeo-environmental material means that the full extent of the water meadows has been designated as being of **High** potential. The eastern part of the area is considered as having **Moderate** potential to contain a southern extension of the barrow cemetery.

#### Area 5

- 3.2.7 The potential presence of a previously unrecorded enclosed barrow cemetery(s) means that the northern part of Area 5 is considered as being of **High** potential.
- 3.2.8 The southern part of the site has less recorded archaeology but there remains potential for activity recorded to the north and south to extend into this area, and has therefore been designated as of **Moderate- High** potential.

## Area 6

- 3.2.9 The northern part of the area is considered as a zone of **High** potential for the presence of an enclosed barrow cemetery(s). This zone of High potential extends south along the eastern boundary due to the potential of encountering Roman roadside activity (burials, ditches, etc.). The southern part of Area 6 is also designated as a zone of **High** potential on the basis of the previously recorded Neolithic settlement/occupation activity
- 3.2.10 For similar reasons to that given for Area 5 the central zone of Area 6 is of **Moderate-High** potential.

## Area 7

- 3.2.11 The western part of Area 7 is considered of **High** potential as it is a focus of Roman and Medieval settlement. Within this western area and radiating northwards and eastwards there are at least three Roman roads (with the potential for burials and structural evidence) which are also considered to be of **High** potential.
- 3.2.12 The eastern parts of the area are thought to be of lower potential, as they become remoter from the perceived focus of settlement and are considered of **Moderate High** and **Moderate** potential.

#### Area 8

3.2.13 The potential for Area 8 is similar to that given for Area 7, with the western zone designated as **High potential** and the eastern zone as **Moderate-High** potential.

#### Area 9

3.2.14 **High** potential zones designated in Area 8 for the Roman and Medieval settlements and Roman road extend into Area 9. The southern and eastern edges have potential to contain activity identified through crop marks and has therefore been designated as **Moderate-High** potential. The **Moderate** potential zone contains no known archaeology, except that recorded in the area of test-pitting.

#### 4 ARCHAEOLOGICAL IMPACT

## 4.1 The Archaeological Remains and Existing Impacts

- 4.1.1 Within the Scheme, excepting Area 4, archaeological remains are likely to take the form of features cut into the surface of the natural chalk and where present clay and flints. The surface of archaeological features may be encountered as little as 0.3m below the ground surface.
- 4.1.2 Historic and modern ploughing will have resulted in the most widespread impact and will almost certainly have removed the upper levels of each feature.
- 4.1.3 With the exception of any Roman road surfaces, spreads and deposits are unlikely to be present, making any that do of potentially greater significance.

## **4.2** Potential Scheme Impacts.

- 4.2.1 Any surviving archaeology is potentially sensitive to impact arising from groundworks, which may result in partial or total loss of the archaeological features. The Scheme's impact would be greatest in areas of highest archaeological potential.
- 4.2.2 Scheme impacts may potentially arise in the following ways,
  - Heavy plant movement on topsoil when wet
  - Stripping of topsoil to expose chalk surface –e.g. in easement corridor and site compounds
  - Mounding of spoil on topsoil
  - Excavation of pipeline trench and services chambers

#### 4.3 The Scheme Route

- 4.3.1 The assessment of archaeological potential (Fig. 7) has been used to plan the Scheme Route for the proposed pipeline, avoiding areas of higher potential wherever possible.
- 4.3.2 However there are a number of factors which place constraints upon routing of the pipeline, these are briefly described below and further summarised in **Table 1**.

## Area 1

4.3.3 The pipeline unavoidably passes through an area of high potential as it must link to Camp Hill Reservoir, which is within a focus of early settlement. There is little potential to re-route within this area. The compound is located to the east of Devizes Road, and east of the previously recorded focus of activity.

#### Area 2

4.3.4 The Scheme Route goes south of the originally proposed route to avoid the area of high potential defining the location of recorded settlement.

#### Area 3

4.3.5 From the junction with Area 2 the pipeline must link to the junction with the existing pipeline at the boundary between Area 3 & 4. The Scheme Route is slightly further north of the revised route to move north of crop-marks identified to the south of the Area

## Area 4

4.3.6 Within Area 4 the existing pipeline will be re-used and no new works are proposed.

#### Area 5

4.3.7 The position of the pipe at the boundary between Area 4 & 5 is fixed, as it must link to the existing pipe running beneath Area 4. At the western end of Area 5 it must therefore cross an area of high potential. Within the central region the pipe has been routed along the northern edge of the zone of moderate-high potential. There is some potential for minor adjustment to the route in this area. A potential compound area has been identified in the south eastern corner of Area 5 in the area of moderate to high potential.

#### Area 6

4.3.8 Generally the route follows the northern boundary of the moderate-high potential, minimising the potential impact, however its eastern end is constrained by the road crossing and must pass through the area of high potential next to the Roman road. An additional potential compound area has

been identified on the western boundary of Area 5 in the area of moderate to high potential.

## Area 7

4.3.9 Generally the new route has been moved north and east of the earlier routes to avoid, as far as possible, the main focus of multi-period settlement.

#### Area 8

4.3.10 The southern link to the Castle Hill Reservoir necessitates the pipeline entering areas of high potential.

#### Area 9

4.3.11 The Scheme Route has been moved considerably further to the north-east generally beyond the areas of highest potential although they are crossed at the line of the Roman road.

#### 5 GEOPHYSICAL SURVEY

#### 5.1 Introduction

- 5.1.1 For the reasons outlined above the pipeline route is relatively constrained. Further assessment was therefore limited, except where specifically detailed below, to the Scheme Route 15m easement and three proposed/potential compound areas.
- 5.1.2 A detailed magnetometer survey was proposed (WA June 2001) for the c. 4km long 15m wide easement in Areas 1-3 and 5-9. Area 4 was not surveyed, as no ground works are proposed, nor were current road lines.
- 5.1.3 Three areas identified as possible compound sites (Compounds A, B & C) respectively in Areas 1, 5 and 6 were also surveyed. In Area 5, where a potential was identified for minor adjustment to the route, a 50m wide corridor centred on the proposed centre line was surveyed. This width was thought to be sufficient identify a route to avoid any archaeological remains of the type anticipated to survive in that area.
- 5.1.4 Access could not be gained to the western most c.120m length of the route next to Camp Hill Reservoir, nor Areas 7, 8 and 9. Areas 7, 8 and 9 will be subject to a separate survey once agreement can be reached with the landowner.

## 5.2 Geophysical Survey – Results

5.2.1 The methodology and results of the geophysical survey are fully detailed in the survey report (Stratascan July-August 2001), the following however provides a brief summary. The interpretative results of the survey are overlain on the results of the desk-based assessment and shown on Figures 8 and 9.

## Area 1 - Fig. 8

5.2.2 Only the land to the east of the Devizes Road, which included both proposed compound A and the pipeline easement and extended to an area of some 0.5ha, was surveyed. A number of parallel anomalies were recorded which were most readily interpreted as being of agricultural origin, however archaeological origin could not be ruled out for some. Two curvilinear anomalies were also detected in the northern part of the survey- these may well be of archaeological origin.

## Area 2- Fig. 8

- 5.2.3 A number of feint parallel anomalies were recorded in Area 2 which are most likely indicative of agricultural activity, however archaeological origins can not be ruled out.
- 5.2.4 Within the northern most part of the easement, where it runs parallel with the road leading to Hill Farm, there are a number of discrete anomalies which have been interpreted as possible archaeological pits.
- 5.2.5 The most convincing archaeological potential is however recorded to the east of Hill Farm where two L-shaped anomalies are recorded indicative of part of a ditched enclosure. These anomalies could well be associated with crop marks recorded to the south-east in Area 3.

## Area 3- Fig. 9

5.2.6 The survey records no anomalies that can be considered as being of archaeological origins. A number of short parallel anomalies are however indicative of agricultural activity.

#### Area 4

5.2.7 Water meadows not surveyed as no ground works are proposed.

## Area 5 – Fig. 10 & 11

- 5.2.8 Within Area 5 the survey was expanded to cover a 50m corridor, 25m either side of the centre line. After the survey was completed it was noted that there was a disjuncture at the western end of the survey corridor where it was broken either side of a fence line. Consequently for a short distance the proposed pipeline route lies just outside and to the south of the surveyed area.
- 5.2.9 The western most 100m of the easement contained a number of strong ferrous based anomalies including pipelines and manholes and point anomalies. A few agricultural marks were also recorded but no potential archaeological anomalies.
- 5.2.10 Within the western section of the easement three pipelines were recorded and a number of anomalies which have been interpreted as being of potential archaeological origin. These anomalies appear compatible and partially consistent with previously recorded cropmarks to the north and south. The anomalies are at their densest on the north side of the 50m corridor.
- 5.2.11 Compound B— measuring 100m by 50m contains a large number of anomalies which are interpreted as being of agricultural origin and a possible relict fence line. No archaeological features were identified.

## Area 6- Fig. 11

- 5.2.12 Survey of the compound area (Compound C) and western part of the easement record a substantial anomaly which has been interpreted as a substantial pipeline. This anomaly may have masked feinter features, nonetheless a number of generally linear agricultural/archaeological features are suspected.
- 5.2.13 The remainder of the easement contained either what are interpreted as agricultural marks or ferrous anomalies no archaeological features were identified.

#### Area 7, 8 and 9

5.2.14 These areas were not accessible but will be surveyed at a later date.

## 5.3 Reappraisal of Archaeological Potential

5.3.1 Generally the geophysical survey has confirmed the archaeological potential identified by desk-based assessment. With those survey areas over or adjacent to concentrations of cropmarks recording most potential archaeological features.

#### 6 ARCHAEOLOGICAL MITIGATION STRATEGY

## 6.1 Introduction

6.1.1 The following strategy to mitigate potential archaeological impacts arising from the Scheme has been prepared after consultation with Wiltshire County Council's Archaeological Adviser. This strategy is summarised within Table 2.

## 6.2 Mitigation – Preservation in situ

- 6.2.1 In formulating the mitigation strategy, primary consideration has been given to achieving preservation of any significant or potentially significant archaeological remains *in situ*, through design solutions. This approach is in accordance with the principles of the Department of the Environment's Planning Policy Guidance Note 16: Archaeology and Planning November 1990 (PPG16).
- 6.2.2 Since preparing the earlier desk-based assessments (WA May 2001 & June 2001) the Scheme Route has been substantially altered to avoid crossing areas which contain, or are thought to contain, potentially significant archaeology, thus achieving preservation of these deposits *in situ*.
- 6.2.3 Further *in situ* preservation will be achieved by designing minor alterations to the Scheme Route to avoid deposits recorded by geophysical survey (Area 5). Generally, within Area 5, the Pipeline will be located within the southern part of the 50m corridor.

## **6.3** Evaluation

#### Compound B

- 6.3.1 Of the two locations identified as potential compound sites in the centre of the Scheme (Compound B & C), the least archaeologically sensitive (Compound B) as determined by geophysics (Fig. 11) will be rapidly evaluated.
- 6.3.2 In Compound B the geo-physical survey recorded only agricultural marks and a remnant fence line. Evaluation trenches will be located to intersect these marks to confirm that they are not of archaeological origin.
- 6.3.3 The length of individual trenches will be determined on site, but will be no less than 1.8m wide. Where the evaluation proves negative the site will then be archaeologically stripped and recorded and if necessary followed by detailed excavation. Under these circumstances no evaluation report will be produced. Compound C will not then be used.
- 6.3.4 Where significant archaeology is identified consideration will be given to relocating the compound to the location of 'Compound C'. Results from this

evaluation will be incorporated in the overall archaeological report for the Scheme.

## 6.4 Mitigation – Preservation by record

#### Introduction

6.4.1 Preservation by record covers all methods by which Scheme impacts are mitigated through the exposure, recording and sampling of archaeological deposits prior to or during construction.

## Archaeologically directed strip and record

- 6.4.2 Top/subsoil stripping will be carried out under archaeological direction either in advance of or during the civil engineering works.
- 6.4.3 Any archaeological deposits that are revealed will be planned and sample excavated sufficient so that the need for and extent of detailed excavation may be determined.
- 6.4.4 Certain areas, which potentially contain significant archaeology (i.e. Camp Hill Reservoir) or will be required early in the construction programme (e.g. Construction Compound 1), will be stripped in advance of the construction programme commencing to afford the maximum period for any further archaeological works.
- 6.4.5 Remaining areas will be stripped and recorded under archaeological direction as part of the rolling construction programme. Sufficient time will be allowed within the construction programme to allow further detailed excavation as required.

## **Detailed Archaeological excavation**

- 6.4.6 It is anticipated that where low densities of archaeological features or features of relatively limited significance are encountered detailed excavation can be undertaken within the remit of the strip and record programme.
- 6.4.7 Should however high densities of archaeological deposits or deposits of significance be encountered a more formal detailed excavation process will be undertaken.
- 6.4.8 Wessex Archaeology will be responsible for identifying those areas/deposits which will require detailed excavation.

#### Archaeological Monitoring

6.4.9 This approach would generally be used in areas considered to have low archaeological potential and comprises the archaeological monitoring of top/subsoil stripping by the civil engineering contractor during construction.

- 6.4.10 No special constraints would be placed upon the stripping method and any archaeological features encountered would be recorded and sampled without undue delay to the construction process.
- 6.4.11 No further stages of fieldwork would be undertaken at these locations once monitoring is complete.

#### 7 STANDARDS AND PRACTICES - EVALUATION

- 7.1.1 Trenches will be excavated by a 360° tracked excavator equipped with a toothless bucket under constant archaeological supervision. Following the removal of the ploughsoil/topsoil, machine excavation will continue to the top of either archaeological deposits or the underlying geological deposits, whichever is encountered first, or to 1.2m in depth. If trenching needs to proceed beyond 1.2m in depth, the trench sides will be stepped or battered in order to comply with current health and safety guidelines.
- 7.1.2 If archaeological deposits are encountered, further cleaning and excavation will continue by hand. All trenches will be located in relation to the Ordnance Survey national grid, and all archaeological features will be related to Ordnance Survey Datum and recorded using Wessex Archaeology's *pro forma* recording system. A sufficient sample of each feature type will be excavated in order to establish the date, nature, extent and condition of the archaeological remains. In the event of the identification of an exceptional number and complexity of archaeological deposits, sample excavation will be more circumspect and will aim to be minimally intrusive. Excavation will, however, be sufficient to resolve the principal aims of the evaluation.
- 7.1.3 Human burials will not be excavated or otherwise removed, but will be sufficiently exposed to allow observation of grave cut, burial position and stratigraphic relationships. Any *in situ* burials will be protected during backfilling of the trenches. Home Office procedures will be followed at all times in regard to human remains.
- 7.1.4 The spoil from each trench will be scanned for artefacts, this may include the use of a metal detector. Following the investigation and recording of each trench, and where no site wide strip is to be undertaken, the trenches will be back-filled with the excavated spoil.
- 7.1.5 Appropriate strategies for the recovery of artefacts will be devised and implemented by Wessex Archaeology staff in consultation with the Wiltshire County Museum Service (WCMS) subject to recognition of the requirement for any further works. In event of the discovery of significant or unusual deposits, environmental samples may also be taken.
- 7.1.6 All artefacts from excavated contexts will be retained, except those from features or deposits of obviously modern date. In such circumstances, sufficient artefacts will be retained in order to elucidate the date and/or function of the feature or deposit. Material of undoubtedly modern date observed on the spoil heap of each trench will be noted but not retained.

- 7.1.7 All artefacts will, as a minimum, be washed, weighed, counted and identified. Any artefacts requiring conservation or specific storage conditions will be dealt with immediately in line with *First Aid for Finds* (Watkinson and Neal 1988). Ironwork from stratified contexts will be X-rayed and stored in a stable environment along with other fragile and delicate material. The X-raying of objects and other conservation needs will be undertaken by the staff of the Wiltshire Museums and Library Service Conservation Consortium, Salisbury. Suitable material, primarily the pottery, worked flint and non-ferrous metalwork, will be scanned to assess the date range of the relevant assemblages.
- 7.1.8 Information will be obtained prior to the commencement of fieldwork from the appropriate Area Museums Council designated museum concerning conditions for the deposition of finds.

# 8 STANDARDS AND PRACTICES - STRIPPING, RECORDING AND EXCAVATION

#### 8.1 Introduction

- 8.1.1 Where the mitigation strategy requires that areas are to be stripped and recorded and features excavated the following standards and practices will be employed.
- 8.1.2 All fieldwork will be conducted in compliance with the standards outlined in the Institute of Field Archaeologist's *Standard and Guidance for Archaeological Excavations*, and *Standard and Guidance for Archaeological Watching Briefs* (as amended 1994) excepting where they are superseded by statements made below.
- 8.1.3 Before work commences suitable arrangements will also be made with a suitable repository, for the deposition of the archive and finds, subject to agreement with the Client.

#### **8.2** Service Location

8.2.1 Before excavation begins the statutory authorities will be consulted, where this has not already been done, for information regarding the presence of any below/above ground services. Where appropriate excavation areas will also be 'swept' before and during excavation with a Cable Avoidance Tool to verify the absence of any underground services.

## 8.3 Excavation – Topsoil Stripping

8.3.1 Each area subject to archaeological investigation will be topsoil stripped under direct archaeological supervision, using a 360° tracked excavator, of suitable power and weight to carry out an effective job, with toothless ditching bucket.

- 8.3.2 Machining will be undertaken in spits down to the top of the undisturbed natural or archaeological deposits whichever is first encountered.
- 8.3.3 Bulldozers will not be used to strip fresh areas although they may be utilised to move displaced spoil. Bulldozers and/or other plant will only run on dump spoil or exposed natural surfaces where (I) they have been denoted archaeologically 'sterile' by the archaeological monitor WCMS, or (ii) recording and investigation of archaeological features has been completed to the satisfaction of the WCMS.
- 8.3.4 If discrete areas of archaeological features or deposits are exposed which appear to be particularly significant and/or fragile they will be delineated by the archaeologist/s using road pins and flash tape.
- 8.3.5 Surfaces containing archaeological features will be cleaned by hand, as necessary, in order that the form and extent of archaeological features can be defined. Cleaned areas will be recorded photographically and planned at an appropriate scale.

## 8.4 Detailed Archaeological Excavation

- 8.4.1 Exposed archaeological/palaeoenvironmental features/deposits will be investigated and stratigraphically sample-excavated by hand. The percentage of any feature or group of features to be excavated will be dependent on a number of factors including the achievement of the Project's objectives, the significance of the archaeological deposit, the percentage of the feature exposed by the topsoil stripping, its stratigraphic relationship to other archaeological features and health and safety considerations. However the following percentages are proposed;
  - Ditches: all significant relationships will be defined and investigated. Generally a minimum 10% sample by length of each ditch will be excavated in sufficient lengths to elucidate the date, character and function of the ditch across its full length within the stripped area, especially with consideration given to the recutting of ditches and their terminals.
  - *Pits*: all pits will be at least 50% excavated. The 100% excavation of pits will be considered on site subject to review of the information gained from the 50% excavation of pits.
  - *Post-holes*: a representative sample of post-holes will be at least 50% excavated unless they form a component of a structure when all post-holes will be investigated.
  - Structures: all structures or areas indicative of specialised activity, for example industrial or agricultural processing, will be fully 100% excavated
  - Other features: the part or full excavation of features such as ring ditches or large, amorphous features, such as quarry pits, will be reviewed on site. As a minimum, excavation should seek to establish their

stratigraphic relationship to other features and to establish their nature, extent, date and function.

- 8.4.2 Any human burials will initially be left *in situ*. Following notification of the Client, WCMS and they will be fully excavated and removed from the site subject to compliance with the relevant Home Office Licence which will be obtained by Framework Archaeology. All human cremations, inhumations and pyre debris will be totally 100% excavated.
- 8.4.3 In the event of discovery of artefacts covered or potentially covered by The Treasure Act, their excavation and removal will be undertaken following notification of to the Coroner, the Client and WCMS.
- 8.4.4 Samples for Scientific dating, (e.g. radiocarbon and archaeomagnetic) will be taken if suitable deposits occur on the site. High priority will be given to sampling suitable prehistoric deposits in order to provide absolute dating evidence for such periods of occupation on the site.

## 8.5 Artefact and Environmental Sampling Strategy

8.5.1 Finds and environmental samples will be treated in accordance with the relevant guidance given in the *Institute of Field Archaeologist's Standard and Guidance for Archaeological Excavations*, (as amended 1994), excepting where they are superseded by statements made below.

## Artefact Sampling Strategy

- 8.5.2 All observed artefacts will be recovered and recorded by context from all deposits/features targeted for manual excavation.
- 8.5.3 All recovered artefacts will be retained for processing, unless they are undoubtedly of modern or recent origin when the presence of which will be noted. Artefact collection will not only provide dating evidence but will aid interpretation of specialist activities associated with particular features or parts of the site.
- 8.5.4 All features will be scanned by metal detector at the earliest opportunity i.e. during stripping, any features identified as containing metal artefacts, will be given priority for excavation.
- 8.5.5 Any significant artefacts, clusters or *in situ* artefacts will be three dimensionally recorded
- 8.5.6 Sieving of bulk environmental samples will be undertaken to enhance levels of artefact recovery. Where appropriate bulk soil samples will be taken specifically for artefact recovery.
- 8.5.7 Previous work in the area and the evaluation results suggest that artefact recovery levels are generally low. Where excavation sampling levels do not produce adequate levels of finds to enable dating, larger percentage sampling

- of features may be implemented, up to a reasonable level agreed with WCMS.
- 8.5.8 Contingency will be made for specialist advice and conservation needs onsite should unexpected, unusual or extremely fragile and delicate objects be recovered, and the advice and input from the Wiltshire Conservation Consortium, Salisbury and South Wiltshire Museum, will be sought.

## 8.6 Environmental sampling strategy

- 8.6.1 Samples will be taken from well-sealed and dated/datable contexts for palaeo-environmental assessment. The detailed sampling policy will be agreed on site and co-ordinated by Wessex Archaeology's Environmental Manager, in discussion with appropriate parties. Bulk sampling will be principally directed towards recovering plant macrofossils and land mollusca. Where appropriate monolith and/or contiguous column samples will be taken for potential pollen/diatom/soil micromorphological analyses.
- 8.6.2 In view of the likely paucity of other dating (e.g. artefactual), samples will be taken where appropriate and feasible for scientific dating, eg archaeomagnetic, C14 etc.

## 8.7 **Recording**

- 8.7.1 Recording will be undertaken in accordance with the guidance given in the *Institute of Field* Archaeologist's *Standard and Guidance for Archaeological Excavations* (as amended 1994) inclusive excepting where they are superseded by statements below.
- 8.7.2 All archaeological features and deposits will be recorded using a *pro forma* recording system which includes a continuous unique numbering system. Single context planning will be used where appropriate.
- 8.7.3 All survey, plan and contour data will be collected by EDM and datalogger, for production of digitised mapping and plotting via AutoCAD. All survey work will be tied in to the OS national grid..
- 8.7.4 All site plans will be at a minimum scale of 1:100, detail plans at 1:20, and sections will be drawn at a minimum scale of 1:20, normally 1:10.
- 8.7.5 The AOD height of all principal features and levels will be calculated and plans/sections will be annotated with AOD heights.
- 8.7.6 A full photographic record of the recording project will be maintained using both colour transparencies and black and white negatives (on 35 mm film). The photographic record will illustrate both the detail and the general context of the principal features, finds excavated, and the site as a whole. Subject to agreement with the Client, overhead site-wide photographs may be taken from cherry-pickers or other suitable elevated platforms.

## 9 STANDARDS AND PRACTICES-POST-FIELDWORK

## 9.1 Intermediary Reporting

#### Evaluations and Strip and Record

- 9.1.1 Where evaluations/Strip and Record are undertaken which prove negative, no formal separate report will be submitted. The results will be incorporated into the overall post-excavation assessment report and any subsequent publication.
- 9.1.2 Where results suggest the need for formal detailed excavation which is not to be undertaken as part of the strip and record process, a brief summary of the findings and outline proposal for further works (upto 4 pages) will be prepared.

## 9.2 Archive preparation

9.2.1 On completion of all the fieldwork a fully ordered, indexed and internally consistent archive will be compiled in accordance with Appendix 3, *The Management of Archaeological Projects* - English Heritage, 1992 (MAP2), and in accordance with the document *Towards Accessible Archaeological Archives* (Society of Museum Archaeologists, 1995).

## 9.3 Post-excavation assessment

- 9.3.1 Once all the fieldwork has been completed a post-excavation assessment of the archaeological results, their potential and significance, will be undertaken in accordance with principles set out in *The Management of Archaeological Projects* English Heritage, 1992 (MAP2).
- 9.3.2 The assessment document will set out the proposals for post-excavation analysis and publication of the results. It will detail the tasks involved, the personnel and organisations who will undertake them and the estimated time input required for each. It will also present a proposed programme of work.
- 9.3.3 The assessment document will set out the proposals for generating the final project archive and the intended place for long-term curation of the archive and finds.

## 9.4 Post-excavation reporting and publication

9.4.1 The programme of post-excavation will be implemented as set out in the post-excavation assessment document. Any changes will only be made by prior written agreement with the Client, WCMS and the LPA.

## 9.5 Archive deposition

9.5.1 The final archive will be prepared in accordance with the proposals set out in the post-excavation assessment document. Any changes will only be made by prior written agreement with the Client, WCMS and the LPA.

#### 10 PROJECT MANAGEMENT AND STAFFING

- 10.1.1 The fieldwork will be directed and supervised by a Project Officer(s) from Wessex Archaeology. The overall responsibility for the conduct and management of the project will be held by one of Wessex Archaeology's Project Managers, who will visit the fieldwork as appropriate to monitor progress and to ensure that the scope of works is adhered to. The appointed Project Manager and Project Officer will be involved in all phases of the mitigation scheme through to its completion.
- 10.1.2 The analysis of the finds and environmental data will be undertaken by Framework Archaeology's core staff or external specialists, using a *pro forma* recording system. The work will be carried out under the supervision of the relevant departmental managers under the overall direction of the Project Manager.

#### 11 MONITORING

11.1.1 Monitoring will be undertaken by the Client and the nominated representative of WCMS.

#### 12 HEALTH AND SAFETY.

- 12.1.1 Wessex Archaeology will ensure that all work is carried out in accordance with its Company Health and Safety Policy, to standards defined in *The Health and Safety at Work etc. Act 1974* and *The Management of Health and Safety Regulations 1992*, and in accordance with the SCAUM (Standing Conference of Archaeological Unit Managers) health and safety manual *Health and Safety in Field Archaeology* (1997). A copy of Wessex Archaeology's Company Health and Safety Policy is available on request.
- 12.1.2 At the outset of any fieldwork stage of the project a Risk Assessment will be undertaken by the nominated Project Manager to ensure that potential hazards have been identified and mitigation or control measures will be implemented. Wessex archaeology will comply with CDM regulations where relevant.

TABLE 1 SUMMARY OF POTENTIAL AND PROPOSALS

Area	Potential	Resource	Route	Constraints	Geophysics	Comments
I	High	IA/RB Settlement	Immediately south of original	Terminus with Camp Hill reservoir	Detailed Magnetometer – 15m easement	
	Moderate	Unknown/ Field systems	1	-	-	
2	High	LBA/IA Settlement/Field Systems	South of Original to avoid settlement	-	Detailed Magnetometer – 15m easement	
	Moderate	Unknown/Fieldsystems	South of Original to avoid settlement	-	Detailed Magnetometer – 15m easement	
3	Moderate	Unknown/Enclosure	-	-	-	
	Low	Unknown	South of Original Route	Link with existing pipeline to east	Detailed Magnetometer – 15m easement	
4	High	Water Meadows	As Original	Re-use of existing pipe to minimise impact	No	No groundworks proposed
	Moderate	Unknown, possible extension to barrow cemetery	-	-	-	
5	High	Enclosed barrow cemeteries	North of Original to minimise impacts to east	Link with existing pipeline to west. Otherwise some potential for adjustment	Detailed Magnetometer – 50m centred on easement	Move to avoid barrow?
	Moderate – High	Unknown, possible extension of activity from north and south	North of Original to minimise impacts to east	Some potential for adjustment	Detailed Magnetometer – 50m centred on easement	

Continued Over/

Area	Potential	Resource	Route	Constraints	Geophysics	Comments
6	High	Barrow cemetery, RB and Neo Settlement	North of Original to minimise impacts to north and south	Constrained by road crossing	Detailed Magnetometer – 15m easement	
	Moderate – High	Unknown	North of Original to minimise impacts to north and south	Constrained by road crossing	Detailed Magnetometer – 15m easement	
7	High	RB/Med Settlement	North of Original to avoid areas settlement	Constrained by road crossing and extant buildings	Detailed Magnetometer – 15m easement	
	Moderate – High	Possible RB/Med Settlement	North of Original to avoid areas settlement	Constrained by road crossing and extant buildings	Detailed Magnetometer – 15m easement	
8	High	RB/Med Settlement	Broadly as original route	Constrained by road crossing and extant buildings and link to reservoir	Detailed Magnetometer – 15m easement	
	Moderate – High	Possible RB/Med Settlement	-	-		
9	High	RB/Med Settlement	Broadly as original route	Links to reservoir	Detailed Magnetometer – 15m easement	
	Moderate – High	Unknown/ cropmarks	Broadly as original route	Links to reservoir	Detailed Magnetometer – 15m easement	
	Moderate	Unknown	-	-	-	

TABLE 2 SUMMARY OF MITIGATION STRATEGY

Location	Strategy	Comments	
Area 1			
Easement West of Devizes Road	Strip and record	In advance of construction – Possibly leading Excavation	
Easement and Compound A East Devizes Road	Strip and record	In advance of construction – Possibly leading Excavation	
Area 2	Strip and record	During Construction- possibly leading to excavation east of Hill Farm	
Area 3	Strip and record	During Construction Possibly leading Excavation	
Area 4	No Ground Works	- No Mitigation required	
Area 5			
Easement	Adjust Route to minimise impact followed by Strip and Record	During Construction- Possibly leading Excavation	
Compound B	Evaluate/ Strip and record	Rapidly evaluate area then if minimal archaeology strip and record Possibly leading Excavation	
Area 6			
Easement	Strip and record	During Construction Possibly leading Excavation	
Compound C	Evaluate/ Strip and record	Only if Compound B not stripped	
Area 7 Area 8	Geophysical survey yet to be	Depending on results strip and	
Area 9	undertaken	Record/Excavate.	

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Wessex Archaeology May 2001 B1914 Old Sarum Trunk Main Replacement, Wiltshire, Archaeological Risk Assessment Unpublished Client Report Reference 49631

Wessex Archaeology June 2001 B1914 Old Sarum Trunk Main Replacement, Wiltshire, Archaeological Assessment Unpublished Client Report Reference 49631.01

# **Appendix 1 SMR Catalogue**

SMR	Site Name	Class	Period	Finds	Comment
No	~ *****	~	3.6 41.1	*** 1 1 7 1	25 111
050	Camp Hill Chalk Pit	Single Find	Mesolithic	Worked Flint	Mesolithic pick
103	East Side Old Sarum	Unclassified Feature	Neolithic	Ceramics	Neolithic sherds from three small pits,.
104	NE Old Sarum	Pits	Neolithic	Ceramics, Worked Flint, Worked Stone, Animal Bone	Two deep, flat bottomed pits.
151	Camp Down	Settlement	Bronze Age	Stone, Animal Bone, Ceramics	Mainly small Pits containing Burnt Stone, Animal Bone and Ceramics, which may be Late Bronze Age or early Iron Age.
153	Bishopsdown	Associated Find	Bronze Age	Worked Flint	Scatter of Flakes
154	South of Old Sarum	Associated Find	Bronze Age	Worked Flint	Worked and Burnt Flint
156	Land at the Beehive	Single Find	Bronze Age	Ceramics	Single sherd recovered from trial trench
200	Camp Hill Reservoir	Settlement within Enclosure	Iron Age	Ceramics, Ashes, Animal Bone, Stone	Ditched Settlement containing a number of Pits.
206	East outskirts of Old Sarum	Linear Feature	Iron Age	None	Ditch with no dating evidence, appears to be IA
207	Hilltop Way Pauls Dene Estate	Settlement	Iron Age	Ceramics and Flint	Group of 15 pits including a grain storage pits, and some Roman Pottery.
209	Camp Down	Settlement	Iron Age	Stone, Animal Bone, Ceramics	Mainly small Pits containing Burnt Stone, Animal Bone and Ceramics, which may be Late Bronze Age or early Iron Age.
210	East outskirts of Old Sarum	Linear Feature	Iron Age	Human Burial	Ditch with no dating evidence, appears to be IA
213	Castle Hill	Unclassified Feature	Iron Age		Ditch cut with Iron Age Rubbish Pits.
218	Bishopsdown	Settlement	Iron Age	Ceramics, Flint, Human Burial	Six pits, a ditched trackway and several other linear features. Human Burial found in one of the pits.
300	Camp Hill Reservoir	Settlement	Romano- British	Ceramics, Stone, Building Stone, Plaster	Settlement with plaster, a rotary quern and oven.
301	Portray R-B Road	Trackway	Romano- British		Roman Road to Silchester
303	South of Old Sarum	Associated Find	Romano- British	Ceramics	Coarse Ware Sherd
306	East outskirts of Old Sarum	Linear Feature	Romano- British	Ceramics	Ditch containing sherd of Samian ware.

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307	East outskirts of Old Sarum	Linear Feature	Romano-British	Human Burial, Ceramics	Ditch with Human Burial at base, sherd of R-B pottery near skull.
311	Bishopsdown	Associated Find	Romano-British	Ceramics, Ceramic Tile, Flint	Scatter of Material
318	Camp Down	Unassociated Finds	Romano-British	Ceramics	Scatter of pottery found during the excavation of a water-pipe trench.
319	Roman Road Old Sarum- Mildenhall	Trackway	Romano-British		Roman Road
320	Roman Road Old Sarum to Winchester	Trackway	Romano-British		Roman Road
321	Castle Hill	Associated Finds	Romano-British	Ceramics	Late R-B pottery sherds from silted up IA ditch.
404	East outskirts of Old Sarum	Cemetery	Early Medieval (Saxon)	Human Burials	14 Saxon skeletons in Bronze Age Barrow.
451	Avon Farm	Single Find	Late Medieval	Stone (Building Material)	Stone with Chevron Moulding.
454	South of Old Sarum	Single Find	Late Medieval	Ceramics, Worked Flint, Ceramic Tile	Ceramic Sherds in possible pit.
456	Western Suburb of Old Sarum	Settlement	Late Medieval	Stone, Ceramics	Pits and walls uncovered, some surviving earthworks.
485	Site of Chapel of the Holy Cross	Ecclesiastical Site	Late Medieval		Exact location not found by discovered during excavation.
493	Eastern Suburb Old Sarum	Cemetery	Late Medieval	Human Burials	50 Skeletons and mass graves
494	Eastern Suburb Old Sarum	Industrial Site	Late Medieval	Ceramics, Stone	Lime kiln with pits defined by a ditch.
499	Site of St John's Hospital	Ecclesiastical Site	Late Medieval		Possible Leper Hospital
4A2	Garden of Romans Rest	Building	Late Medieval	Stone Walls	Building of several phases 12 <sup>th</sup> -14 <sup>th</sup> Century.
516	North of Avon Farm	Associated Finds	Late Medieval	Stone	Five 12 <sup>th</sup> Century Stones built into the side of a house.
600	Camp Down	Field System			Field System covering 100 Acres.
604	Camp Hill	Round Barrow			Possible Round Barrow located on a map of Salisbury Plain, but not located in Fieldwalking or Geophysical survey. May be the same as 661.
606	North Hill Down North Group	Round Barrow	Bronze Age	Ceramics, Human Burial, Primary	Urned Cremation burials in a primary context, in a ditched Bowl Barrow.
607	North Hill Down North Group	Round Barrow	Bronze Age	Human Burial Primary	Bowl Barrow with a simple Cremation, probably in the primary position.

SMR No	Site Name	Class	Period	Finds	Comment
608	North Hill Down North Group	Round Barrow			Bowl Barrow with no burials found.
609	North Hill Down North Group	Round Barrow	Bronze Age	Ceramics, Human Burial, Primary	Bowl Barrow with a primary urned cremation burial, with parts of two small cups.
610	North Hill Down North Group	Round Barrow			Bowl Barrow with no burials found.
611	North Hill Down South Group	Round Barrow			Bowl Barrow.
612	North Hill Down North Group	Round Barrow			Round Barrow
613	North Hill Down North Group	Round Barrow			Round Barrow
614	North Hill Down North Group	Round Barrow			Round Barrow
615	North Hill Down North Group	Round Barrow			Round Barrow
616	Avon Farm/ Devizes Road	Enclosure			Small rectangular enclosure within a curving ditch, probably part of a larger subcircular enclosure.
621	East Old Sarum	Round Barrow	Bronze Age	Ceramics	Bowl Barrow with Urn Fragments and 14 Saxon Skeletons.(404)
629	Rockshill Plantation	Field System			Various cropmarks constituting a Field System.
630	New Farm	Circular Feature			Ring Ditch appearing as a crop-mark on aerial photographs.
631	North of Old Sarum	Unclassified Feature			Features visible on aerial photographs, probably part of field system
632	North of Old Sarum	Circular Feature			Ring Ditch which is part of levelled Barrow Cemetery
633	North of Old Sarum	Circular Feature			Ring Ditch which is part of levelled Barrow Cemetery
634	North of Old Sarum	Circular Feature			Levelled Round barrow adjoining linear feature. Part of Barrow Cemetery.
635	North of Old Sarum	Circular Feature			Ring Ditch which is part of levelled Barrow Cemetery

SMR No	Site Name	Class	Period	Finds	Comment
641	Camp Hill	Field System			Possible Field System.
642	Avon Farm Westwards	Linear Feature			Linear Feature, possibly a Droveway, which intersects Field System 649.
649	Hill Farm	Field System			Undated Field System.
650	Camp Hill	Field System			Lynchets, Banks, ditches and Pits confirmed by Geophysical Survey, associated with settlements 200 & 300
654	New Farm	Linear Feature			Linear feature abutting Ring-Ditch 630.
659	South of Old Sarum	Linear Feature	Undated	Ceramics, Worked Flint Animal Bone	Ditch with flint, bone and Post-Medieval CBM
660	South of Old Sarum	Pit	Undated	Ceramics, Worked Flint, Ceramic Tile	Worked and Burnt flint with medieval and Post- Medieval ceramics in possible pit.
661	NNE of Fugglestone Red Buildings	Round Barrow			Possible Round Barrow not seen since the 19 <sup>th</sup> Century.
664	Land at the Beehive	Linear feature	Undated		Probable Postmedieval feature.
665	Land at the Beehive	Unclassified Feature	Undated		Probable Postmedieval feature.

## **Appendix 2 Aerial Photographs:**

Obliques:

NGR INDEX:SU1332/15 FILM/FRAME:NMR 73/147 DATE:20 April 1968

NGR INDEX:SU1332/19 FILM/FRAME:FLI 9316/ORACLEE DATE1 September 1954

NGR INDEX:SU1332/106 FILM/FRAME:NMR 15362/38 DATE:7 August 1995

NGR INDEX: SU1332/65 FILM/FRAME: CCC 9029/9051 DATE: 2 March 1932

NGR INDEX:SU1333/4 FILM/FRAME:NMR 486/46 DATE:13 May 1973

NGR INDEX:SU1333/5 FILM/FRAME:NMR 486/59 DATE: 13 May 1973

NGR INDEX:SU1333/8 FILM/FRAME:NMR 811/211 DATE:17 March 1975

NGR INDEX:SU1333/9 FILM/FRAME:NMR 881/288 DATE:27 July 1975

NGR INDEX:SU1333/10 FILM/FRAME:NMR 881/291 DATE:27 July 1975

NGR INDEX: SU1333/11 FILM/FRAME:NMR 881/298 DATE:27 July 1975

NGR INDEX:SU1333/41 FILM/FRAME:NMR 881/345 DATE:27 July 1975

NGR INDEX: SU1433/3

FILM/FRAME: NMR 486/41

DATE: 13 May 1973

NGR INDEX:SU1433/5

FILM/FRAME:NMR 881/275

DATE:27 July 1975

NGR INDEX: SU1433/8

FILM/FRAME: NMR 881/309

DATE: 27 July 1975

#### Verticals:

SORTIE NO:106G/UK/1654

FRAME:4219

DATE: 11 July 1946

SORTIE NO:106G/UK/1654

FRAME:4221

DATE: 11 July 1946

SORTIE NO:CPE/UK/1811

FRAME:4230

DATE: 20 October 1946

SORTIE NO:CPE/UK/1894

FRAME:4024

DATE:12 DECEMBER 1946

SORTIE NO:CPE/UK/2061

FRAME:4145

DATE: 11 May 1947

**SORTIE NO:58/1310** 

FRAME:0018 (F22)

DATE: 10 November 1953

**SORTIE NO:58/1310** 

FRAME:0019 (F21)

DATE: 10 November 1953

**SORTIE NO:58/1310** 

FRAME:0023 (F22)

DATE: 10 November 1953

**SORTIE NO:540/854** 

FRAME:4173

**DATE: 29 August 1952** 

**SORTIE NO:58/8970** 

FRAME:0131

DATE: 29 August 1968

SORTIE NO:OS/70129

FRAME:252

DATE: 24 May 1970

SORTIE NO:OS/70130

FRAME:453

DATE: 24 May 1070

SORTIE NO:MAL/71016

FRAME:001

DATE: 22 March 1971