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6.3 Environmental Statement Appendices

Appendix 6.1 Annex 4 Previous archaeological and antiquarian investigations within the Stonehenge part of the World Heritage Site

APFP Regulation 5(2)(a)

Planning Act 2008

Infrastructure Planning (Applications: Prescribed
Forms and Procedure) Regulations 2009

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HIA Annex 4 –

Previous archaeological and antiquarian investigations within the Stonehenge part of the World Heritage Site

Ancient references to Stonehenge

The Greek historian Hecataeus of Abdera in c.330 BC wrote briefly of ancient sanctuaries and temples in the land of the Hyperboreans, the place from which the north wind blew, tentatively identified as Britain and Ireland. It is telling though that later Classical writers whose works covered Britain such as Caesar (51 BC), Strabo (AD 20), Pliny (AD 77) and Tacitus (AD 97), never made reference to Stonehenge (Darvill 2006, 32–35).

The first specific written account of Stonehenge was by Henry of Huntington in 1130, an archdeacon at Lincoln who was commissioned to write a history called *Historia Anglorum* (History of the English). He prefaced the history proper with a short account of Britain's four wonders including Stonehenge or 'Stanenges, where stones of wonderful size have been erected after the manner of doorways...' (Darvill 2006, 36; Richards 2017, 59; Souden 1997, 140).

A short time later was Geoffrey of Monmouth's *History of the Kings of Britain*, written around 1136, which recounted the story of how Stonehenge was commissioned by the British king Aurelius Ambrosius with the help of Merlin who brought the stones from Ireland (Parker Pearson 2015, 65; Souden 1997, 140; Thorpe 1966, 195–212). Two 14th-century manuscripts provide the earliest known depictions of Stonehenge and one of the rare instances that prehistoric monuments were depicted during the Middle Ages. One depicts Merlin placing a lintel on top of a pair of standing stones, completing a trilithon, much to the amazement of onlookers, while the other, a squared version of Stonehenge, decorates a historical calendrical table (Chippindale 2004, 23, figs 14 & 15; Darvill 2006, 36). Another small illustration of Stonehenge is in the *Scala Mundi*, a manuscript written in c.1441 and which is now kept in Douai in France (Parker Pearson 2015, 125).

Antiquarian enquiry in the 16th and 17th centuries

Stonehenge was still to remain in the popular imagination – John Rastell (c. 1475–1536), an antiquary in the 16th century, attempted to solve the question as to why Stonehenge was built with non-local stone. He observed that the stones were of no recognisable building stone in an area where the underlying geology was chalk with flint nodules, but 'so hard that no yryn tole wyll cut them without great bysynes' (Chippindale 2004, 27–28). William Camden's (1551–1623) *Britannia*, a topographical and historical survey, first published in 1586, mentioned Stonehenge, and in the 1600 edition he described the site as 'a huge and monstrous piece of worke' and that 'men's bones have many times been digged up here ... Ashes and pieces of burnt bone here frequently found' (Parker Pearson 2015, 126). A few years later, John Leland (c.1503–1552), in his *De Antiquitate Britannica*, attempted to tease fact away from legend in relation to Stonehenge, noting that 'almost everything that is related about the bringing of these stones from Ireland is fictional'. Instead, he believed that Merlin brought these stones from some quarry in the locality. Leland reckoned that it would have been beyond the ability of the Romans to move such large stones all the way from Ireland to

Amesbury, since the River Avon was a good twenty miles away (Chippindale 2004, 29). William Lambarde (1536–1601) in the 1580s sought a more rational explanation of Stonehenge, rejecting the fables and ‘suche like Toyes, whearwith Galfrid [Geoffrey] and many others have brought good Hystories into vile Contempt, and themselves the Wryters woorthely into Derision’. He regarded the stones as hanging ‘with no more Wonder than one Post of a House hangeth above another, seinge that all the Stones are let one in another by a Mortece and Tenant, as Carpenters call them’. Lambarde astutely identified the origin of the stones: ‘theare is within the same Shyre great Stoare of Stone of the same Kinde, namely, above *Marlborow*, from whence I thinke they weare chosen by the Greatness, for other Difference eyther in Matter or Fashion I see none’ (Lambarde 1730, 314–315).

Stonehenge certainly attracted the attention of many, including British monarchs – King James I (1566–1625) was much intrigued by what he saw at Stonehenge during a visit in 1620. George Villiers, the 1st Duke of Buckingham (1592–1628), his host at Wilton House near Salisbury, offered the then owner, Robert Newdyk, ‘any rate’ if he would sell Stonehenge but ‘he would not accept it’. James’ curiosity remained unabated and the Duke did arrange to have a hole excavated in the middle of Stonehenge to allow for the site’s secrets to be revealed (Chippindale 2004, 47; Darvill 2006, 39; Long 1876, 237). When John Aubrey (1626–697), the antiquary of King Charles II (1630–1685), saw the site years later, the excavation hole was still evident, describing it as the size of two saw pits placed together. Aubrey recounted that stags horns, bull horns, arrow heads, and some pieces of rusted armour had been recovered from the dig (Chippindale 2004, 47; Darvill 2006, 39). Around the same time a so-called altar stone was ‘found in the middle of the Area’ and brought to St James’ in Westminster for courtiers to admire (Chippindale 2004, 47–48). The Duke of Buckingham also examined some of the round barrows on King Barrow Ridge, in one of which was found a ‘bugle-horne tip’t with silver at both ends’ (Darvill 2005, 7).

This excavation intrigued James I so much that he commissioned an expert study on Stonehenge. This job fell to Inigo Jones (1573–1652), the well-known neo-classical architect, masque designer and Surveyor of the King’s Works, who was given ‘his Majesty’s Commands to produce, out of my own Practice in Architecture, and Experience in Antiquities Abroad, what possibly I could discover’ about the site (Chippindale 2004, 48). Most of the work was done after the king’s death in 1625, mostly during visits to Wiltshire between 1633 and Jones’ own death in 1652 (Darvill 2006, 39). Following his death, the most prominent English architect of his time had left only ‘some few indigested Notes’, which his assistant and protégé, John Webb (1611–1672) ‘moulded off and cast into a rude Forme’ as a book in 1655 entitled *The Most Notable Antiquity of Great Britain, Vulgarly Called Stone-heng, on Salisbury Plain. Restored*. This was the first book on Stonehenge and probably the first book to be published anywhere on a single prehistoric monument (Chippindale 2004, 48; Richards 2017, 63; Webb 1655, preface). The original notes by Inigo have not survived, so it is not clear as to how much is by Jones and how much is by Webb, but this matters little as Webb was mentored by Jones and adopted a similar approach with regard to architectural matters (Chippindale 2004, 48). Inigo believed that Stonehenge was built by the Romans, identifying in the site’s layout the geometrical arrangement of four equilateral triangles, paralleling a Vitruvian plan of a Roman theatre with the same geometrical controls. The book contained a plan and elevations of what Jones considered to be the original appearance of Stonehenge (Chippindale 2004, 57–59, pls 32–35; Darvill 2006, 40, fig. 8; Richards 2017, 64–65; Souden 1997, 142–143).

John Aubrey drew a plan of Stonehenge in 1666 for Charles II, with dotted lines marking the Avenue, along with the Heel Stone to one side. By the entrance causeway there were three stones where now there is only one (the Slaughter Stone). The central setting of five trilithons was depicted as a horseshoe (albeit with two more trilithons roughed in to complete a spurious circle). Just inside the bank, marked with 'c's were the two Station Stones, and marked with 'b's were five additional cavities, which following excavation centuries later in 1920, turning out to be the 'Aubrey Holes', prehistoric pits which were regularly arranged around the inside of the circular enclosure and ditch (Chippindale 2004, 69; Darvill 2006, 39; Richards 1991, 32; Richards 2017, 66–67). Aubrey deduced that Stonehenge was related to other stone circles in places like Pembrokeshire, north-east Scotland and Ireland where the Romans, Saxons and Danes had penetrated scarcely, their distribution suggesting that these stone circles were the temples of the native British instead (Chippindale 2004, 69–70; Richards 2017, 66).

In about 1695, Celia Fiennes (1662–1741) visited Stonehenge, 'placed on the side of a hill in a rude irregular form – two stones stands up and one laid on their tops with mortises into each other and thus are severall in a round like a wall with spaces between, but some are fallen down, so spoyle the order or breach in the temple, as some think it was in the heathen tymes.' Fiennes appears to describe a bluestone trilithon, known to have once existed, but never otherwise seen in modern times: 'There is severall rows of lesser stones within the others set up in the same forme of 2 upright and one lies on the top like a gateway.' (published in 1888 as *Through England On a Side Saddle in the Time of William and Mary Being the Diary of Celia Fiennes*)

Antiquarian research in the 18th century

A generation later, the Lincolnshire antiquarian, William Stukeley (1687–1765) worked each summer in Avebury and Stonehenge during the years 1721–24, surveying, measuring and drawing monuments (Chippindale 2004, 75; Richards 2017, 68). The word 'trilithon' was conjured up by him from the Greek for 'three stones' to describe what he saw at Stonehenge (Chippindale 2004, 14; Richards 2017, 70). Stukeley also dug at the stone circle, and spotted the Avenue running from the entrance past the Heel Stone and beyond 'where abouts the sun arises, when the days are longest', and also discovered what he called the Cursus, a pair of ditches about 350 feet apart which ran for about 2 miles. To the antiquarian it appeared to be a running track for the ancients competing in 'games, feats, exercises and sports' (Chippindale 2004, 76; Richards 1991, 32; Richards 2017, 70–71). Between 1722 and 1723, Stukeley and Thomas Herbert, 8th Earl of Pembroke and 5th Earl of Montgomery of Wilton House (c. 1656–1733) dug into 13 barrows, most of them situated in the Amesbury and Wilsford parishes, the 'artificial ornaments of this vast and open plain' that were set 'upon elevated ground, and in sight of the temple' (Chippindale 2004, 76; Darvill 2005, 8; Richards 1991, 32; Richards 2017, 71). Their excavations revealed the makeup of the barrow mounds as well as the nature of the burials contained within. Stukeley eventually brought out two books based on his fieldwork, *Stonehenge, a temple restor'd to the British Druids* in 1740 and *Abury: a Temple of the British Druids* in 1743 (Boyd Haycock 2017; Chippindale 2004, 81, 86; Darvill 2006, 41), which contained allusions of Druidical design behind these great monuments – the latter book also dwelled on the Phoenicians and how true Christians gathered in mystical serpentine temples to await the coming of the Messiah (Chippindale 2004, 92; Richards 1991, 33). Stukeley's work came to define people's understanding of Stonehenge, with every aspect of ancient Britain now being construed as

somehow Druidic; consequently nothing better was written about the site for the remainder of the 18th century (Boyd Haycock 2017; Chippindale 2004, 91–92; Richards 2017, 73). Indeed, relatively little fieldwork took place in the remainder of the 18th century, though two barrows in the Iron Age hillfort known as Vespasian's Camp were excavated in 1770, probably during the course of landscaping works associated with the nearby country residence of Amesbury Abbey (Darvill 2005, 8).

Antiquarian investigations in the 19th century

By the turn of the 19th century, interest had been rekindled among those interested in the ancient past. The antiquarian most closely associated with Stonehenge and the surrounding area at this time was William Cunnington (1754–1810), a wool merchant from Heytesbury on the western edge of the Salisbury Plain. He was quite prodigious in his excavations of barrows – by 1801 he had opened up 24 barrows, and at Stonehenge had dug with 'a large stick' under a fallen sarsen (Darvill 2006, 43; Richards 1991, 33; Richards 2017, 74). Cunnington successively enjoyed the patronage of Henry Penruddocke Wyndham, M.P. for Wiltshire (1736–1819), the Reverend William Coxe, Rector of Stourton, and Sir Richard Colt Hoare (1758–1838), owner of the Stourhead estate in Wiltshire (Richards 1991, 33; Richards 2017, 74–75). In 1802 Cunnington dug again at Stonehenge: '...particularly at the front of the Altar, where I dug to the depth of 5 feet or more & found charred Wood, Animal Bones, & Pottery, of the latter there were several pieces similar to the rude Urns found in the Barrows – also some pieces of Roman pottery' (Chippindale 2004, 117; Richards 2017, 78). Over time, Cunnington opened more than 600 Wiltshire barrows, including nearly 200 examples in the vicinity of Stonehenge – only those planted with trees or under tillage were spared. Two or three barrows could be dug in a day, if they were not too substantial in size (Chippindale 2004, 121–22; Richards 2017, 78–80). He used the shaft technique which involved digging a pit in the centre of the mound, the search continuing downwards until a burial was found or the old ground surface under the mound was reached (Darvill 2005, 8; Richards 2017, 78). The most impressive discovery made by Cunnington was the richly furnished burial at Bush Barrow (Wilsford 5) uncovered in 1808. This was an inhumation with accompanying grave goods, including a bronze axe, three daggers, one of which had a pommel decorated with gold, a stone sceptre, and two gold lozenges (Darvill 2005, 8; Richards 2017, 82–83). Another associate of Cunnington was Philip Crocker, a draughtsman and surveyor, who produced a working map of Stonehenge and the surrounding area, with the various barrows drawn and numbered along with the Cursus, all superimposed on the local topography and road system (Chippindale 2004, 125, fig. 101). A version of this was published in 1812 in Colt Hoare's first volume of *The Ancient History of Wiltshire*, the first detailed map of the archaeology of the Stonehenge environs (Richards 1991, 14, fig. 2; Richards 2017, 76–77).

Thankfully, the last person allowed to go digging at Stonehenge on a whim was a Captain Beamish from Devonport who in c.1839 excavated a six foot [1.8m] deep hole in front of the Altar Stone, over an area 8 feet [2.4m] square, and found nothing more than rabbit bones. This was done 'in order to satisfy a society in Sweden there was no internment in the centre of Stonehenge' (Chippindale 2004, 161; Cleal et al. 1995, 9; Richards 2017, 87). The welcome obstinacy of one owner, Sir Edmund Antrobus, was to protect Stonehenge from further unnecessary interference for the remainder of the 19th century, including from any proposed restoration efforts by government authorities (Chippindale 2004, 161).

Notwithstanding the lack of access for excavation on the stone circle, antiquarian research continued apace within the environs of Stonehenge. John Thurnam (1810–1873) was a medical superintendent at the Devizes Asylum with an interest in the skeletons, and especially the skulls, of ancient Britons. Any skeletons that Cunnington had come across in his excavations of the barrows were left unmolested, and with Colt Hoare's *The Ancient History of Wiltshire* as his guide, Thurnam quarried the barrows for these skeletons in the mid-19th century. He found that the skulls could be grouped into two classes depending on the barrow in which they were interred. Those from the long barrows were dolichocephalic, with their skulls long in relation to their width; those from the round barrows were brachycephalic, tending to be more round in shape. The long barrows, with multiple inhumations, long skulls, few grave goods and no metal items, belonged to a stone age; whereas the round barrows, with single inhumations or cremations, round skulls, burial goods sometimes in bronze, were later in date belonging to the Bronze Age. And as long barrows were situated around Stonehenge equally with round barrows, Thurnam suggested that the stone circle's location showed it to be a Bronze Age temple on a site originally used as a burial ground for the elite of the stone age (Chippindale 2004, 129; Darvill 2006, 44–45).

During the 1870s, the archaeologist and Egyptologist Flinders Petrie (1853–1942) measured Stonehenge, attempting to ascertain the unit of length adopted by the site's builders as part of a larger study into thirty to forty sites across Britain and France. The numbering system applied to the stones by Petrie is still used today (Parker Pearson 2013, 72; Parker Pearson 2015, 128; Richards 2017, 91–92). Petrie was also interested in Stonehenge astronomy – he saw the first glimpse of the sun as seen over the Heel Stone from between the uprights of the great trilithon as being significant. From this, he calculated a date of AD 730 for Stonehenge's construction which fitted his Roman foot as well as his notion that the site was the burial ground of English kings after the Roman withdrawal (Chippindale 2004, 137, 139–140). A second effort was made to date Stonehenge by the astronomer Sir Norman Lockyer (1836–1920) at the close of the 19th century. Through using orientations and alignments he arrived at a date of about 1680 BC, but his flawed approach discouraged other archaeologists from working on the astronomical significance of Stonehenge until the mid-20th century (Lockyer 1906, 67).

The first archaeological investigations in the early 20th century

Until the late 19th century, archaeological research on Stonehenge was carried out under the patronage of wealthy gentlemen or well-to-do professionals working during their leisure time. From the turn of the 20th century, this began to change as archaeology emerged as an academic discipline, and became a profession in its own right. Fieldwork was now carried out by professional archaeologists under the auspices of learned societies or government departments (Chan and Parker 2014, 46). During a storm in December 1900, strong winds blew down stone 22, an upright on the west side of the outer sarsen circle. This was the first recorded stone fall since 1797 (Chippindale 2004, 164; Richards 2017, 96). This occurrence aroused concerns for the future preservation of Stonehenge. The state's advisory committee approved an effort to pull upright the leaning stone no. 56, the sole standing upright of a great trilithon – its lean had increased over the years to an angle of 60 degrees, and threatened the safety also of bluestone no. 68, which it was pushing over (Chippindale 2004, 166–167). This restoration work was carried out in the autumn of 1901 under the direction of Mr Detmar Blow (1867–1939), a Wiltshire architect, and Professor William Gowland, a

mining geologist from the School of Mines in South Kensington, who was nominated by the Society of Antiquaries as the supervising archaeologist (Chippindale 2004, 167; Cleal et al. 1995, 9). Through his meticulous work, Gowland was able to show how the stone-holes had been dug, and how the sarsens had been trimmed, shaped and erected, and he made a reasonable estimate as to the age of the site at around 1800 BC, during the latter part of the Neolithic, given the lack of metal found during the course of his excavation except for a tiny green copper stain on a sarsen block seven feet down (Chippindale 2004, 167–169; Richards 1991, 35; Richards 2017, 98). After more than a century of excavation and developments in scientific archaeological research that still remains the conventional view (Pitts 2018, 10). For Gowland, there was no exotic, foreign origin for Stonehenge, ‘...its plan and execution alike can be ascribed to none other than our rude forefathers, the men of the Neolithic or, it may be, of the early bronze age’ (Chippindale 2004, 172; Souden 1997, 25). In 1906 Stonehenge became the first archaeological site in Britain to be photographed from the air when an oblique shot was taken from the basket of a Royal Engineers’ balloon by 2nd Lt Philip Henry Sharpe (Darvill 2005, 9; Richards 2017, 99–101).

After the Great War, an assessment was made of Stonehenge and a restoration programme was organised by the Office of Works (the monument had been gifted to the nation by Mr (later Sir) Cecil Chubb in 1918), who turned to the Society of Antiquaries for advice and funding. Work began in November 1919 focusing on the stones that were leaning the most in the outer circle. The task of excavation in advance of these conservation works fell not to Gowland, who had since retired, but to a colleague, Colonel William Hawley (1851–1941) assisted by Robert Newall (1884–1978) (Chippindale 2004, 179–180; Cleal et al. 1995, 10–12; Richards 2017, 102–103). Hawley also started to investigate the surrounding ditch, the Slaughter Stone and a number of the holes identified in Aubrey’s *Monumenta Britannica* (Chippindale 2004, 181; Richards 1991, 35; Richards 2017, 107). For 1921, the Office of Works planned to re-erect the stones which had fallen in 1797 and in 1900, but funding was problematic, and as no stone was in actual danger, the restoration was suspended (Chippindale 2004, 181–182). Hawley continued to excavate at Stonehenge on behalf of the Society of Antiquaries, often working on his own, clearing the south-eastern half of the interior of Stonehenge for a number of seasons, running from 1921 to 1926 (Chippindale 2004, 182–83; Cleal et al. 1995, 12–15, fig. 8; Richards 1991, 35–36). While under-resourced and using a field methodology that has been open to criticism, Hawley located two more rings of holes, besides the Aubrey Holes. These rings were called the ‘Y’ and ‘Z’ holes, and were regarded as possibly Iron Age in date; the Aubrey Holes were presumed to be Neolithic and the main stone circles to be Bronze Age in origin (Chippindale 2004, 183; Souden 1997, 25; Richards 2017, 108).

While excavation work was continuing, questions were also being raised on the nature of the stones used in the construction of Stonehenge. As early as 1868, Sir Andrew Crombie Ramsey (1814–1891) was the first geologist to point out the similarity of some of Stonehenge’s bluestones to the igneous rocks to be found in Pembrokeshire (Darvill 2006, 45). In 1923, Dr Herbert Henry Thomas (1876–1935) of the Geological Survey identified the provenience of the bluestones, tracking their origins to a deposit of igneous rock in the Preseli Mountains in northern Pembrokeshire. The three main varieties of Stonehenge bluestone – spotted dolerite, rhyolite and volcanic ash were matched exactly by outcrops (Thomas 1923, 239–60; Richards 2017, 111).

Archaeological investigations were taking place elsewhere in the environs of Stonehenge. In 1921, aerial photographs taken in the vicinity of Stonehenge revealed the full extent of the Avenue – O.G.S Crawford (1886–1957), trawling through old negatives in 1923, observed a pair of thin parallel lines running across the countryside between Stonehenge and Amesbury. They had been traced by Stukeley as far east as the gap between the Old and New King Barrows at which point they disappeared under ploughed fields. The aerial photographs now showed that the Avenue swung from there southwards to finish close to the bank of the River Avon at West Amesbury (Crawford 1924, 57–59). In 1923 Crawford and A.D. Passmore (1877–1958) followed this up with the excavation of three trenches to confirm the course of the Avenue identified through the aerial photography (Clea et al. 1995, 296; Darvill 2005, 142). Investigations also took place in the vicinity of Stonehenge associated with management works: a section of a water utilities trench along what was to become the A344 was monitored by Robert Newall in 1919 – he drew a profile of the trench showing the Heelstone Ditch and both Avenue ditches; an investigation of the Avenue close to the Amesbury-Stonehenge road at West Farm was carried out by R. Clay in 1927; and in 1935 W.E.V. Young carried out excavation in advance of the first a series of car-parks on the north side of the A344 (Clea et al. 1995, 295, 301; Darvill 2005, 9, 142). Elsewhere, Dr J.F.S. Stone (c.1891–1957), a chemist based at Porton Down who was interested in archaeology, excavated at numerous sites along Countess Road and around Ratfyn that were revealed during the course of property development, road-widening, or the laying of pipelines during the 1920s and 1930s, while Newall also excavated in Winterbourne Stoke in 1925 (Darvill 2005, 9). Aerial photography continued to be pursued in the area; O.G.S. Crawford and Alexander Keiller (1889–1955) produced a book entitled *Wessex from the Air* (1928) which included images of Stonehenge and Bush Barrow (Darvill 2005, 9). Field walking was also beginning to feature in archaeological research on the area such as the work on King Barrow Ridge by B. Laidler and W.E.V. Young in 1939 (Darvill 2005, 9).

Archaeological investigations c.1950 to 1990

After the Second World War, research on Stonehenge also began afresh in 1947 when J.F.S. Stone investigated a section cut across the Cursus near the wood of Fargo Plantation (Chippindale 2004, 201). Although investigations in advance of property development, engineering works and agricultural activities had been a feature of archaeological fieldwork during the first half of the 20th century, the post-war period was to see a substantial increase in this sort of activity (Darvill 2005, 10). The range of sites recorded increased, and the opportunities for small-scale investigations at known sites increased greatly such as the flint mines which were discovered and recorded east of the Stonehenge Inn in 1952 (Darvill 2005, 10). During the 1950s, burial mounds were often at risk of being destroyed by ploughing due to the increase in demand for cultivated land, leading to a number of excavation campaigns, in most instances after the barrows had already been heavily damaged. Among the excavated barrows were G51–54 on Wilsford Down and Normanton Down in 1958; Wilsford G2–5 in 1959; twelve barrows in Amesbury and Winterbourne Stoke between 1959 and 1961; Wilsford cum Lake 1, 33 and 33a in 1960; Amesbury 51 in 1960; and Amesbury G70 and G71 in 1961. A few of the sites explored still remain unpublished, but the insights gained by this flurry of barrow excavation within the area has contributed much to the understanding of Bronze Age round barrows in Britain as a whole (Darvill 2005, 10). The most notable of these barrow excavations that took place in the 1950s and 60s was Wilsford 33a. This was a pond barrow that was excavated between 1960 and 1962 by Paul

Ashbee and Edwina Proudfoot, revealing the Wilsford Shaft, a cylindrical prehistoric shaft over 30m deep and only 2m in width. The bottom layers of its filling were waterlogged and preserved organic materials including rope, wool and the remains of wooden buckets (Darvill 2005, 10 & 143; Richards 1991, 38; Richards 2017, 141–142). With the encouragement of Richard Atkinson (of the Ashmolean Museum), an early geophysical survey using a 'Megger Meter' took place on the so-called long mortuary enclosure on Normanton Down in 1957–8; the site was subsequently excavated and dated to the middle Neolithic (Darvill 2005, 10).

The Hawley legacy at Stonehenge also needed to be sorted out, and it was agreed that Richard Atkinson, Professor Stuart Piggott (of Edinburgh University) and Dr J.F.S. Stone (a Wiltshire archaeologist) would collaborate together to produce a full report on Hawley's work, as well as excavate where necessary to clarify uncertainties (Chippindale 2004, 201; Cleal et al. 1995, 15–16; Darvill 2005, 10; Richards 1991, 36; Richards 2017, 118–32). The fieldwork took place during the years 1950–54, 1956, 1958–9 and 1964, and commenced with the Aubrey Holes; with two more investigated on top of the 32 already excavated by Hawley, leaving the last 22 intact for archaeologists in the future (Chippindale 2004, 201; Richards 1991, 36; Richards 2017, 118). It was confirmed that the Aubrey Holes were late Neolithic ritual pits, deliberately refilled, and usually containing cremated human remains. A sample of charcoal from one of the two newly excavated pits was sent to Professor Willard Libby in the University of Chicago who applied his newly developed technique of radiocarbon dating to it. The figure provided was 1848 ± 275 BC, the first absolute dating for Stonehenge (though uncalibrated), which fitted into the conventional chronology at the time for the Neolithic in England which ran from 2000 to 1500 BC (Atkinson et al. 1952, 19–20; Richards 2017, 118–119). In 1953, a photographic survey of the stones revealed carvings depicting axes of Bronze Age type and a dagger of exotic appearance with supposed parallels in Mycenae itself (Chan and Parker 2014, 47; Chippindale 2004, 202–3; Richards 2017, 119). Atkinson and Piggott also opened three cuttings in Stonehenge Bottom in 1953 and three further cuttings – two near the River Avon and one northeast of the A344 in 1956 in an effort to find the Avenue (Darvill 2005, 142). The result of the post excavation research, coupled with fresh limited excavation and survey, was published by Atkinson in a book simply called *Stonehenge* (1956) in which three phases of Stonehenge's development was detailed – further work has altered details, and calibrated radiocarbon dating has refined the dating, but the essential framework of Atkinson's scheme still stands today (Chippindale 2004, 204; Richards 2017, 123–124). As part of a scheme to restore some of the bluestones and sarsen circle along with the trilithon that had collapsed in 1797, further excavation was carried out in 1958 in the interior of Stonehenge which hitherto had not been available for investigation, allowing for the analysis of a segment of the bluestone horseshoe, the setting for an entire trilithon, an arch of the bluestone circle and part of the sarsen circle (Richards 2017, 125–130). Further archaeological investigations were carried out in 1959 in advance of work to straighten the sole surviving upright of another fallen trilithon, as well straighten two other stones in the outer circle (Richards 2017, 130–131). This was followed in 1964 by the re-erection of another stone and the straightening of two others in the outer circle, and the two uprights of one of the intact trilithons (Richards 2017, 131).

Stonehenge was not to be excavated again for another decade. In 1978, two excavations were carried out, one of which involved Alexander Thom at one of the Station Stones, the other through the enclosing ditch by John Evans in order to retrieve environmental samples (Darvill 2005, 10). The latter re-excavated a 1954 cutting through the enclosing ditch.

Samples were taken in order to study land-snails, which provided an insight into the changes in environment over time. New samples for radiocarbon dating pushed the first phase of construction of Stonehenge back to around 2,800 BC (Richards 1991, 37). During the course of this excavation, the skeletal remains of a young man were found lying on his side with knees bent. A stone archer's wrist guard was found with the body along with a number of finely worked barbed-and-tanged arrowheads, some with their tips broken off. Only later did it emerge that the tips of the arrowheads were embedded in his bones, and that the arrows were the cause of his death. The burial was later radiocarbon dated to 2300 BC (Richards 2017, 137–138).

While Atkinson updated his book in 1979, he never got around to publishing his full results in any detail, and it was only in 1995 that the results of all of the 20th century excavations were finally brought together and published by Rosamund Cleal and her colleagues at the Trust for Wessex Archaeology. This work, entitled *Stonehenge in its Landscape: twentieth-century excavations*, was accompanied by a new programme of radiocarbon dating that proved definitively that the main stone settlements of Stonehenge were late Neolithic in date. The volume contains detailed descriptions of the individual excavation cuttings, the plans and photographs that made up the reassembled site records (Parker Pearson 2015, 130; Richards 2017, 173–176; Souden 1997, 25).

In the immediate vicinity of Stonehenge, excavations were carried out in advance of extensions to the car park in 1966 and 1979, the creation of an underpass and associated works in 1967, and a whole range of pipe-trenches and cable-laying in 1968 and 1979–80. Faith Vatcher and her husband Major Lance Vatcher undertook much of this work during the 1960s, with the later seasons in the 1970s undertaken by Mike Pitts and English Heritage (Cleal et al. 1995, 17; Darvill 2005, 10). These investigations contributed much to our knowledge of Stonehenge, including the finding of the Mesolithic postholes and an early tree pit in the western end of the car park; along with the identification of the so-called Palisade Ditch north and west of Stonehenge (Darvill 2005, 10; Richards 2017, 134–135). The Vatchers also excavated in 1968 between the King Barrow Ridge and Stonehenge in advance of cable laying by the Southern Electricity Board where they discovered early Neolithic pottery (Darvill 2005, 140). The eastern end of the Avenue (35m in length) near the Avon west of Amesbury was also investigated in advance of house-construction involving excavation by George Smith in 1973 (Cleal et al. 1995, 295 & 297; Darvill 2005, 10, 142). Mike Pitts excavated along the south side of A344 at Stonehenge in advance of cable-laying and pipe-trenching – in 1979, he discovered a pit belonging to a previously unknown stone close to the Heel Stone. As part of the project, geophysical survey also identified pits along the course of the Avenue. In 1980, Pitts again excavated beside the A344 where he discovered a stone floor and the only complete prehistoric artefact assemblage to be found in association with the monument (Chan and Parker 2014, 47; Darvill 2005, 142). Smith also excavated in the Stonehenge car park on behalf of the Central Excavation Unit in 1979–80 (Darvill 2005, 142). In 1981 the Central Excavation Unit excavated in advance of the construction of a footpath through Stonehenge (Darvill 2005, 142). In 1987 and 1990 Rosamund Cleal and Mike Allen investigated tree-damaged barrows on King Barrow Ridge and near the Luxenborough Plantation. Stormy weather in those years upturned a large number of trees, exposing the archaeology. A total of 39 tree-throw holes in 9 barrows were examined and recorded (Amesbury 18–19, 27–32, and 39) (Darvill 2005, 141).

Road improvements around Amesbury in the late 1960s also provided opportunities for archaeological investigations. The works included the construction of a dual carriageway along the A303 in the eastern part of the Stonehenge landscape, the building of a bypass around the north side of Amesbury, and the construction of a roundabout and the modification of road alignments at Winterbourne Stoke crossroads. All revealed important finds and structures (Darvill 2005, 10). Amesbury barrow G39 was excavated in 1960, and was subsequently reconstructed with a revetment to support the underlying chalk. Sections were also dug by the Vatchers across the full width of the Avenue in advance of the Amesbury A303 bypass in 1967. The excavation covered an irregularly shaped area some 52m by 41m in extent, and investigated both ditches of the Avenue and the area in between (Cleal et al. 1995, 17, 296; Darvill 2005, 142). The first prehistoric settlement to be found in the Stonehenge area was excavated close to the Winterbourne Stoke cross-roads (also known as Longbarrow crossroads) (Richards 1991, 38). There the Vatchers excavated the remains of a Late Bronze Age village dating to around 1000 BC consisting of three small round houses, each with a south-facing porch, pits and a stockade trench (Darvill 2005, 143; Richards 2017, 142). In 1969, again during the widening of the A303, Faith Vatcher excavated two chalk-cut pits west of King Barrow Ridge. One of the pits contained a rich assemblage of late Neolithic material including a pair of incised chalk plaques (Darvill 2005, 10, 140; Richards 2017, 142).

In line with increasing protection of archaeological remains through planning policy guidance and the nomination of Stonehenge and Avebury jointly as a WHS in 1986, there was a general shift from work carried out as rescue archaeology towards targeted investigations informing conservation and management policies (Chan and Pearson 2014, 47). Archaeologists now began to focus on the landscape surrounding Stonehenge; in 1979 the Royal Commission on Historical Monuments of England (RCHME – now part of Historic England) undertook the plotting and analysis of all of the accessible aerial data, publishing it under the title of *Stonehenge and its Environs* detailing the prehistoric monuments to be found in the vicinity of the stone circle. All the known sites were included that made up the prehistoric ceremonial landscape. But for the first time subtle traces of everyday life were also revealed: small irregular fields, miles of boundary ditches dividing up the landscape and even the occasional small ditched enclosures that hinted at places of human habitation (Richards 2017, 148). Following this work, Wessex Archaeology was commissioned by the Department of the Environment to undertake a more intensive ground-based survey to develop a better understanding of the landscape and to aid in its management and preservation – this was the Stonehenge Environs Project (Richards 2017, 148). This involved the systematic fieldwalking over available cultivated land (c.750ha), sample excavations at 15 sites ranging in date from the early Neolithic through to the later Bronze Age, and the sampling of dry valley fills. This work revealed that the area around Stonehenge with its numerous barrows and other prehistoric monuments was not solely a ritual, funerary landscape, but one where people also lived in. In 1990, Julian Richards published the full results of the Stonehenge Environs Project (Darvill 2005, 11; Parker Pearson 2015, 130; Richards 1991, 38–47; Richards 2017, 153–154).

One of the sites partially excavated as part of the Stonehenge Environs Project was the small henge on Coneybury Hill to the south-east of Stonehenge. Following geophysical and geochemical surveys, excavation was carried out, including the sieving of topsoil. Magnetometry revealed a large pit outside the entrance to the henge, which contained a

huge collection of early Neolithic pottery, animal bones and flint tools deposited over a thousand years before the henge itself was constructed around 2700 BC. This pit feature became known as the Coneybury 'Anomaly' (Richards 2017, 148–149).

Archaeological investigations 1990 to 2017

While much of the recent work in the Stonehenge landscape has been developer led or connected with management issues, there has been a resurgence of research led projects within the Stonehenge landscape, benefitting from the publication of the 20^t-century excavations by Rosamund Cleal and her colleagues in 1995 and the preparation of the Stonehenge research framework by Timothy Darvill in 2005, which created a consensus on the current state of knowledge and allowed for the definition of future research priorities (Chan and Parker 2014, 48). Such work has been characterised by the adoption of best practice and cutting-edge specialist technologies and approaches: high standards of excavation and artefact collection, geophysical survey, high-precision accelerator mass spectrometry radiocarbon dating, and isotopic trace element analysis of both human and animal teeth (Chan and Pearson 2014, 48). Projects utilising one of these methodologies, or a combination, have accessed the significance of the prehistoric landscape within the WHS and beyond. One such project has been the Stonehenge Southern WHS Survey by Historic England which utilised aerial photography, geophysical survey, earthwork survey and excavation (Historic England 2017). Alongside research projects, the bulk of the fieldwork carried out in the area from 1980 onwards involved investigating potential routes for the proposed re-routing of the A303 road adjacent to Stonehenge and the proposed relocation of the visitor centre away from Stonehenge itself (Chan and Parker 2014, 47). Given the massive increase in archaeological investigations within the environs of Stonehenge since 1990, the following projects have been divided into sections detailing separately watching briefs, fieldwalking, geophysical surveys, earthwork surveys, building surveys, evaluations (trial trenching) and excavations.

Watching briefs

A watching brief (EWI4274) was carried out during the machine ground reduction from the construction of the garage extension at Hunters Hill. A north-south aligned ditch found during the monitoring was probably a boundary/drainage ditch and runs approximately parallel to the western ramparts of Vespasian's Camp (Wessex Archaeology 1997).

A watching brief (EWI4772) was conducted during the laying of a telecommunications cable through the village of Winterbourne Stoke and the Stonehenge WHS. A number of archaeological features were recorded in a restricted area to the west of Longbarrow Crossroads. It is thought that these were part of an undated (probably prehistoric) enclosed settlement, previously noted from aerial photography (Wessex Archaeology 1999).

A watching brief was carried out at the proposed Amesbury Business Park (EWI5639). No subsoil features were identified during the archaeological monitoring of the excavation of geotechnical trial pits on the site, but a moderate quantity of worked flint was recovered from the topsoil and subsoil deposits (Whelan and Valentin 2000).

An archaeological watching brief (EWI99) was undertaken during the mechanical cleaning of the roadside ditch, adjacent to the eastbound carriageway of the A303. The watching brief identified five archaeological features: a pair of ditches belonging to a round barrow, a section of the Avenue ditch, a shallow linear feature and a small early Iron Age pit (Wessex Archaeology 2002).

During the construction of a new byway on land south of the A303, between the former Amesbury Road and Allington Road in Amesbury, plough soil was removed onto the top of natural chalk, and all features revealed were recorded in plan (EWI5890). The work identified five undated linear features, two of which had been previously identified by a geophysical survey of the site. Most of these features are likely to represent surviving evidence for former field systems in the area. Other features comprised two possible prehistoric and one undated pits (Adam and Valentin 2003).

An archaeological watching brief (EWI5936) was carried out during geotechnical site investigation works along the proposed route of the A303 Stonehenge Improvement. Archaeological features revealed included part of a rectilinear enclosure, and a shallow pit containing Middle Bronze Age pottery (Wessex Archaeology 2003).

Fieldwalking

Fieldwalking (EWI232) over 41 hectares between Stonehenge Down and Parsonage Down recorded worked flint concentrations, within each of which small clusters of retouched forms were noted. The flint was predominantly Bronze Age in character, although some Neolithic material was also present. A concentration of Late Roman pottery was recorded in one field and much burnt flint was also noted in the same area. Elsewhere, pottery was scarce, though other scatters of Late Roman pottery was found in two other fields. Five sherds of Late Bronze Age pottery were found in one field, three of which were from the same vessel. An auger transect and two test pits discovered a shallow colluvial sequence at the eastern side of the valley of the River Till, from which a single sherd of Anglo-Saxon pottery and animal bone were recovered (Butterworth 1992).

Fieldwalking (EWI6579) across 31 hectares was carried out over five areas associated with possible alternative routes for improvements to the A303. Small collections of worked flint were recorded in all areas including cores and tools. A large proportion was Late Neolithic while that from near Longbarrow Roundabout was principally Bronze Age. Very little pottery was found, comprising only four sherds of Romano-British material (Butterworth et al. 1992).

Fieldwalking was undertaken in three areas on what was then designated as the northern Brown route (EWI261). Concentrations of worked and burnt flint were noted within each of the areas. The majority of datable finds were flint artefacts of Bronze Age date. Other finds included a small quantity of pottery and ceramic building material, the greatest number of Romano-British sherds occurring at the western end of the route corridor (Leivers and Moore 1994).

The programme of surface collection (EWI5637) at the proposed Amesbury Business Park has shown evidence for prehistoric activity dating from the earlier Neolithic period onwards. However, the majority of the material suggests activity dating to the Bronze Age, possibly contemporary with the construction of the round barrows which lie within the study area (Cox and Richards 1998).

Fieldwalking (EWI6588) was carried out in a field immediately northeast of Longbarrow Roundabout, the junction of the A303 and the A360. A light concentration of worked and burnt flint, principally of Bronze Age date, but also containing some Neolithic material, was recovered from the northern part of the field. Other finds were scarce, but included two sherds of Roman and one of possibly Early Iron Age pottery (Wessex Archaeology 2002).

Fieldwalking surveys (EWI6556) were carried out in eight areas along the 2002 Preferred Route of the A303 Stonehenge Improvement. The most common material types recovered were worked flint and burnt flint. The distribution was relatively even across the survey areas. Very little pottery was recovered. The small assemblages of medieval and post medieval pottery recovered suggested a possible focus of activity to the north of Winterbourne Stoke (Cooke et al. 2002).

Wessex Archaeology on behalf of the National Trust fieldwalked over c.34 hectares, comprising 576 collection units (runs) that yielded 4,226 objects weighing a total of 81,615g (EWI8072). The distribution of flint work was felt to demonstrate the full extent of this major cluster of prehistoric activity. The survey confirmed that the southern boundary of this activity was defined by the crest of Stonehenge Down, beyond which flint recovery was severely reduced. No Roman or medieval material was recovered although a single sherd of Anglo Saxon pottery was found at the north end of the study area. Post medieval and modern remains were concentrated towards the southern edge of the survey area, within the WWI Stonehenge Airfield Day Camp and aerodrome complex that was demolished in the 1920s (Harding and Crockett 2006).

Geophysical investigations

A number of geophysical surveys were undertaken in advance of proposed road improvements to the A303 between Amesbury and Berwick Down during the early 1990s.

Despite some magnetic disturbance, geophysical survey (EWI5930) revealed evidence of several likely archaeological features, including the continuation of a linear earthwork extending north of Normanton Gorse, a major sub-oval enclosure, a ring ditch, linear ditches, pits and an area of high activity suggesting a multi-phased occupation complex of enclosures and associated features including pits (GSB Prospection 1992a).

During the course of another gradiometry investigation (EWI5929), the locations of several sites visible on aerial photographs were supported by clear magnetic responses and several new features were identified. Notable features include linear features, a segmented ring-ditch and a possible enclosure (GSB Prospection 1992b). Further geophysical survey (EWI5931) identified numerous features likely to be of archaeological origin, including probable ditches (including a double ditch in one area), possible pits, a crescent-shaped feature, a field boundary and possible enclosures (GSB Prospection 1993).

Geophysical survey (EWI4254) was carried out as part of evaluation to define a route to the Stonehenge Visitor Centre. The survey detected a number of archaeologically significant features, including ditches or earthworks associated with the Durrington Down and Fargo field systems (Bartlett 1993).

One gradiometer survey (EWI266) revealed a concentration of archaeological anomalies, which can broadly be divided into three groups: an oval enclosure with associated features,

possible remains of a former field system and a possible barrow/henge. Isolated ditch and pit type anomalies were also recorded, but the responses were generally poorly defined (GSB Prospection 1994).

Magnetometer and resistivity surveys (EWI84) were undertaken in the southern part of Vespasian's Camp. A semi-circular feature, 30m in diameter, was discovered abutting the southern rampart and is perhaps the remains of a Bronze Age barrow (Cole 1995).

A gradiometry survey (EWI5056) over a proposed road corridor in the general area of the present A303 showed only one field to have any anomalies that were likely to be of significant archaeological interest. The survey in the field northeast of the Longbarrow Cross Roads produced a multitude of responses of archaeological significance, correlating with known cropmarks of boundary ditches. There were numerous weaker anomalies, but their interpretation remained tentative (GSB Prospection 1999).

Three survey blocks (EWI101) within the proposed road corridor contained anomalies of archaeological interest; the continuation of a large settlement complex, a clear ring ditch, two bowl barrows and a section of 'The Avenue'. Additionally, a number of possible relict field systems and ridge and furrow cultivation were identified (GSB Prospection 2001a). In a follow-up survey (EWI5553), magnetometry recorded a number of anomalies of potential archaeological interest, in particular evidence for a rectangular enclosure to the southwest of the main settlement site identified in this area by earlier geophysical surveys. Most magnetic responses were felt to relate to relict field systems. This survey data, and previous data, helped to define the limits of the Romano-British settlement found in Field I7 (GSB Prospection 2001b).

Geophysical survey (EWI6559) was carried out at Airman's Corner and identified a number of potential archaeological features. These included a barrow and internal grave cut, but plough damage had obscured some of the clarity of response. Similar survey was carried out at Countess West and detected part of a possible Bronze Age boundary ditch, part of the former Amesbury to Market Lavington road and a section of Stonehenge Avenue. Three other barrow sites were also tentatively identified along with some possible ditch systems. No indications of major settlement activity were recorded in any of the geophysical survey areas (Adcock et al. 2002).

A survey (EWI442) at Amesbury Business Park identified ring ditches noted from the cropmark evidence, and also found another definite example as well as a number of possible ring ditches not previously recorded. While the majority of the linear or curvilinear ditch cropmarks were located, some could not be verified. Two ditches were added to those known to cross the survey areas. Although a number of pit type anomalies have been found within the data, their interpretation is tentative as they may be a result of natural or recent activities on the site (GSB Prospection 2001c).

Along the A303, a gradiometer survey (EWI5932) identified a circular feature which could represent a ploughed-out barrow or possibly a shaft or well, and another clearly-defined feature indicating a barrow. Elsewhere, evidence of earlier field systems and ridge and furrow were identified (GSB Prospection 2002).

A magnetometry survey (EWI5937) along the A303 road improvement scheme revealed a linear anomaly in one area which corresponds with a former boundary ditch mentioned in an

earlier source. This was associated with other linear and pit-like features which also might have represented archaeology, possibly including a ring-ditch and a horse-shoe-shaped enclosure. The other surveyed area only produced signals associated with modern disturbance and services (GSB Propection 2003).

Over the last twenty years or so changes to the Stonehenge landscape introduced by the National Trust have produced large areas of grassland, ideal terrain for extensive and rapid geophysical survey. These accessible areas have recently been the focus of a number of organisations and major projects: Bournemouth University, Historic England's geophysics team and most extensively, the Stonehenge Hidden Landscapes Project, an international collaboration between Birmingham University and the Ludwig Boltzmann Institute for Archaeological Propection and Visual Archaeology in Vienna (Richards 2017, 167). In advance of conservation management by the National Trust, geophysical surveys (EWI7768) were carried out over six barrows and one possible barrow. These revealed more detail of the monuments' shapes and ditches, as well as suggesting internal features such as pits within some of the monuments (Papworth 2009).

The most high-profile development in the WHS over the past 30 years has been the relocation of the visitor centre as part of the ongoing Stonehenge Conservation Management Programme promoted and co-ordinated by English Heritage. After the preparation and retraction of planning applications for a development at Larkhill in 1991 and Countess Road in 2005, further desk-based studies and public consultations were carried out for five sites with Airman's Corner emerging as the favoured option, along with the closure of the A344 and a visitor centre designed by architects Denton Corker Marshall (Darvill 2012, 12). A magnetometry survey (EWI7824) at Airman's Corner by English Heritage confirmed the location of activity suggested by historic mapping and suggested a wider scatter of possibly much earlier pit-type anomalies across the down. A targeted area of resistivity was also carried out and enhanced the interpretation of probable 19th–20th century built structures at the site (Linford and Martin 2009). Also at Airman's Corner, in the same year, several features appeared in another geophysical survey by Wessex Archaeology (EWI7825). These included the enclosing ditch of a scheduled bowl barrow, which seemed to also have some internal features. To the east of this was an apparent complex of post pits, forming a circle, within which were two other possible features. Elsewhere, there were many other possibly clustered circular and sub-circular pit-like features, perhaps indicating quarrying or storage across the site. Numerous linear and curvilinear trends were also present, though these were not clearly identified as features, but might indicate previous ploughing directions (Urmston 2009). Again in another geophysical survey by Wessex Archaeology (EWI7826) at Airman's Corner, few positive archaeological features were identified. The linear ditch, identified during an earlier earthwork survey, may have formed part of a planned boundary along the southern edge of the dry valley, separating the southern field system from possible pasture within the coombe to the north. Extensive prehistoric field systems which were recorded to the west and south-east of the site did not extend into the proposed development area, and trenches across the projected line of the linear did not identify the ditch. Analysis of finds from the topsoil confirmed a scattering of Later Neolithic-Bronze Age flintwork across the site. No structural traces of 19th-century buildings or the early 20th-century air crash known from the site were identified (Thompson 2009).

Elsewhere in the WHS, another geophysical survey (EWI not assigned) at Druid's Lodge Polo Club covered 8.7ha and demonstrated the presence of archaeological features across

the site, along with numerous anomalies of probable and possible archaeological interest. Of particular note was a large enclosure exhibiting internal structures and features with a number of intersecting tracks to the north and east. Whilst their existence was already known from aerial photography, this survey added detail to their morphology and extent. A series of linear anomalies seemed to relate to former field systems. They share a common alignment, which is reflected in extant boundaries nearby. Several annular anomalies and trends approximately 10m in diameter have been identified, and it is possible that they represent former settlement at the site. A group of discrete anomalies appear to be distributed around an approximate circle 35m in diameter. Numerous other pit-like anomalies and weak trends are distributed throughout the dataset, apparently at random. While some of these are probably archaeological in origin, the remainder lack sufficient magnetic contrast to be interpreted further (Wessex Archaeology 2010a). The phase II geophysical survey (EWI not assigned) covered 9.5ha and demonstrated the presence of archaeological features across the site, along with numerous anomalies of probable and possible archaeological interest. Of particular note was a large enclosure exhibiting internal structures and features with a number of intersecting tracks to the north and west. While their existence was already known from aerial photography, this survey added detail to their morphology and extent. The density of internal features and apparently coherent distribution was of interest. A series of linear anomalies seem to have been related to former field systems and trackways, some of which were continuations of linear anomalies identified by the previous survey. In general, their alignments differ from those of extant boundaries. A sub-annular anomaly near the north-eastern corner of the survey area was consistent with a ring ditch or ploughed-out barrow. Elsewhere, numerous discrete anomalies of possible archaeological interest were apparent throughout the dataset, along with weak trends in the magnetic background. Some of these related to ploughing and were aligned with former boundaries, indicating fossilised field systems (Wessex Archaeology 2010b).

The First Monuments Project involved an extensive high-resolution geophysical survey covering approximately two square kilometres undertaken to the north of Stonehenge in June and October 2011 as part of an international collaboration between Bournemouth University and the German Archaeological Institute which was associated with a broader programme investigating early monument-building in different parts of Europe. The area investigated included all of the Stonehenge Cursus together with downland extending southwards to the A344 and between King Barrow Ridge in the east and Fargo Plantation in the west. The aim of the work was to understand the structure of the Cursus and its spatial relationships with other monuments in the area. The survey provided abundant additional detail on the form and structure of the Stonehenge Cursus, including the recognition of entrances in both the long sides. Additional information about the internal form of round barrows in the Cursus Round Barrow Cemetery, the course of the Avenue, the course of the so-called Gate Ditch, and the numerous tracks and early roads crossing the landscape was gathered. In addition, a series of previously unrecognised features were recorded including: a pit-arc or cove below a barrow on the west side of King Barrow Ridge, a square enclosure on the east side of Stonehenge Bottom, a linear ditch on the same solstitial axis and parallel to the southern section of the Stonehenge Avenue, and a variety of pits and scoops (Darvill 2012, 19; Darvill et al. 2013).

The Stonehenge Hidden Landscapes Project (2010–16) was a collaborative effort between a team from Birmingham University led by Vince Gaffney and the Ludwig Boltzmann Institute

for Archaeological Prospection in Vienna. This project aimed to address gaps in the knowledge and understanding of the Stonehenge landscape by conducting a cutting-edge geophysical and remote sensing survey at an unprecedented scale and resolution. Beginning in July 2010, the fieldwork took about 120 days, spread over four years (EWI771). Cutting-edge geophysical technologies, applied at an unprecedented spatial scale and resolution using multiple motorized magnetometers, ground-penetrating radar arrays, electromagnetic induction sensors, earth resistance surveys and terrestrial 3D laser scanners revealed the landscape of Stonehenge through the largest and most detailed archaeological prospection project. The results of the survey project were used to create a highly detailed archaeological map of the 'invisible' landscape, providing the basis for a full interpretative synthesis of all existing remote sensing and geophysical data from the study area (Gaffney et al. 2012). The second season of the Project (2011) involved the continued development of novel motorized geophysical measurement devices, the improvement of measurement methodology, and the development and adaptation of corresponding data processing software (EWI8007). Over 550 ha of remotely sensed data were collected in 3 weeks from within a 2.5 square kilometre area centred on Stonehenge. Many new and unexpected features were apparent in these preliminary results. These included an apparent major gap in the centre of the northern Cursus ditch, the mapped route of the palisade ditch, which seemed to reach almost to the Cursus to the north, yet not linking with the ditch section south of the A344; as well as a series of small monuments and features including: a large horseshoe monument south of the Cursus, clusters of pits west of the King Barrow ridge, as well as a series of large pits in various positions across the survey area – in particular two very large pits were discovered situated in the western and eastern ends of the Cursus monument (Stonehenge Hidden Landscapes Project Team 2015a). The third season (2012–13) of the Project involved the continued development of novel motorized geophysical measurement devices, the improvement of measurement methodology, and the development and adaptation of corresponding data processing software (EWI8008). Over 463 ha of magnetometer data was collected in 6 weeks on National Trust land from within a 4km x 3km area centred on the Stonehenge monument field. Many new and unexpected features were apparent in these preliminary results (Stonehenge Hidden Landscapes Project Team 2015b). The fourth season of the Project (2013–14) involved the continued development of novel motorized geophysical measurement devices, the improvement of measurement methodology, and the development and adaptation of corresponding data processing software (EWI8009). The survey area was expanded to the east and west, as well as covering a small central area immediately surrounding the Stonehenge monument. In 2013–14, over 255 ha of magnetometer data were collected on National Trust land from within an area of approximately 12 sq. km centred on the Stonehenge monument field. A total of 971 ha of magnetometer data was therefore collected over four seasons from 2010 to 2014. Many new and unexpected features were apparent in these preliminary results (Stonehenge Hidden Landscapes Project Team 2015c).

In 2001, as part of the National Mapping Programme, archaeologists from English Heritage (now Historic England) plotted archaeological evidence from both aerial photographs and newly available LIDAR surveys. This resulted in the identification of new sites, provided additional detail to many known examples and showed that some monuments that were thought to have been destroyed by ploughing did in fact survive as shallow earthworks (Richards 2017, 166). This was followed by the Stonehenge WHS Landscape Project that commenced in 2008 involving the English Heritage survey team carrying out ground surveys

of many of the monuments that survive as earthworks. The ground surveys were also aided by geophysical work, architectural surveys and investigations, revisions to aerial photographic plots, and the revision of the GIS for the WHS. Lidar data was also examined with a special focus on 20th-century military activity, and medieval, post-medieval, and modern impacts on the landscape. Among the important findings are the possible presence of a low mound under the south-eastern sector of Stonehenge itself and the multi-phase structural nature of many of the round barrows in the surrounding landscape (Darvill 2012, 16; Richards 2017, 166–167).

This project was followed up with another round of survey work by Historic England under the auspices of the Stonehenge Southern WHS (SWHS) Southern Landscape Survey utilising aerial photography and lidar (Historic England 2017, 9–13). Caesium magnetometer and Ground Penetrating Radar (GPR) surveys were conducted over Diamonds Field as part of the project during a first tranche of fieldwork in autumn 2015 on sites within the Priority 1 study area (EWI8103). Both the magnetometer and GPR surveys successfully identified anomalies that correlated well with the known aerial photographs, confirming the majority of known remains and identified some additional significant activity (Historic England 2017, 14–17; Linford et al. 2015a). Caesium magnetometer and Ground Penetrating Radar (GPR) surveys (EWI8107) were also conducted on Wilsford Down over Diamonds Field, Druid's Lodge Estate and Wilsford cum Lake, as part of the same project. Results from both techniques were partially affected by disturbance from the former military railway crossing the western extent of the survey, although the survey complemented records of known historic assets within the area, including previous limited fluxgate coverage. The vehicle towed caesium magnetometer survey (10.1ha) identified linear anomalies related to the wide spread pattern of field enclosures and land division in the area, together with a confirmation of the magnetic response of a known henge monument and the better location on the ground of a supposed Neolithic long barrow. GPR survey (6.2ha) was focused on the henge and a possible round barrow, where the data supports a more complex reuse of the original monument (Historic England 2017, 15; Linford et al. 2015b). In the following year, again as part of the Stonehenge WHS (SWHS) Southern Landscape Project, a magnetometer survey covered the majority of Normanton Down and largely confirmed the known distribution of monuments. More targeted GPR coverage provided useful information regarding the survival of the barrows and illustrates the impact of ploughing on the landscape before the current reversion to pasture (EWI8106). The long linear ditches crossing the downs shown on cropmarks have proved difficult to identify, with one magnetic response appearing to be more suggestive of a track way and a series of discrete GPR anomalies to the north of the main barrow group may be related to a Roman pit alignment. Some further detail has been revealed to the south of the site over the North Kite earthworks, suggesting buried stones or pits (Historic England 2017, 16–17; Linford et al. 2016).

This initial ground penetrating radar component of a geophysical survey (EWI7078) for English Heritage was conducted over an area centred at the circle at Stonehenge as well as over three barrow groups in the same and neighbouring fields. This investigation also involved magnetometry survey (EWI7084) and further ground penetrating radar survey (EWI7082). The overall geophysical investigation revealed known features such as the course of former trackways, as well as new anomalies (Linford et al., 2012).

A geophysical survey (EWI7437) undertaken to the north of Stonehenge identified entrances in both of the long sides of the Stonehenge Cursus, and provided additional information on

the internal form of the round barrows in the Cursus Round Barrow Cemetery, the course of the Avenue, the course of the 'Gate Ditch', and numerous tracks and early roads crossing the landscape. A series of previously unrecognised features were identified: a pit arc or cove below a barrow on the west side of King Barrow Ridge, a square shaped feature surrounded by pits on the east side of Stonehenge Bottom, and a linear ditch on the same solstitial axis, and parallel to, the southern section of the Stonehenge Avenue. A scatter of metallic anomalies marked the position of camping grounds associated with the Stonehenge Free Festival in the late 1970s and early 1980s (Darvill et al. 2013).

As part of the Stonehenge Southern WHS Survey, geophysical surveys (EWI8059) took place at West Amesbury. While largely reflecting the cropmark evidence, the magnetometer survey provided some additional detail and indicated one potentially unrecognised weakly magnetised ring-ditch in the vicinity of the Coneybury Henge. Neither magnetometer nor GPR technique provided any additional evidence for the three ring-ditches plotted from cropmarks to the west of the site. The GPR produced a more complex response, often dominated by the underlying geomorphology, but also revealed a more subtle pattern of linear anomalies, possibly an extension to the known prehistoric or Roman field systems. Numerous discrete anomalies recorded by both techniques provided evidence for the wide spread distribution of pits or tree throw hollows across the down land (Historic England 2016).

Recent geophysical surveys and excavations at Druid's Lodge Estate, in fields west of the Diamond Wood in the Stonehenge WHS (SWHS) (EWI not assigned), affirmed the existence of the Winterbourne Stoke 71 long barrow and discovered a new long barrow a short distance to the south. Survey and excavation revealed internal features at both barrows, and alongside aerial photography, suggest that both were destroyed during later prehistory. These barrows are part of a cluster around the head of a dry valley. Long barrows in the SWHS and environs were reviewed to contextualise these discoveries, demonstrating a diversity of internal features, barrow sizes and morphologies. Bayesian modelling was used to place the SWHS barrows in their inter-regional chronological context (Roberts et al. forthcoming).

Between 2012 and 2015, a series of high-resolution electromagnetic induction (EMI) surveys were undertaken by Ghent University and the University of Birmingham within the core area of the Stonehenge part of the WHS. The first stage of this work consisted of manual coring and manual geophysical sounding aimed at calibrating and validating the EMI survey results (EWI8780). This work demonstrated that limited invasive calibration made it possible to transform geophysical data into concrete geological and archaeological information. Evaluation of the borehole evidence demonstrated the potential of augering and EMI survey for understanding the evolution of the Stonehenge landscape. It was also determined that reasoned analysis of subtle geophysical features aided the recording and interpretation of ephemeral archaeological traces (De Smedt 2017a). Various methodological issues were resolved as the project progressed and 20 Scheduled Monuments were investigated (De Smedt 2017b) (EWI8790). This was followed up by excavation to test geophysical anomalies near Stonehenge north of the A303 in 2017 (Pitts 2018, 5).

In advance of proposed new A303 road tunnel development, a number of arable fields covering a total area of 227.8 ha were identified for survey. The anomalies identified by the detailed gradiometer survey (EWI8802) were primarily ditch-like features which took a

number of different forms and dated to a variety of different periods. These largely corresponded with known archaeological remains derived from aerial sources and represented complexes of prehistoric funerary monuments. Evidence for field systems, settlement, a Roman building and a variety of other significant archaeological features were also identified. Several former field boundaries correlated with OS mapping and aerial photography for the scheme and areas of increased magnetic response, superficial geological deposits, agricultural ploughing trends and numerous modern services were also located. The GPR survey was targeted over eight areas where significant archaeological features were encountered. The majority of these related to funerary monuments in the form of Neolithic long barrows and Bronze Age round barrows. The results of this GPR survey confirmed this interpretation and provided additional detail regarding their character and extent. In some cases, it also identified additional possible archaeological features within the monuments that were also likely to be of significance (Wessex Archaeology / AAJV 2016 & 2017).

Also in advance of the current proposed road development, a number of other arable fields covered a total area of 97.1 ha. The GPR survey (EWI not assigned) was targeted over five areas within SW6 where significant archaeological features were identified. The majority of these were thought to relate to funerary monuments in the form of Bronze Age round barrows. The results of these GPR surveys confirmed this interpretation in three of the five areas and provided additional detail regarding their character and extent (Areas 11, 13 and 15). In the remaining areas (Areas 12 and 14), the possible ring-ditch features identified in the gradiometer survey were shown to be more likely associated with modern ploughing activity (Wessex Archaeology / AAJV 2017).

Another site comprises two arable fields covering a total area of 18.9 ha. Geophysical survey (EWI not assigned) was undertaken between the 12th and 25th September 2017, and conditions for data collection were generally good with the field under short stubble. The multi-channel GPR survey detected a high density of anomalies of archaeological origin across the survey area, including some significant sites relating to the prehistoric funerary landscape of the WHS. These largely corresponded with known archaeological remains identified from aerial sources and represent complexes of prehistoric funerary monuments. In addition, two further previously unidentified funerary monuments were also located. Evidence was also identified for a lynchet, drainage, and a former field boundary that correlated with Ordnance Survey mapping and aerial photography for the scheme. Areas of superficial geological deposits, agricultural ploughing trends, and evidence of previous archaeological investigations were also located (Wessex Archaeology / AAJV 2018).

Earthwork Survey

As part of the Stonehenge WHS Landscape Project led by English Heritage, a number of areas were covered by detailed earthwork surveys. One area was surveyed in April 2009 and further details were added in June 2010. The area contains the earthworks of part of the Cursus Barrow Group (late Neolithic and Early Bronze Age round barrows in a linear arrangement), sections of a post-medieval road and two dewponds, and early 20th-century military training facilities (Amadio and Bishop 2010, EW17031). The area covered by the barrows at Winterbourne Stoke Clump was surveyed as part of the same project. This has revealed previously unrecorded features and demonstrated some chronological relationships between the barrows (Bax et al. 2010, EW17758). Much of the Normanton Down Barrow

Group was also surveyed as part of the Stonehenge WHS Landscape Project (Barrett and Bowden 2010, EWI7761). Analytical survey of the ground surface at Stonehenge also revealed the presence of a number of interesting earthworks that have a bearing on interpretation and the development of the monument (Field and Pearson 2010, EWI7763; Darvill 2012, 16; Field et al. 2014a). Also as part of the Stonehenge WHS Landscape Project, a survey of the earthworks on Stonehenge Down, including those in the immediate environs of Stonehenge recorded well preserved barrows, as well as a number of examples previously thought to have been levelled, along with traces of part of the First World War Royal Flying Corps aerodrome. In addition, earthworks relating to cottages constructed for the Stonehenge custodians were identified, along with a number of trackways, most of which were overlain by ridge and furrow, the result of cultivation during the 19th and 20th centuries (Pearson and Field 2011, EWI6924; Field et al. 2014a).

Further analytical earthwork survey and investigation of the area to the north of Stonehenge (EWI7107) revealed several zones of archaeological interest. Chief among these and well-known is the Avenue which, for part of its course, survives as an earthwork. When studied it is more substantial closer to Stonehenge than elsewhere. The lack of hollowing where the Avenue passes over a steep bluff at the 'elbow' was highlighted, raising the question of the degree to which the Avenue can ever have been a heavily used route, either for stone moving or processions. The degree of later damage to the Avenue through use as a trackway and by cultivation at various times in the past has become evident. Earthworks associated with an 18th-century road and a 20th-century group of agricultural buildings were recorded. In Stonehenge Bottom, quarrying has disturbed earlier remains, but on the western slopes, a series of terraces and platforms may relate to buildings associated with agriculture in the area. On the eastern slopes of the valley a number of barrows, trackways and other features were surveyed, along with traces of a possible enclosure close to the valley floor (Field et al. 2012).

Rapid survey of three areas on Boreland Farm was undertaken as part of the Stonehenge WHS Landscape Project (EWI7557). Barrows, field systems and linear ditches were investigated, as well as elements of the more recent landscape. The opportunity was taken to report a previous survey of the nearby long barrow Wilsford 34. The most significant issues raised were: the previously accepted relationships between the Lake Barrows and adjacent linear ditches; and the existence of the 'North Kite' enclosure. A more conventional relative chronology between the barrows and the linear ditches was suggested at the time but more detailed survey was recommended to resolve this issue satisfactorily; in the light of results from aerial survey it was suggested that the 'North Kite' was a fortuitous survival of linear ditches which were otherwise ploughed out before the first maps and antiquarian records were made (Bowden et al. 2012).

An earthwork survey of Vespasian's Camp was undertaken by Historic England as part of the Stonehenge Southern WHS Survey in 2015. Though it had been well mapped by the Ordnance Survey and limited geophysical survey was carried out in 1995 (EWI84), no modern archaeological survey had previously been undertaken (Cole 1995; Historic England 2017, 29–33).

Structural survey

A photogrammetric survey (EWI7791) of the stones of Stonehenge was carried out by English Heritage in order to digitally record them, generate a three-dimensional model and investigate the capabilities of the software in relation to the task (Bryan and Clowes 1997). Archaeological analysis of laser scan data (EWI7810) of Stonehenge was carried out subsequently by English Heritage in collaboration with ArchHeritage, a consultancy based in Sheffield. This identified more than double the number of previously known axe-head carvings, and more insights into the methods of stone-dressing used by Stonehenge's builders (Abbott and Anderson-Whymark 2012; Parker Pearson et al. 2015, 140).

One of the big issues concerning Stonehenge – where the stones came from, when and why – can only really be answered by investigations not at Stonehenge itself but at rock sources elsewhere. Most of this work has focused on the bluestones. Geologists Rob Ixer and Peter Turner have shown that the Altar Stone is of Devonian sandstone and possibly from the Brecon Beacons. Ixer has also worked closely with Richard Bevins on the bluestones, which are of volcanic origin, matching chippings and pillars at Stonehenge with specific outcrops in Pembrokeshire, south Wales. This research led to the discovery of a megalith quarry at Craig Rhos-y-felin as well as the locations of other quarries at Carn Goedog and Cerrigmarchogion on the north flank of the Preseli Mountains. A review of samples from the Altar Stone confirmed that it was a fine-to-medium grained calcareous sandstone of the kind found in the Senni Beds of south Wales. An examination of finds from the Cursus Field collected in 1947 and from excavations by the Stonehenge Riverside Project in 2006 and 2008 confirmed that much of the material could be matched with samples from Stonehenge (Darvill 2012, 19–20; Parker Pearson 2013, 80–81; Parker Pearson 2015, 106–107, 142–3). Paul Robinson (2007) reported the results of petrological studies of 21 stone items from the Devizes Museum collections that were thin-sectioned by the Implement Petrology Committee of the South Western Federation of Museums and Art Galleries in the late 1950s. This includes material from barrows in Wilsford, Shrewton, and Winterbourne Stoke. An examination of spotted dolerite axeheads from southern England suggests that some may have been made from pieces of Stonehenge rather than introduced from more distant sources (Darvill 2012, 20).

Evaluations

Extant earthworks and buried archaeological features were identified by geophysical survey and on aerial photographs on sections of the A303 between Amesbury and Berwick Down being considered for improvement in the early 1990s. Three areas (A–C) were investigated through trial trenching (EWI5927). Archaeology in Area A consisted of a linear ditch and bank, and pieces of Bronze Age and Roman pottery were found in the topsoil. Trenches in Area B investigated a known, and scheduled, long barrow and showed it to be severely disturbed. Some modern features, including a post pit, were found associated with this long barrow. Some antler fragments were recovered from the topsoil. Area C contained two known and scheduled round barrows, and one of these was investigated by trenching. This found that the barrow survived well and had not been too disturbed. Worked flints and Bronze Age pottery sherds were recovered in association with this monument. All of this work established the sequencing and construction phases of the earthworks and barrows (Wessex Archaeology 1993).

An archaeological evaluation (EWI4252) in the early 1990s at the site of the then proposed Stonehenge Visitor Centre, Site 12, consisted of hand-dug test pits, machine-excavated

linear trenches, fieldwalking and auger survey. Concentrations of artefacts were found in three fairly distinct areas. One focus of activity, south of King Barrow Ridge, included a square enclosure and a linear ditch, associated with a concentration of artefacts (Crockett and Davies 1993). A small number of auger bores (EWI287) were taken at Stonehenge. The survey identified the presence of a Neolithic ground surface under the bank and a previously unknown feature outside the excavated areas. In addition, the composition of the counterscarp bank was established (Wessex Archaeology 1994).

An archaeological evaluation (EWI5649) of Areas A, B, C and D of the 2002 Preferred Route of the A303 Stonehenge Improvement revealed agricultural boundaries, a small number of pits and two postholes. Two possible ring ditches seen on the geophysical survey were located by the trenches, but were not undated (Wessex Archaeology 2002b). Another evaluation (EWI5650) in Areas L and O consisted of the excavation of 23 trial trenches, targeted on the basis of previous surveys. Archaeological features and deposits of Neolithic, Bronze Age, Iron Age and Romano-British date, along with a number of undated features, were identified in 18 of the evaluation trenches. A wide distribution of features and deposits was recorded in Area L, although more features were found in the westernmost field of Area L, to the west of a major cropmark boundary feature; the geophysical survey also recorded an increased number of anomalies, both linear and pit-type, in this field. This broad spread of features appears to represent sporadic and extensive activity across a wide time range. The finds assemblages recovered were generally small, suggesting that there was no major centre of activity, such as a settlement, within the evaluation area. The low levels of environmental remains recovered from the soil samples appear to confirm this. In Area O, the prehistoric boundary ditch was found to survive well as a subsurface feature. Possible ephemeral traces of the former military light railway were also recorded (Wessex Archaeology 2002c). Evaluation in Area P (EWI5651) revealed only four features of archaeological interest. Two possible Middle Bronze Age rubbish pits in Trench 2 at the western extent of Area P appeared to be related to the undated field system associated with the settlement at Longbarrow Roundabout. Two Early Bronze Age Beaker burial pits located in Trench 15 at the eastern extent of Area P clearly related to the previously excavated Bronze Age round barrow. Excavation of an additional trench close by found only natural features, suggesting that the burials did not form part of any extensive flat cemetery here. The objects recovered comprised primarily Beaker vessels and human bone from the Early Bronze Age burial pits in Trench 15, together with Middle Bronze Age pottery, animal bone, burnt flint and worked flint of Neolithic–Bronze Age date from the two pits in Trench 2 (Wessex Archaeology 2002d).

An evaluation (EWI111) at the Amesbury Business Park confirmed the presence of seven ring ditches, representing the ploughed remains of former barrows. A network of linear features was present across all areas, many of which may have related to previously identified prehistoric land divisions and associated field systems. A late Bronze Age or early Iron Age pit was also excavated (Valentin and Robinson 2002). Another archaeological evaluation (EWI130) on the preferred route of the A303 Stonehenge Improvement involved aerial photography, fieldwalking and geophysical survey. This work indicated the survival in Area C1 of an enclosure complex of likely prehistoric and Roman date, together with a multi-period field system extending over some 5 hectares. All six of the trenches excavated contained archaeological features, ranging from small post holes to large boundary ditches (Cooke and Moore 2002). In another evaluation (EWI131) associated with proposed

improvements to the A303, features of archaeological interest were uncovered in four of the 29 trial trenches. These included a buried linear ditch previously recorded from cropmark evidence, a gully, an irregular linear feature thought to be a former hedgeline, a former hollow way and associated cart ruts, and traces of the former Stonehenge Airfield (Wessex Archaeology 2002e). Four trenches (EWI314) were excavated along the line of a proposed gas pipeline in the vicinity of the River Avon. The first trench revealed evidence of prehistoric activity, in addition to substantial evidence for a rural Roman settlement contained within a late prehistoric enclosure. The second was placed across an Iron Age enclosure. The remaining two revealed little or no archaeological evidence (Wessex Archaeology 1991).

Again in relation to proposed road improvements to the A303, archaeological features were recorded in 24 evaluation trenches in areas designated as 1, 2, 3 and 4 (EWI5935). The majority of these were undated and comprised mostly agricultural boundaries, notably a series of negative lynchets in Areas 2, 3 and 4. Although undated, the earliest features encountered were likely to be prehistoric land divisions in Area 4, probably related to the known later Bronze Age settlement at Longbarrow roundabout. Possible settlement-related activity in Area 2 comprised an enclosure ditch and associated pit and a single posthole, all undated; no evidence was found for any activity associated with the adjacent enclosed settlement (Area C1). Iron Age finds from a pit and tree throw north of Manor Farm in Area 3, together with an undated boundary ditch, may also suggest settlement-related activity. An enclosure ditch in Area 4, dated to the later prehistoric or Romano-British period, may be related to a group of ring ditches seen to the south of the Proposed Route on aerial photographs. The lynchets in Areas 2, 3 and 4 formed part of an extensive series of strip fields visible on aerial photographs and were likely to be of medieval date, representing open-field arable cultivation to the north-west and north-east of Winterbourne Stoke. The few finds recovered across the evaluation areas included burnt flint, Late Neolithic/Bronze Age flintwork, a fragment of quernstone of later prehistoric date and pottery of later prehistoric, Romano-British, medieval and post-medieval dates (Wessex Archaeology 2003b).

There was an archaeological evaluation (EWI5976) of Drainage Treatment Areas (DTA) 2 and 6. In DTA 6, a former river terrace defining the back of a former floodplain of the River Avon was revealed. On the terrace edge, a relict brown forest soil of Holocene date contained a flint scatter of Late Mesolithic/Early Neolithic date. The survival of a forest soil with an associated near-in situ flint assemblage is unprecedented within the WHS and the deposit offers good potential for the survival of palaeo-environmental evidence (Wessex Archaeology 2003c).

In advance of the proposed Stonehenge Visitor Centre at Countess East on the outskirts of Amesbury, significant archaeological features were revealed in 20 of the 81 trenches (EWI6555), with a total of 28 features and deposits dating from the Neolithic through to the post-medieval period (Wessex Archaeology 2003). Further archaeological evaluation (EWI6564) in advance of the proposed Stonehenge Visitor Centre at Countess East involved the excavation of 13 trial trenches. The only features recorded were a short ditch and a substantial assemblage of worked flint, and a sunken featured building of Anglo-Saxon date (Wessex Archaeology 2004).

Following two phases of geophysical survey at the Druids Lodge Polo Club, twenty trenches (EWI7029) were targeted on probable archaeological features. Three trenches were also positioned within an area of fill in the south-east corner of the site, to provide further

information on the archaeology. The evaluation has established that archaeological features comprising two enclosures, pits, ditches and a possible trackway are present across the site. The earliest evidence of activity dates to the early Bronze Age and although this was largely found residually amongst later Romano-British pits, in two of the ditches, no other datable finds were recovered suggesting a low level of early prehistoric activity across the site. Two trenches targeted on the enclosure in the south-east corner of the site have confirmed an Iron Age date. A substantial double ditched feature enclosing the settlement was recorded and partially excavated. One storage pit and several further pits and postholes indicative of settlement activity were recorded within the interior of the enclosure. The archaeological remains encountered close to the enclosure located just off the north-west side of the site date mainly to the Romano-British period. The fieldwork has also demonstrated that there is a good correlation between the geophysical results and the presence of actual archaeological remains on the site (Milward et al. 2010).

At Longbarrow Crossroads, the line of a ditch of probable Late Bronze Age was confirmed by trench evaluation (EWI7883). Nothing was found to confirm its date. A further ditch cut through the tertiary fills of the ditch. Work also recorded a number of field boundary ditches associated with 'Celtic field' systems. Molluscan analysis was also carried out (Harding and Farr 2014).

As part of the archaeological evaluation of the current A303 Amesbury to Berwick Down road project, areas designated as SW1 and SW2 were targeted (EWI8672). The locations of two early Neolithic long barrows were investigated and confirmed during the evaluation within SW2. The barrow located at the northern end of SW2 (Barrow 1) had been identified by the National Mapping Programme and confirmed by geophysical survey, while the barrow located at the centre of SW2 (Barrow 2) had been identified by recent geophysical survey. Two trenches were opened across both monuments, and two slots excavated through the ditches of Barrow 1, and four slots at Barrow 2. It was also noted that areas of higher natural chalk between the flanking ditches and a redeposited reverse sequence of chalk and topsoil (within one of the Barrow 2 ditches) are a probable indicator of a once present earthwork. Another significant nearby feature in SW2, a small penannular ditched monument, identified by geophysical survey, was also located and confirmed during the evaluation. The evaluation indicated that it was closely associated with two cremation burials, one clearly pre-dating one of the ditch's terminals, the other located just behind the terminal. Beaker pottery was recovered from the main monument ditch. Further notable features included two small pits containing Beaker/EBA pottery, plus worked and burnt flint, from the vicinity of Barrow 1. All of the recorded features in area SW1 were ditches. Most substantial was a Wessex Linear boundary ditch running northeast-southwest considered to be of late Bronze Age / early Iron Age in date. Other ditches were recorded running roughly perpendicular to it towards the NW. Similar ditches were recorded by the geophysical survey in SW2, where they appeared to form at least two long wide fields. Dominant features mapped from aerial photographs around SW2 comprise a dense rectilinear arrangement of much smaller fields, none of which were identified in the evaluation trenches, suggesting that cropmarks probably represent lynchets, rather than ditches. A number of shallow north-south linear features recorded on the western side of SW2 appear to be associated with the early 20th-century Larkhill Military Light Railway (Wessex Archaeology 2017b).

Also as part of the archaeological evaluation for the current A303 Amesbury to Berwick Down, work was undertaken within three investigation areas of the WHS referred to as SW1,

SW2 and NE2 (EWI8787). A total of 94 trenches were opened, 35 within SW1, 32 within SW2 and 27 within NE2. The trenches were positioned to target both known and potential features and to sample 'blank' areas. Previous survey techniques highlighted that known archaeology could be expected in all three areas, although NE2 suggested limited potential. This was mirrored in the results from the trench evaluations, where only a single feature was recorded from area NE2 despite the proximity to the Avenue and other known monuments. In addition, bulk soil samples were taken from the centre points of each trench for the controlled recovery of lithics and other finds, in order to provide some comparison with the results of previous field walking investigations. Archaeological features included: two Early Neolithic long barrows; a small penannular ditched monument; two small pits containing Beaker/EBA pottery of Late Neolithic/Early Bronze Age date plus worked and burnt flint, and various ditches including a Wessex Linear boundary ditch. The evaluation identified features that contribute to the Outstanding Universal Value of the WHS – the long barrows and penannular ditch in particular. Under a detailed programme of research excavation, SW2 has a high potential to provide important new information about Neolithic and Beaker/Early Bronze Age monument construction and use, and prehistory settlement and land use. The evaluation suggests that NE2 has a lower potential for archaeological features (Powell 2017).

Excavations

A number of excavations have been carried out in advance of development. Prior to the construction of a new business park and new A303 road junction on the eastern outskirts of Amesbury, the excavation (EWI987) of seven Bronze Age ring ditches, associated burial pits and linear and other subsoil features was carried out (Valentin 2004). At Oatlands Dairy Unit on the Druid's Lodge Estate, sampling and hand excavation (EWI6075) of potential features was undertaken in order to establish the location and nature of the archaeology. Two well defined sub-circular pits were excavated to the south of the site, together with one sub-square pit to the north. All three features were dated to the Beaker period and exhibited a similar sequence of deposition and good preservation of environmental remains (Wakeham 2004).

The largest research project undertaken in the Stonehenge landscape during the 2000s was the Stonehenge Riverside Project led by Mike Parker Pearson and colleagues Josh Pollard, Colin Richards, Julian Thomas, Chris Tilley and Kate Welham in a joint venture involving a number of university archaeology departments (Parker Pearson 2015, 134). This ambitious project, funded over several years to the amount of £750,000, sometimes involved as many as 160 diggers in the field during summer excavations (Richards 2017, 157). This involved the excavation of 42 trenches throughout the area, as well as conducting widespread geophysical survey (Chan and Parker Pearson 2014, 48). Excavations were concentrated on the entrances to Durrington Walls, along the ridge south of Woodhenge, at the Cuckoo Stone, at the west end of the Stonehenge Greater Cursus, and within the relict river channel of the River Avon adjacent to Durrington Walls. Geophysical surveys were completed at Durrington Walls and were carried out around the Cuckoo Stone and south of Woodhenge, at the east of the Greater Cursus, the southwest end of the Stonehenge palisade, the area immediately in front of Stonehenge and at the 'elbow' of the Stonehenge avenue. Geological study of the Welsh bluestone chippings from the south of the Greater Cursus has shed new light on the sources in South Wales (Parker Pearson et al 2007a & b, EWI7317; Darvill 2012, 14–16).

In the following year (2008), a number of investigations were again undertaken as part of the Stonehenge Riverside Project (EWI7594). These involved the retrieval of cremated bone from Aubrey Hole 7, as well as investigations at the Stonehenge Avenue Bend, the Stonehenge Avenue towards the River Avon, the sarsen-dressing area just north of Stonehenge; the Greater Stonehenge Cursus and Amesbury 42 Long Barrow, the Stonehenge Avenue's so-called 'Northern Branch', and the Stonehenge Palisade (Parker Pearson et al. 2008; Darvill 2012, 14-16). The cremations from Aubrey Hole 7 revealed a minimum of 63 men, women and children deposited at Stonehenge over five centuries between 3000 BC and 2700 BC. These remains were excavated in 1921-26 by William Hawley, and in 1935 Hawley's assistant, Robert Newall, placed all the cremated remains found in Aubrey Hole 7 as he was worried that no museum would take them (Darvill 2012, 14-16; Parker Pearson 2015, 140; Richards 2017, 178–180). Also in 2008 a trench was excavated across the Stonehenge Avenue, revealing a series of deep narrow channels in the chalk, running along the centre of the Avenue, parallel with its solstice axis. These were periglacial fissures naturally formed in a previous Ice Age and subsequently filled with fine chalk-derived sediment. These fissures below ground surface may have caught the attention of hunter-gatherers when during dry weather, the grass became parched on what was then a very thin post-glacial soil, the fissures showing up as coloured stripes (Parker-Pearson 2013, 79-80; Parker Pearson 2015, 42–3; Richards 2017, 165). Another feature of the Riverside Project was the investigation of a field immediately north of Stonehenge beyond the line of the now removed A344, where evidence was found of a sarsen-dressing area. Sample excavation revealed a mass of stone chippings, mainly of sarsen, together with 50 hammerstones. Within the excavated area a band of chipping-free chalk clearly showed the outline of a stone, shaped and then moved off to take its place in the Stonehenge complex around 2500BC (Darvill 2012, 14-16; Richards 2017, 165). Test pits and trenches (EWI7784) were excavated at the end of the Stonehenge Avenue, beside the River Avon, discovering a lost bluestone circle which has become known as Bluestonehenge. The stones had been removed in prehistory, but the sizes and shapes of their empty sockets indicate that these formerly held Welsh bluestones. The bluestone circle was succeeded by a henge, comprising a circular ditch 23.4m wide with an external bank (Parker Pearson et al. 2009; Darvill 2012, 14-16).

Excavation (EWI7811) was carried out within the stone circle at Stonehenge itself to date the construction of the Double Bluestone Circle as part of the SPACES project (Strumble-Preseli Ancient Communities and Environmental Study) led by Timothy Darvill and Geoffrey Wainwright in 2008 (Darvill 2012, 17–18; Parker Pearson 2015, 135 & 140; Richards 2017, 177–178). The project sought to examine, characterise, and date identified bluestone extraction sites, associated monuments, and nearby settlements on Carn Meini in Pembrokeshire, and to examine the relationships between these places and water sources within and around the eastern Preseli ridge. The central research questions were as follows: when were the spotted dolerite pillar stones taken from Preseli to Stonehenge, by whom, in what context, and why? Moving beyond Stonehenge is considered critical to resolving issues of structure, significance and importance (Darvill 2012, 18). A provisional working date of around 2300 BC for the construction of the Double Bluestone Circle was suggested, while it was argued that the history of the site was far more complex than had been allowed for in existing interpretations, with a multiplicity of overlapping and intercutting (though not continuous) events, including substantial late Roman, medieval and early modern activity (Darvill and Wainwright 2009a; Darvill 2012, 17–18; Richards 2017, 177–178). A small-scale

excavation (EWI8146) used a single trench to investigate an area adjacent to Stones 9 & 10 and 34 & 35a, to clarify the date of the Double Bluestone Circle, and to document the history of the bluestones through later phases. 15 bedrock cut features were found, in the bottom of one of which was a coin of Constantius II c. 338 AD. Medieval, post-medieval and modern features representing stone robbing and antiquarian investigation were found across the trench (Darvill & Wainwright 2009; Darvill 2012, 18; Richards 2017, 177-178).

As part of the Stonehenge Environmental Improvements Project, archaeological excavation (EWI8149) during the removal of the A344 road adjacent to Stonehenge revealed short lengths of the Stonehenge Avenue ditches, and a part of the outer edge of the ditch that encircles the Heel Stone. All had been truncated by the construction of the road. No traces of the Avenue's internal banks survived, although these were reflected in the profiles of the ditches' fill. Small pieces of Bluestone, and one of Sarsen, were recovered from the upper levels of the Avenue ditches. The old visitor facilities and structures at Stonehenge were subject to Level 1 building recording prior to their demolition. The Grade II listed Airman's Cross memorial, which commemorates the first fatal military aviation accident, on 5th July 1912, was photographed in situ and during lifting, as was the adjacent unlisted milestone (Powell 2014; Powell and Farr 2016).

Excavations (EWI7804) at the Old Dairy on London Road in Amesbury produced unexpected evidence for multi-phase activity, much of it linked with funerary use, extending from at least the Middle Neolithic to the Anglo-Saxon period. The earliest activity included two Middle Neolithic pits, one of which contained Peterborough Ware pottery. Three large ring ditches of Bronze Age date were recorded, and appear to represent a previously unrecorded funerary complex, located in an area that already boasts some of the densest concentrations of such monuments in the country. The largest ring ditch measured 28m in diameter. The site also revealed a small Anglo-Saxon inhumation cemetery spanning the late 7th to early 8th centuries. Five inhumations, most with grave goods, were arranged around a central inhumation burial. This burial, which was surrounded by a shallow ring ditch, was heavily disturbed and the bones rearranged, possibly within the Anglo-Saxon period (Wessex Archaeology 2014).

Excavation (EWI8052) uncovered preserved Mesolithic deposits suggesting a possible settlement of that date a short distance north-east of an Iron Age fort called Vespasian's Camp (Jacques et al. 2010). Further fieldwork (EWI8473) involved the opening of a series of small trenches in a silted up spring head on the flood plain of the River Avon. The main finding of the fieldwork was the discovery of a Mesolithic site, evidenced by sealed deposits within three trenches (Trenches 19, 22 and 23). In Trench 19 the Mesolithic layer spread over the entire trench (approximately 6m x 3m) and comprised high densities of struck flint (c. 10,000 pieces), burnt flint, and an unusually large assemblage of faunal remains, in which aurochs were predominant. Trenches 22 and 23 were located c.30m to the east and north of Trench 19. Trench 23 in particular contained a large assemblage of flintwork – 1018 pieces from a single 1m square area. A series of five radiocarbon dates obtained from the animal bone in Trench 19 covered a period of c.2800 years (7593 – 4695 cal. BC). A limited walkover survey on the western ramparts of the nearby hillfort led to the finding of over 50 sherds of Iron Age pottery, which extended the range of the Iron Age occupation of the site from the Early Iron Age through to 50 BC. In addition, previously undiscovered prehistoric field systems were identified to the east of the hillfort (Jacques and Phillips 2013). Further small scale fieldwork (EWI7131) at Blick Mead close to the River Avon near Amesbury

revealed various finds and possible features including Mesolithic flint and a Bronze Age dagger fragment deposited in a spring (Jacques and Phillips 2014). Additional fieldwork (EWI8064) at Blick Mead comprised a single excavation trench, Trench 24, situated on a terraced area to the north-west of a spring head where previous excavations yielded Mesolithic flintwork and animal bone (Jacques et al. 2015). To date, in an area of only 16sq. m, over 34,000 worked flints have been recovered, from long elegant blades to tiny carefully produced microliths made as bards or points on arrows and spears (Jacques et al. 2018; Richards 2017, 171).

As part of the Stonehenge Southern WHS Survey, the Historic England Excavation and Analysis team undertook excavations (EWI8150) on three separate sites to the south of the A303, one in Druids Lodge and the other two in West Amesbury. These areas were selected on the basis of extensive geophysical surveys. The western area, Druids Lodge, was planned to investigate four particular features through five trenches. These were a large pit-like anomaly, some ditches from a wider field system, the terminus of a substantial ditch, and a series of pits around a bowl barrow (a scheduled monument). The West Amesbury Farm excavations were focussed on an area south of the A303 and targeted a square enclosure ditch, a linear boundary and pits, either end of a hooked ditch and a linear boundary ditch. There were also a number of other features, probably natural in origin, including tree throws (Historic England 2017, 19–28; Roberts et al. 2016).

A number of significant excavations have taken place outside the World Heritage Site; for example excavation at Bulford uncovered two adjacent henge monuments, ring ditches 16 or 17m in diameter; centuries later both were converted into early bronze age burial mounds (Historic England 2017, 36–38; Pitts 2018, 8). Recent fieldwork has challenged the perception that ancient landscape around Stonehenge was hemmed in between the rivers Avon and Till. A great number of burials have been found on the chalk overlooking the eastern side of the Avon, often with no barrows over them. Among them is the most impressive Beaker burial in Britain, the Amesbury Archer with his exceptional collection of 150 artefacts (Pitts 2018, 9). Other burials include that of three infants huddled together in a pit at Larkhill Garrison, where another pit held the nested remains of three cattle. On Boscombe Down, a teenage girl was laid to rest with a necklace of 90 amber beads (Pitts 2018, 9). Excavation by Wessex Archaeology in advance of development for the Army Basing Programme at Larkhill Garrison has revealed a Beaker inhumation, a middle Bronze Age cremation cemetery, a very small ring-ditch, the extensive remains of military practice trenches, as well as most notably the ditch of an early Neolithic causewayed enclosure measuring c.210m in diameter (Historic England 2017, 39–40).

Other work

In 2007–8 English Heritage compiled a preliminary catalogue of human remains excavated from within the Stonehenge Landscape that were datable to the period 3700–1600 cal BC. Contacts with museums and other institutions that might hold relevant material provided the main sources of information. Four ‘standard boxes’ and fourteen ‘skull boxes’ of disarticulated remains from more than 30 different sites were examined and considered to have little further research value. Some 116 articulated skeletons were identified, of which about half were found to be in good condition and all having potential for further work. A total of 123 cremation deposits were assessed, many of which had not previously been studied (Darvill 2012, 17).

The Beaker People Project/Beaker Isotope Project: mobility, migration and diet in the British Early Bronze Age was an interdisciplinary project based at the Universities of Sheffield and Durham, and the Max Planck Institute for Evolutionary Anthropology, Leipzig, Germany. The project aimed to resolve the 'immigration versus local development' problem among Beaker populations in Britain and, in doing so, transform understanding of economy and society at the time of Stonehenge by studying mobility, diet, and health. The objectives of the project were firstly to systematically sample a large proportion of the surviving, well-preserved skeletal remains of the Beaker period for a comprehensive range of isotopes relating to the reconstruction of individuals' diet and mobility; secondly to systematically record and/or reassess these individuals' dentition (through studies of microwear and macrowear) and skeletal remains which will shed light on diet, health, trauma, physical stress and funerary manipulation, and: c) to improve knowledge of these individuals' social and temporal contexts through systematic study of their burial contexts, circumstances of discovery and chronology. Around 250 individuals from five geographical areas (Scotland, East Yorkshire, Wessex, Wales, and the Peak District) were studied. Preliminary results suggested some movement of people (Darvill 2012, 17; Parker Pearson et al. 2016).

The relative significance of solar and lunar orientations embedded in the architecture of Stonehenge has long been a subject of interest, and it remains so. In the 1960s, claims were made for Stonehenge's role as an astronomical observatory or computational calendar. From Alex Thom's astronomical investigations to Gerald Hawkins' suggestion in his book *Stonehenge Decoded* among other things that the circle of Aubrey Holes could be used to predict lunar and solar eclipses, Stonehenge gained a reputation as being a repository of ancient knowledge (Parker Pearson 2013, 75). Following on from Hawkins, the astronomer Fred Hoyle developed his own model of astronomical prediction at Stonehenge in the 1970s (Parker Pearson 2013, 75). Since then, these theories have been undermined by the arrival of archaeoastronomers such as Clive Ruggles who could bring expertise in both archaeology and astronomy to bear on the problem (Parker Pearson 2013, 75). They argued not only for understanding the role of basic astronomy within its cultural context, but also developed a critical means for assessing and evaluating competing astronomical claims (Parker Pearson 2013, 75). Stonehenge was the subject of a detailed archaeoastronomical case study by Clive Ruggles and Amanda Chadburn which identified ten astronomical sightlines within the Stonehenge WHS, associated with the Stonehenge stone circle, the Avenue, the Station-Stone, Woodhenge and the Southern Circle at Durrington Walls (Ruggles and Chadburn 2017, 54).

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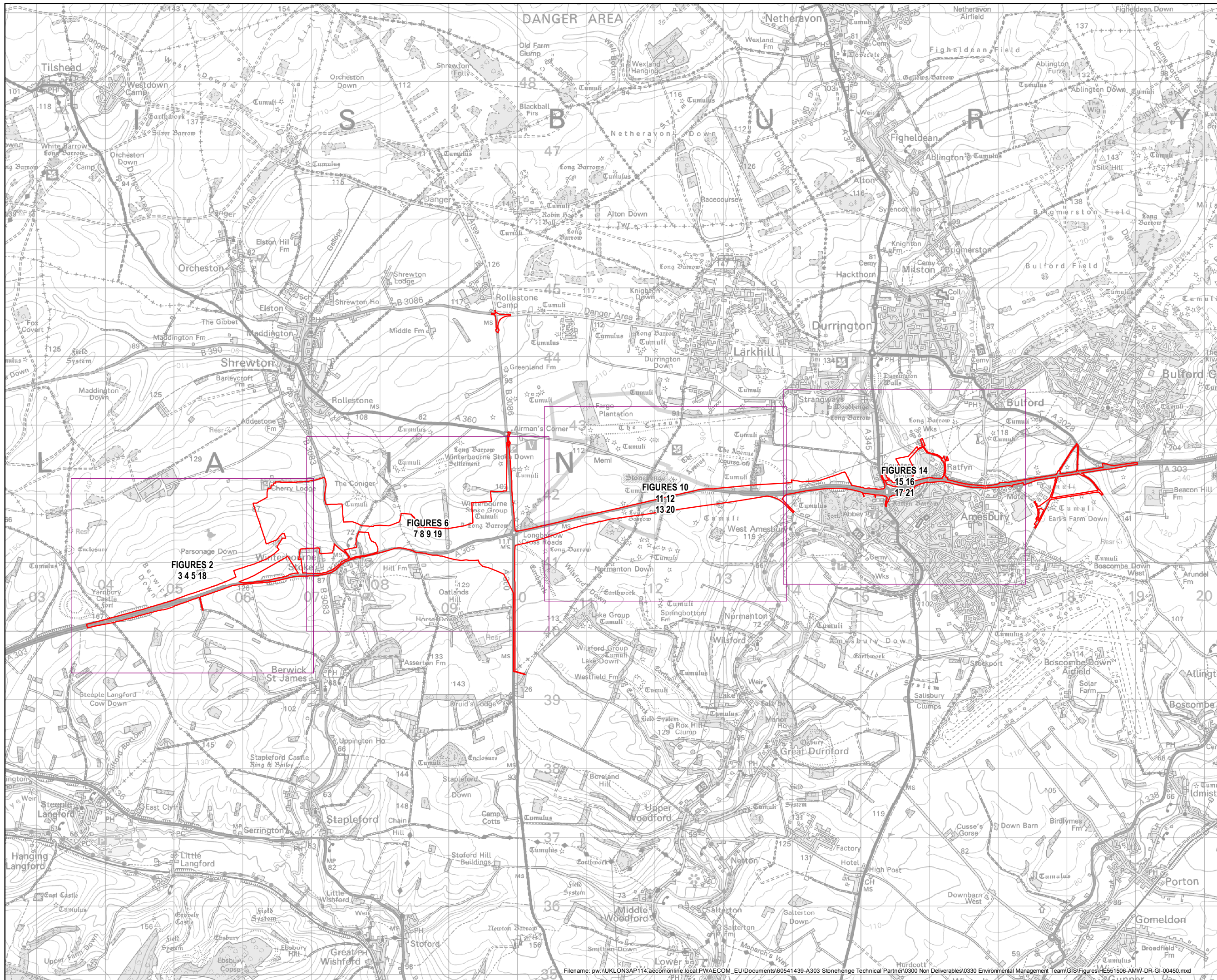
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Figures



NOTES / LEGEND

- Sheet Layout
- Proposed scheme boundary

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Revision Details	By	Date	Suffix
	Check		

Purpose of Issue: **FINAL**

Client: Highways England
Working on behalf of: **highways england**

Project Title: **A303 AMESBURY TO BERWICK DOWN**

Drawing Title: **ANNEX 4
FIGURE 1
PREVIOUS ARCHAEOLOGICAL
INVESTIGATIONS OVERVIEW SHEET**

Designed	Drawn	Checked	Approved	Date
JB	KD	CC	JB	14/09/18

Internal Project No.: 60547200

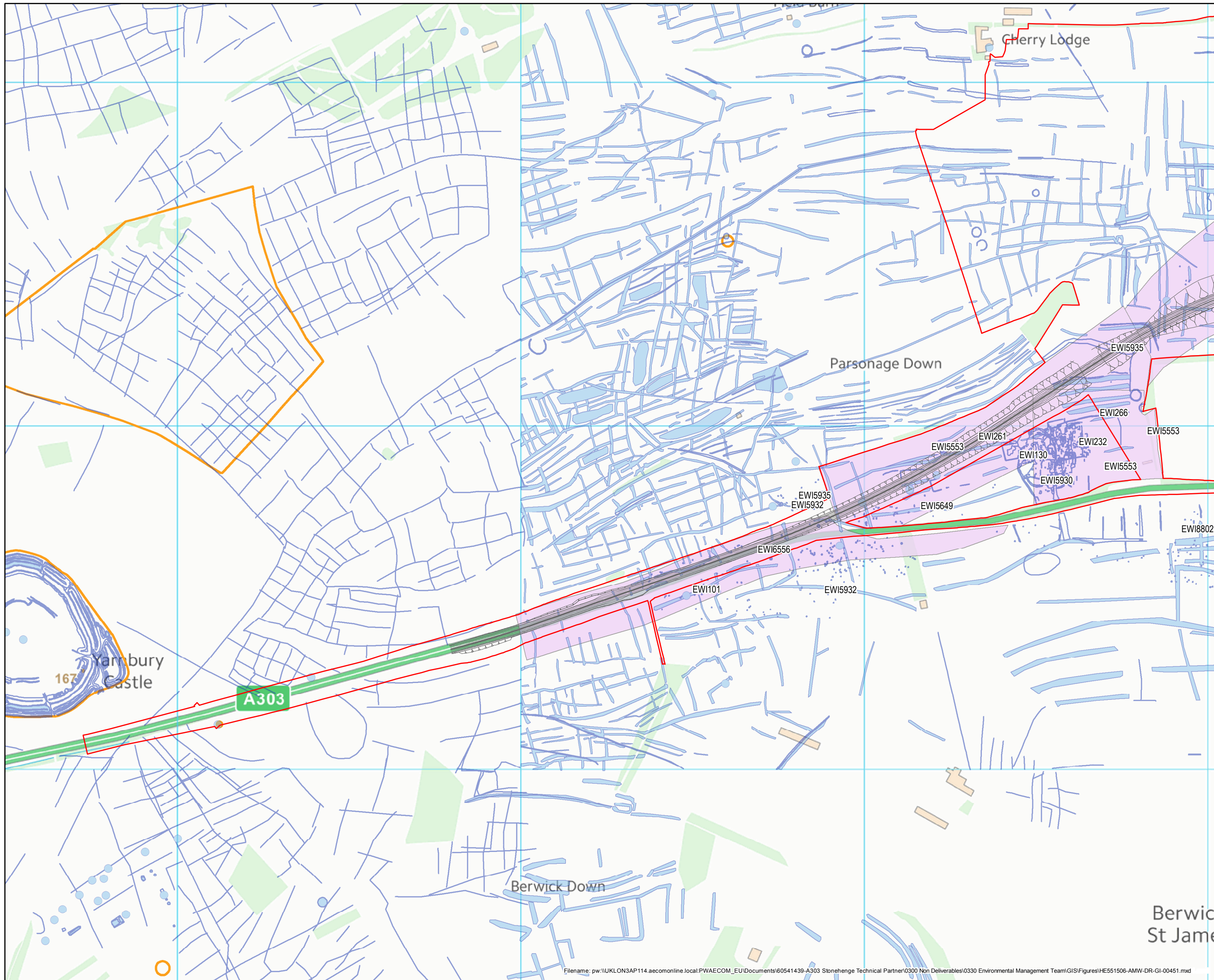
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Location		Type	Role

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- NOTES / LEGEND
- Sheet Layout
 - Proposed scheme boundary
 - Proposed route alignment
 - HER Monuments (Point)
 - HER Monuments (Line)
 - HER Monuments (Polygon)
 - Scheduled Monument
 - Stonehenge Environs Project
 - Field Walking Survey (polygon data in HER)

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Purpose of Issue
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Client: Highways England

Working on behalf of

Project Title
A303 AMESBURY TO BERWICK DOWN

Drawing Title
**ANNEX 4
FIGURE 2
PREVIOUS ARCHAEOLOGICAL
INVESTIGATIONS WINTERBOURNE STOKE
BYPASS WEST**

Designed	Drawn	Checked	Approved	Date
JB	GM	CC	JB	23/08/18

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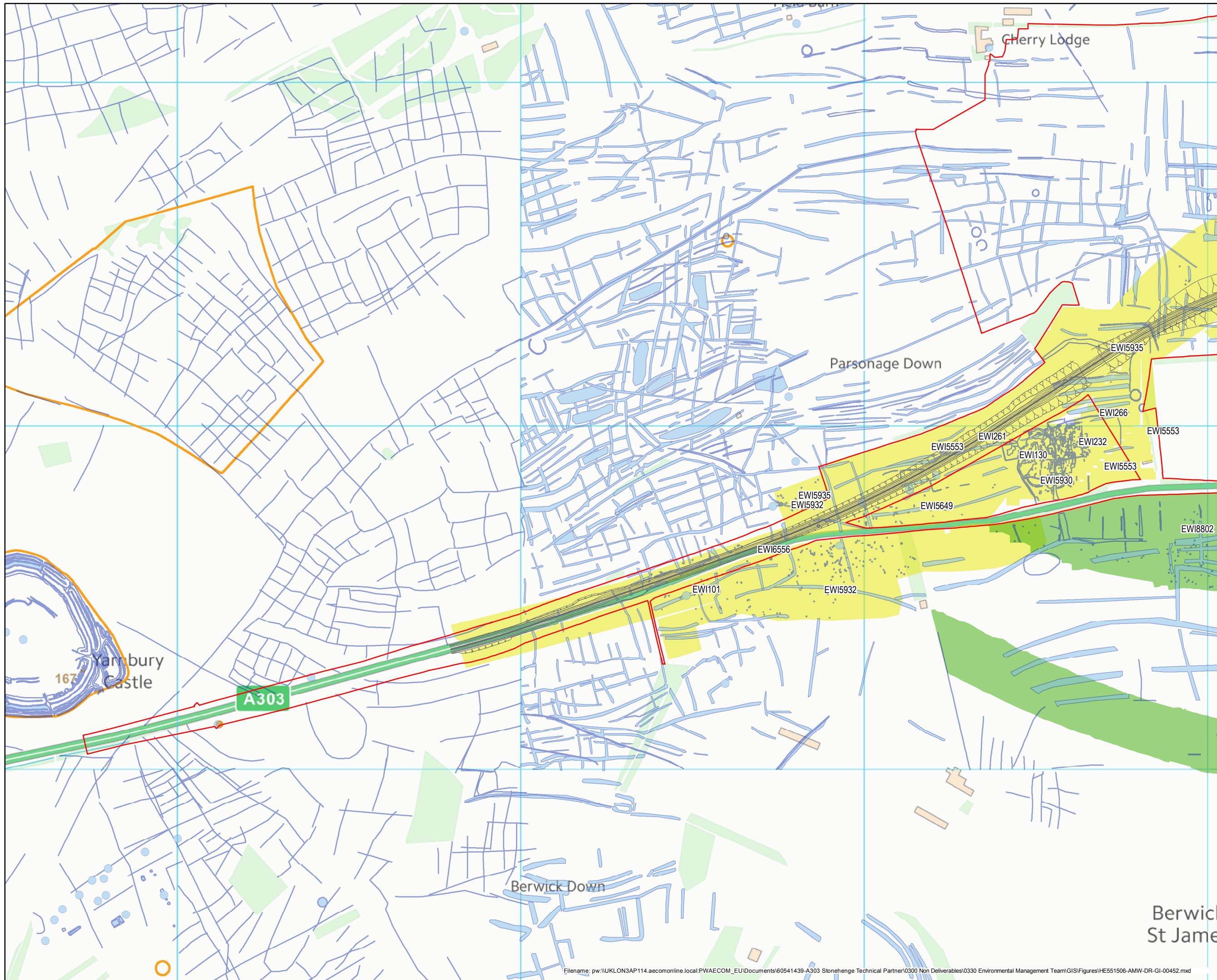
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Location	Type	Role	Number	



- NOTES / LEGEND
- Proposed scheme boundary
 - Proposed route alignment
 - HER Monuments (Point)
 - HER Monuments (Line)
 - HER Monuments (Polygon)
 - Scheduled Monument
 - AAJV Gradiometry
 - Geophysical Survey (HER event records)

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A303 AMESBURY TO BERWICK DOWN

Drawing Title
**ANNEX 4
FIGURE 3
PREVIOUS ARCHAEOLOGICAL
INVESTIGATIONS WINTERBOURNE STOKE
BYPASS WEST**

Designed	Drawn	Checked	Approved	Date
JB	GM	CC	JB	23/08/18

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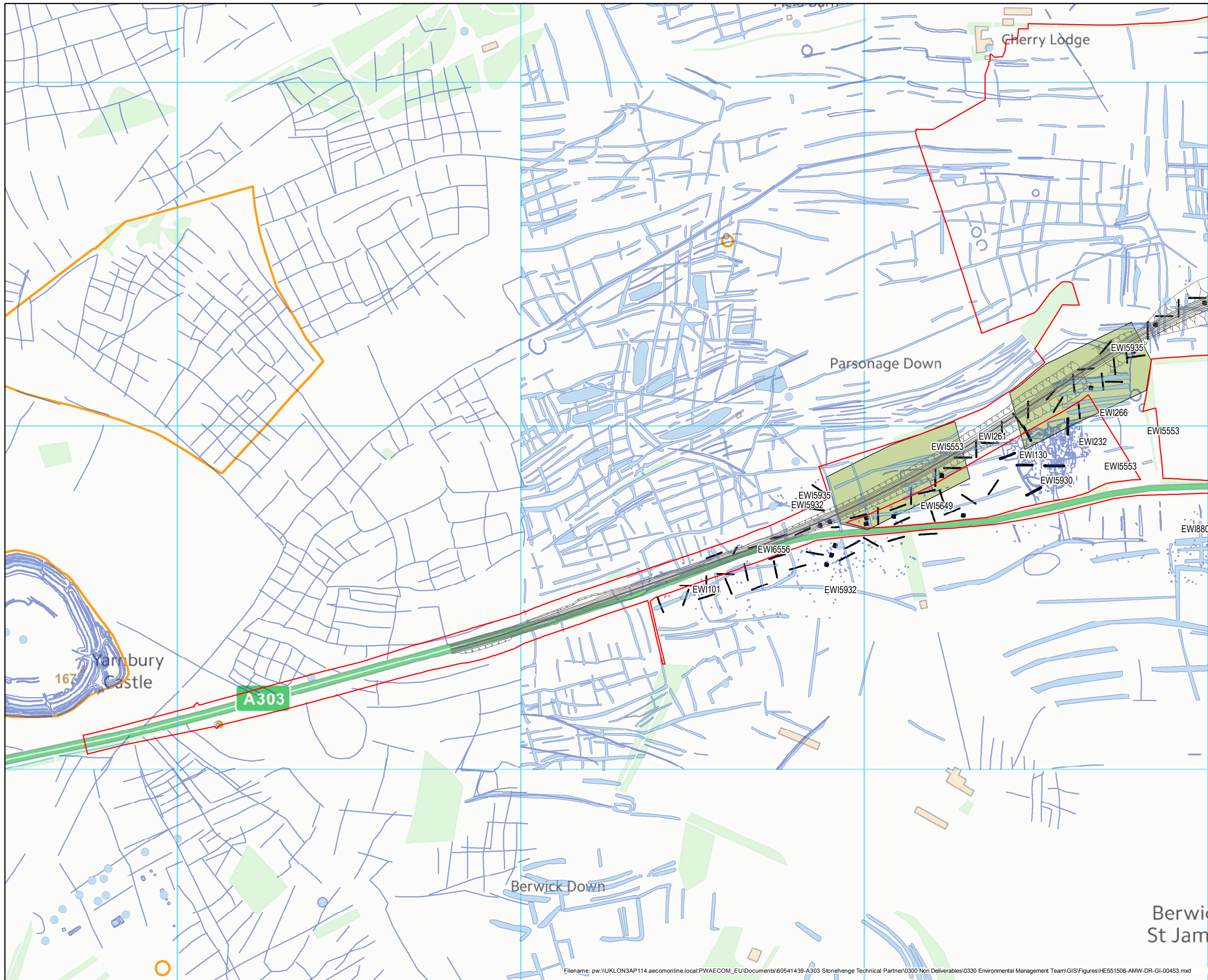
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SCHEME WIDE		DR	GI	00452
Location	Type	Role	Number	



- NOTES / LEGEND
- Proposed scheme boundary
 - Proposed route alignment
 - HER Monuments (Point)
 - HER Monuments (Line)
 - HER Monuments (Polygon)
 - Scheduled Monument
 - Field Evaluation - Trenches mapped
 - Field Evaluation - Area only (trenches unmapped)

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Drawing Title
**ANNEX 4
FIGURE 4
PREVIOUS ARCHAEOLOGICAL
INVESTIGATIONS WINTERBOURNE STOKE
BYPASS WEST**

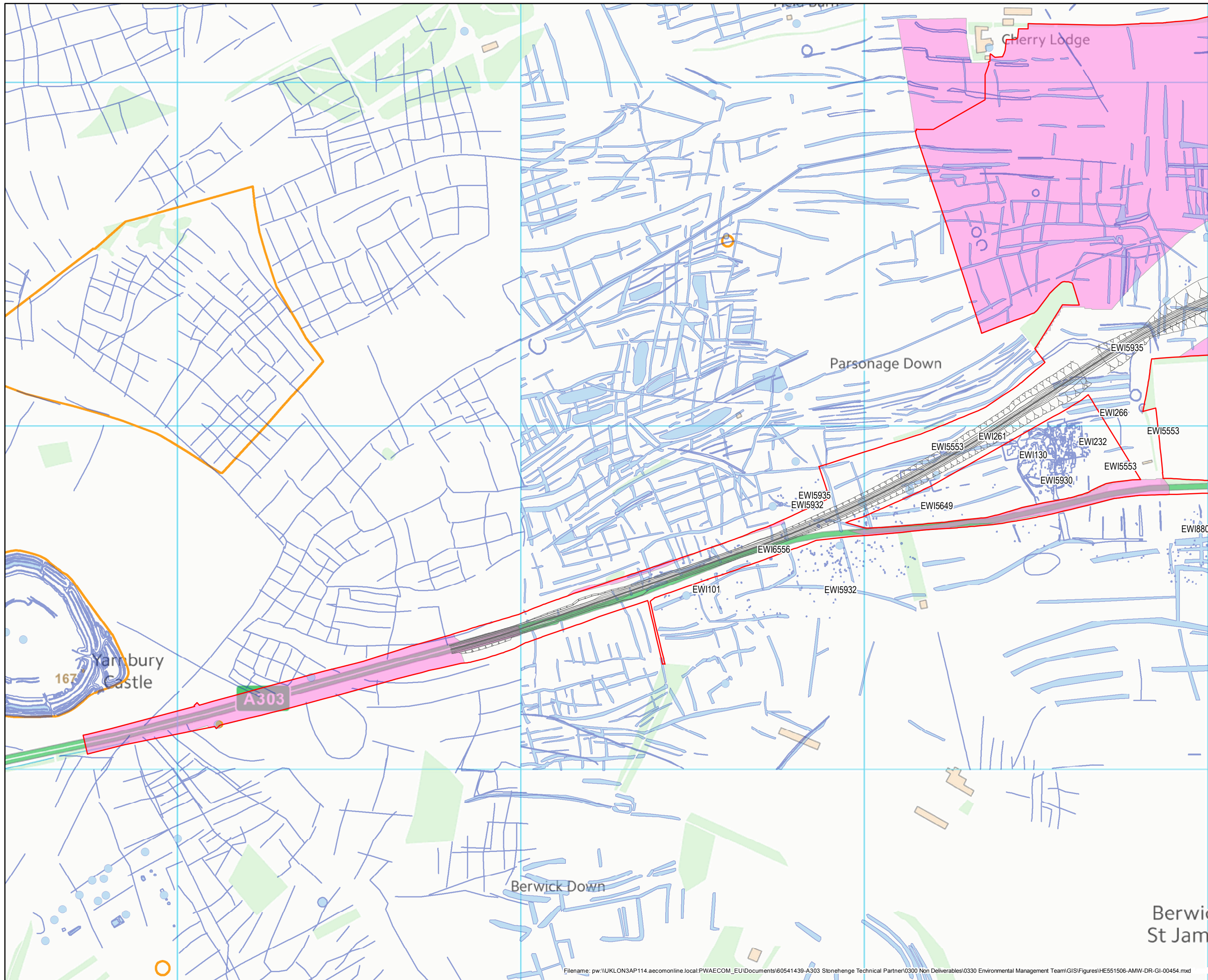
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Location	Type	Role	Number	



- NOTES / LEGEND
- Proposed scheme boundary
 - Proposed route alignment
 - HER Monuments (Point)
 - HER Monuments (Line)
 - HER Monuments (Polygon)
 - Scheduled Monument
 - Unsurveyed or data unavailable

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**ANNEX 4
FIGURE 5
PREVIOUS ARCHAEOLOGICAL
INVESTIGATIONS WINTERBOURNE STOKE
BYPASS WEST**

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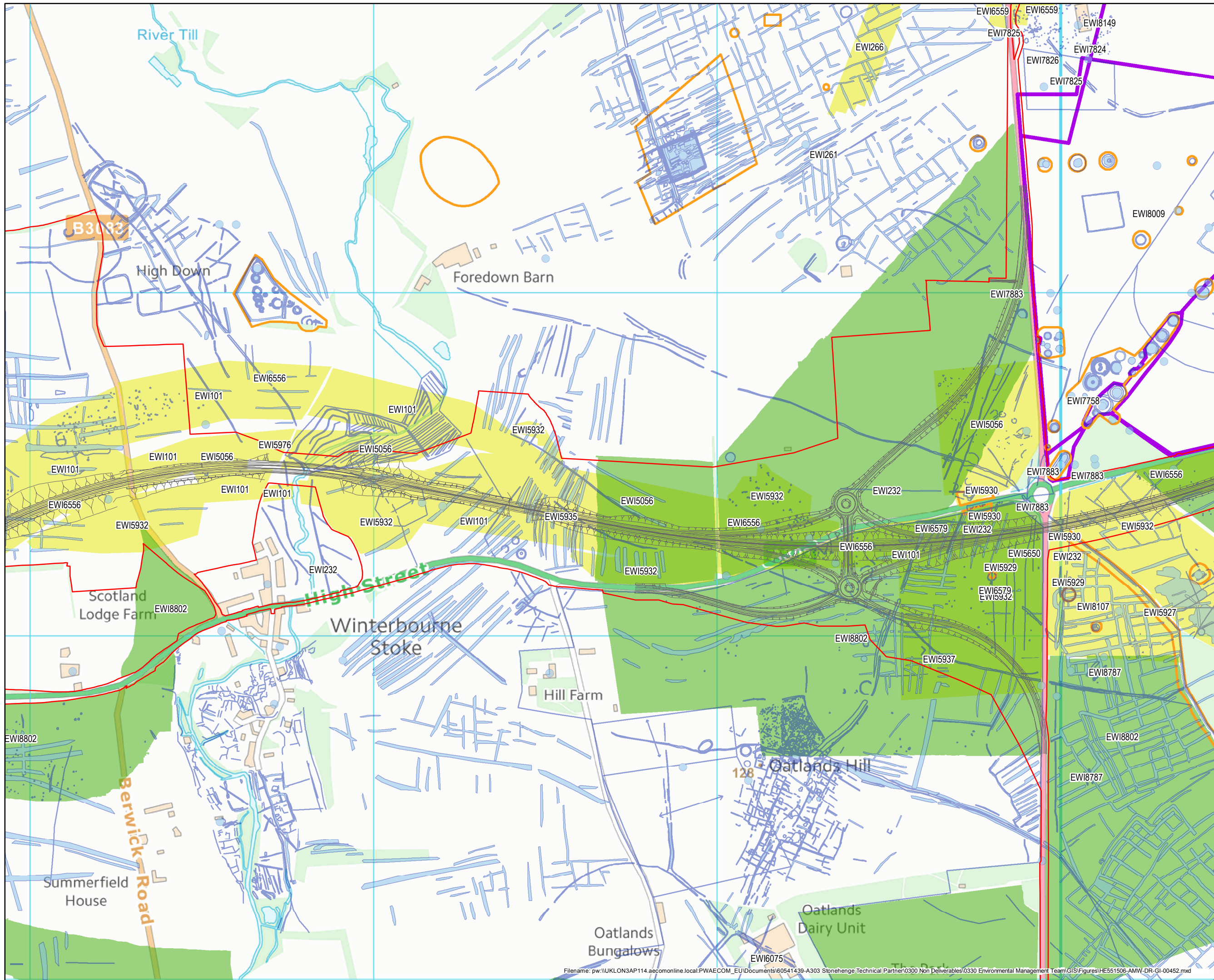
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Location	Type	Role	Number	



- NOTES / LEGEND
- Proposed scheme boundary
 - Proposed route alignment
 - HER Monuments (Point)
 - HER Monuments (Line)
 - HER Monuments (Polygon)
 - Scheduled Monument
 - Hidden Landscapes Geophysics
 - AAJV Gradiometry
 - Geophysical Survey (HER event records)

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Drawing Title: **ANNEX 4
 FIGURE 7
 PREVIOUS ARCHAEOLOGICAL
 INVESTIGATIONS WINTERBOURNE STOKES EAST
 AND LONGBARROW JUNCTION**

Designed	Drawn	Checked	Approved	Date
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Internal Project No: **60547200**

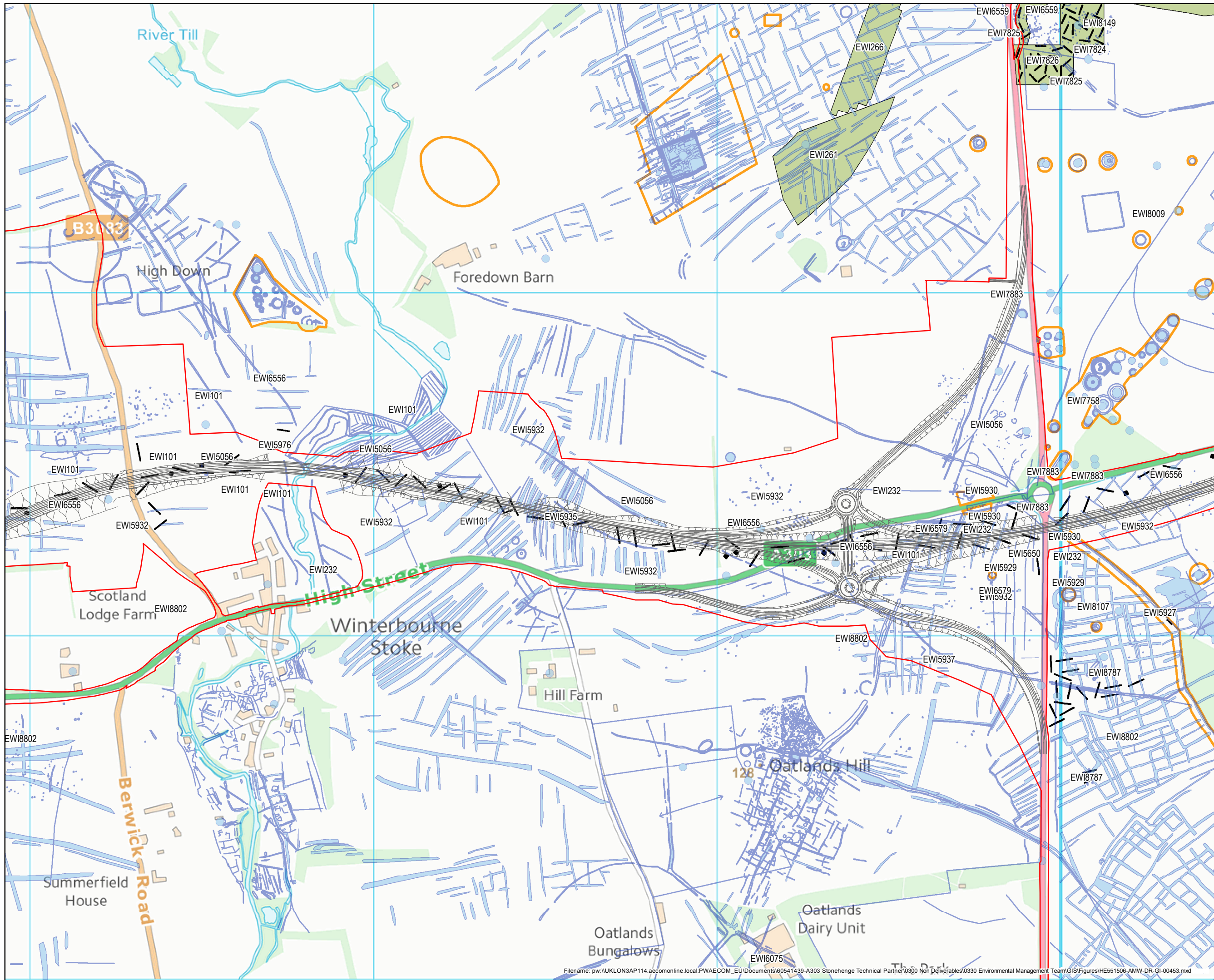
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- NOTES / LEGEND
- Proposed scheme boundary
 - Proposed route alignment
 - HER Monuments (Point)
 - HER Monuments (Line)
 - HER Monuments (Polygon)
 - Scheduled Monument
 - Field Evaluation - Trenches mapped
 - Field Evaluation - Area only (trenches unmapped)

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Drawing Title: ANNEX 4
 FIGURE 8
 PREVIOUS ARCHAEOLOGICAL INVESTIGATIONS WINTERBOURNE STAKE EAST AND LONGBARROW JUNCTION

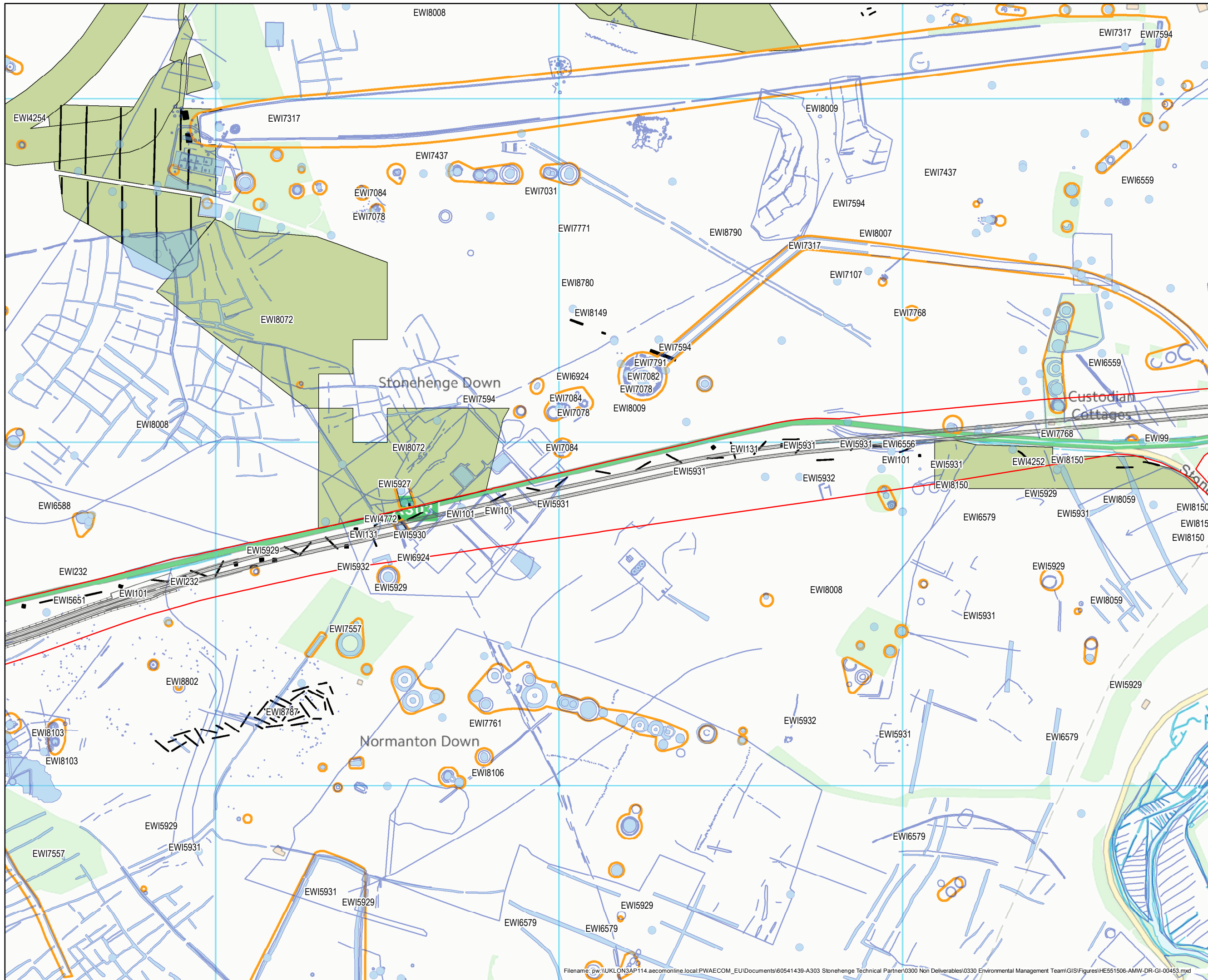
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Location	Type	Role	Number	



- NOTES / LEGEND
- Proposed scheme boundary
 - Proposed route alignment
 - HER Monuments (Point)
 - HER Monuments (Line)
 - HER Monuments (Polygon)
 - Scheduled Monument
 - Field Evaluation - Trenches mapped
 - Field Evaluation - Area only (trenches unmapped)

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Drawing Title
ANNEX 4
FIGURE 12
PREVIOUS ARCHAEOLOGICAL
INVESTIGATIONS TUNNEL AND PORTALS

Designed	Drawn	Checked	Approved	Date
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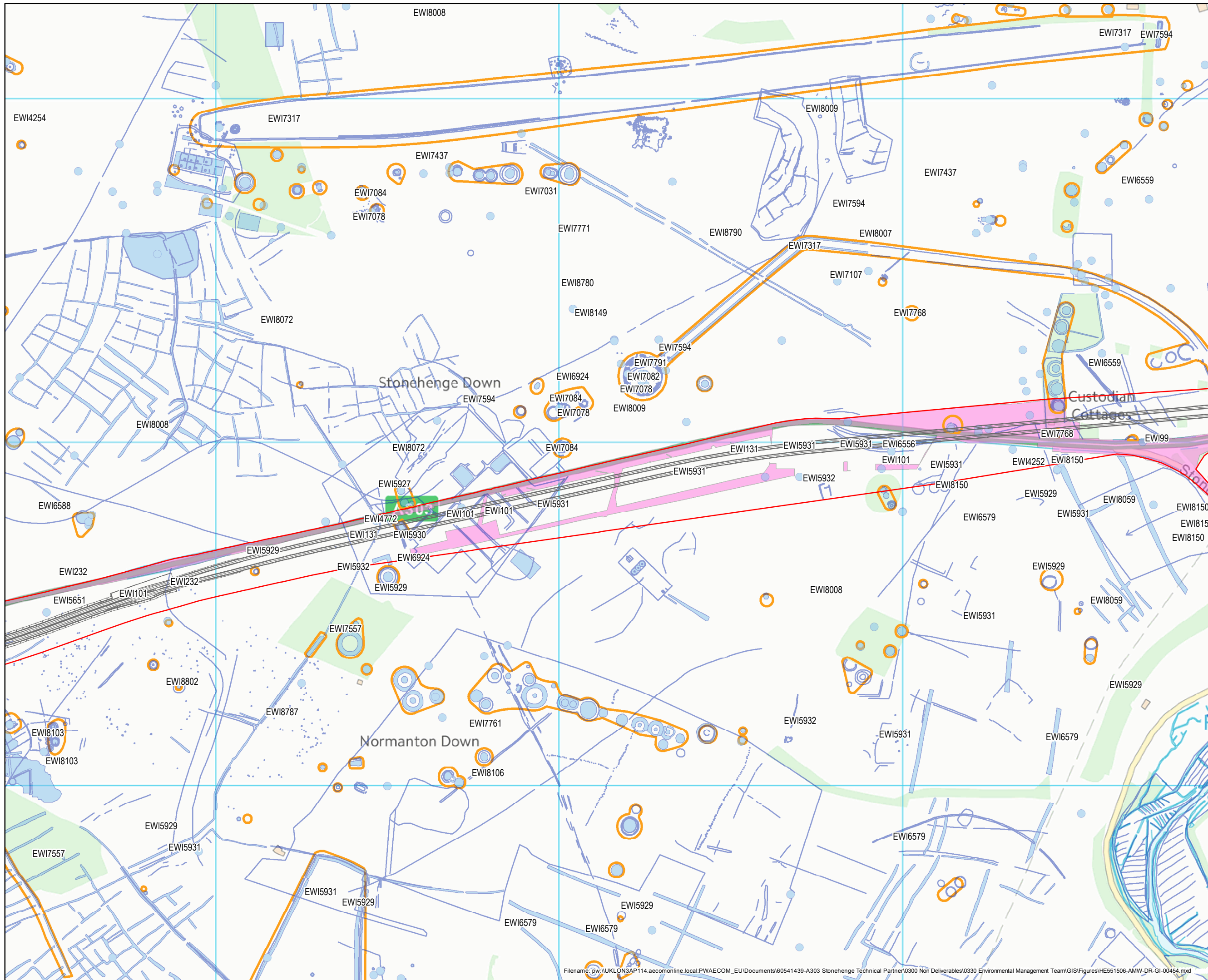
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SCHEME WIDE		DR	GI	00453
Location	Type	Role	Number	



- NOTES / LEGEND
- Proposed scheme boundary
 - Proposed route alignment
 - HER Monuments (Point)
 - HER Monuments (Line)
 - HER Monuments (Polygon)
 - Scheduled Monument
 - Unsurveyed or data unavailable

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Drawing Title
ANNEX 4
FIGURE 13
PREVIOUS ARCHAEOLOGICAL
INVESTIGATIONS TUNNEL AND PORTALS

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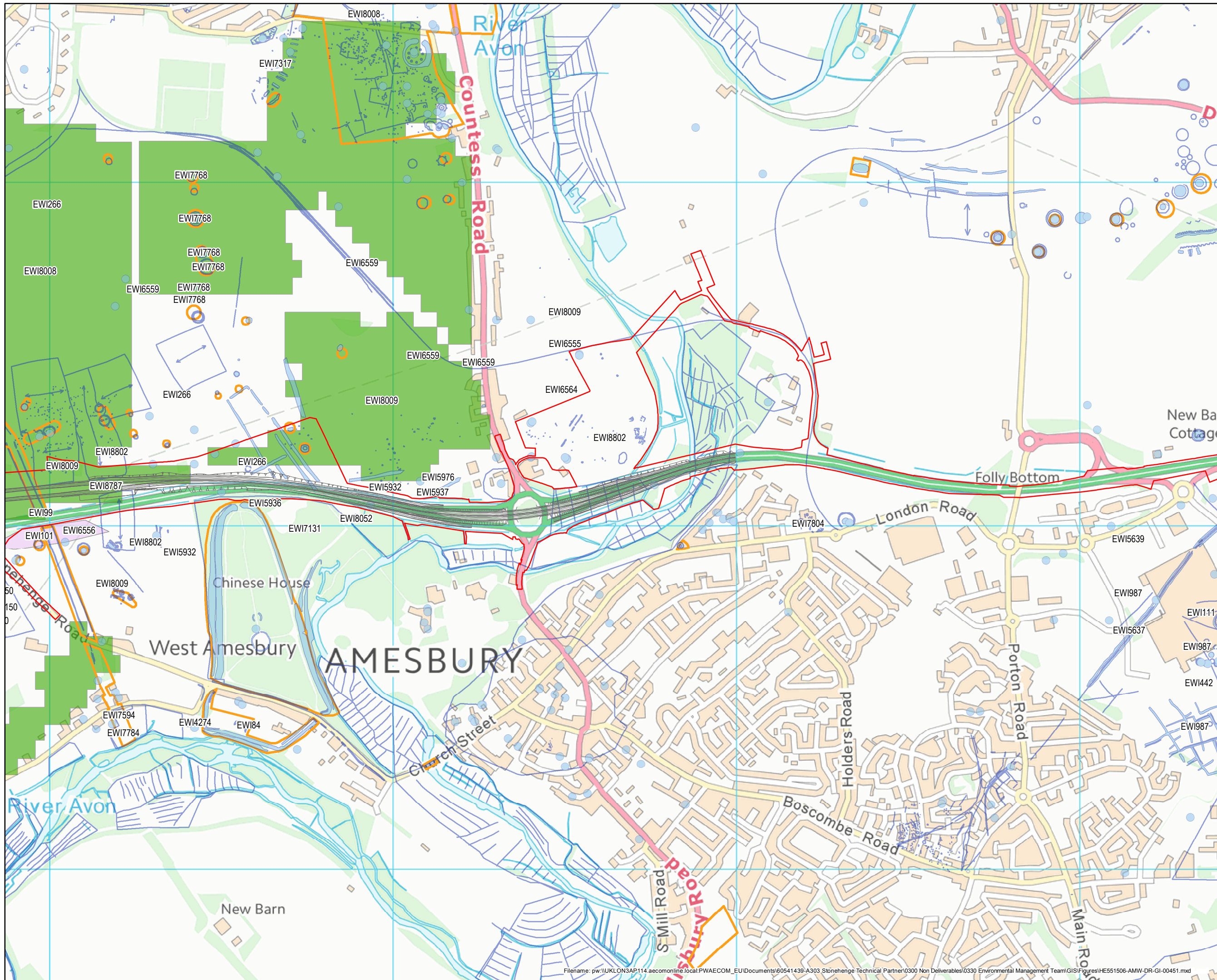
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SCHEME WIDE		DR	GI	00454
Location	Type	Role	Number	



- NOTES / LEGEND
- Sheet Layout
 - Proposed scheme boundary
 - Proposed route alignment
 - HER Monuments (Point)
 - HER Monuments (Line)
 - HER Monuments (Polygon)
 - Scheduled Monument
 - Stonehenge Environs Project
 - Field Walking Survey (polygon data in HER)

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Drawing Title: **ANNEX 4
 FIGURE 14
 PREVIOUS ARCHAEOLOGICAL
 INVESTIGATIONS COUNTESS ROUNDABOUT**

Designed	Drawn	Checked	Approved	Date
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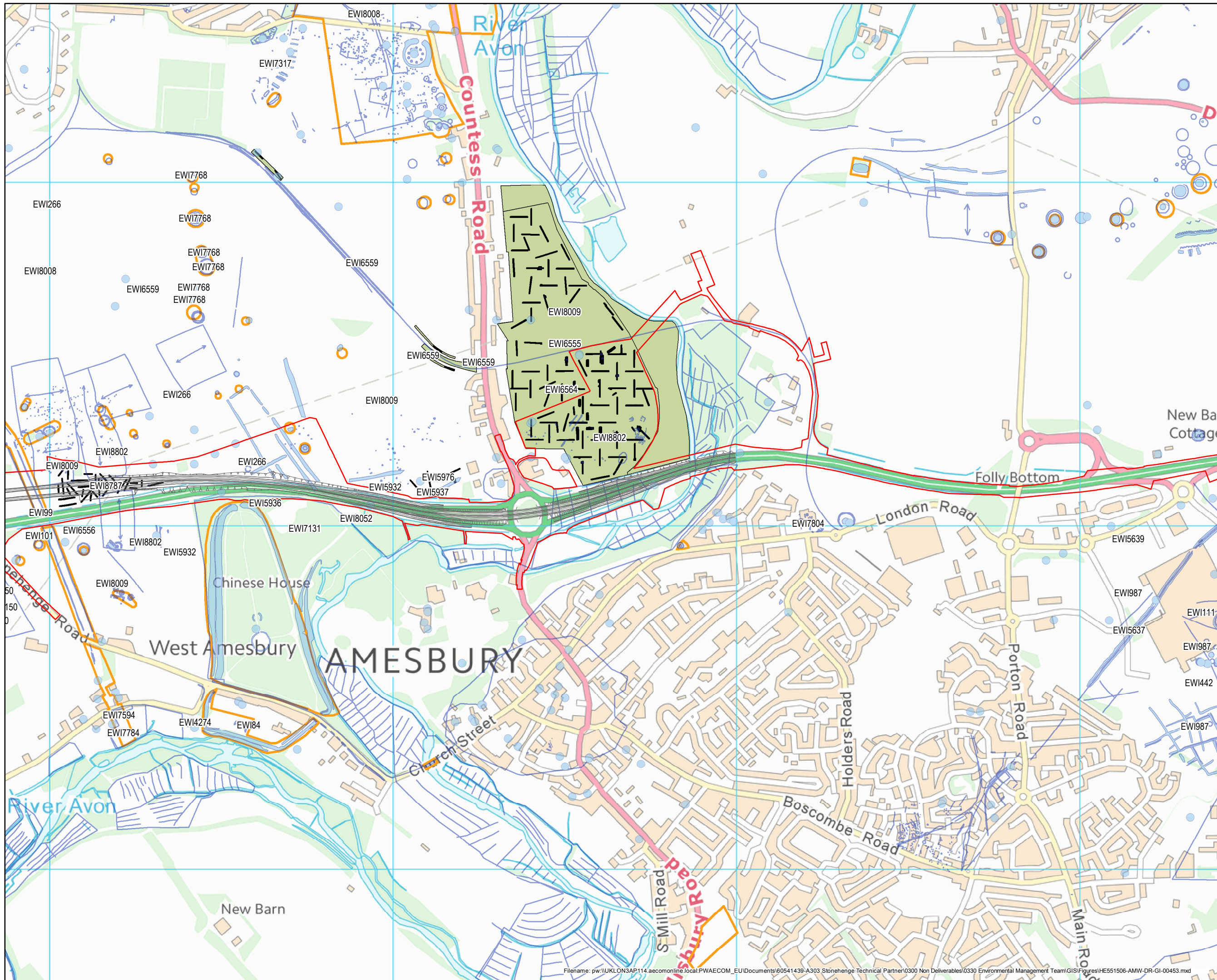
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Location	Type	Role	Number



- NOTES / LEGEND
- Proposed scheme boundary
 - Proposed route alignment
 - HER Monuments (Point)
 - HER Monuments (Line)
 - HER Monuments (Polygon)
 - Scheduled Monument
 - Field Evaluation - Trenches mapped
 - Field Evaluation - Area only (trenches unmapped)

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Purpose of Issue: **FINAL**

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Project Title: **A303 AMESBURY TO BERWICK DOWN**

Drawing Title: **ANNEX 4
 FIGURE 16
 PREVIOUS ARCHAEOLOGICAL
 INVESTIGATIONS COUNTESS ROUNDABOUT**

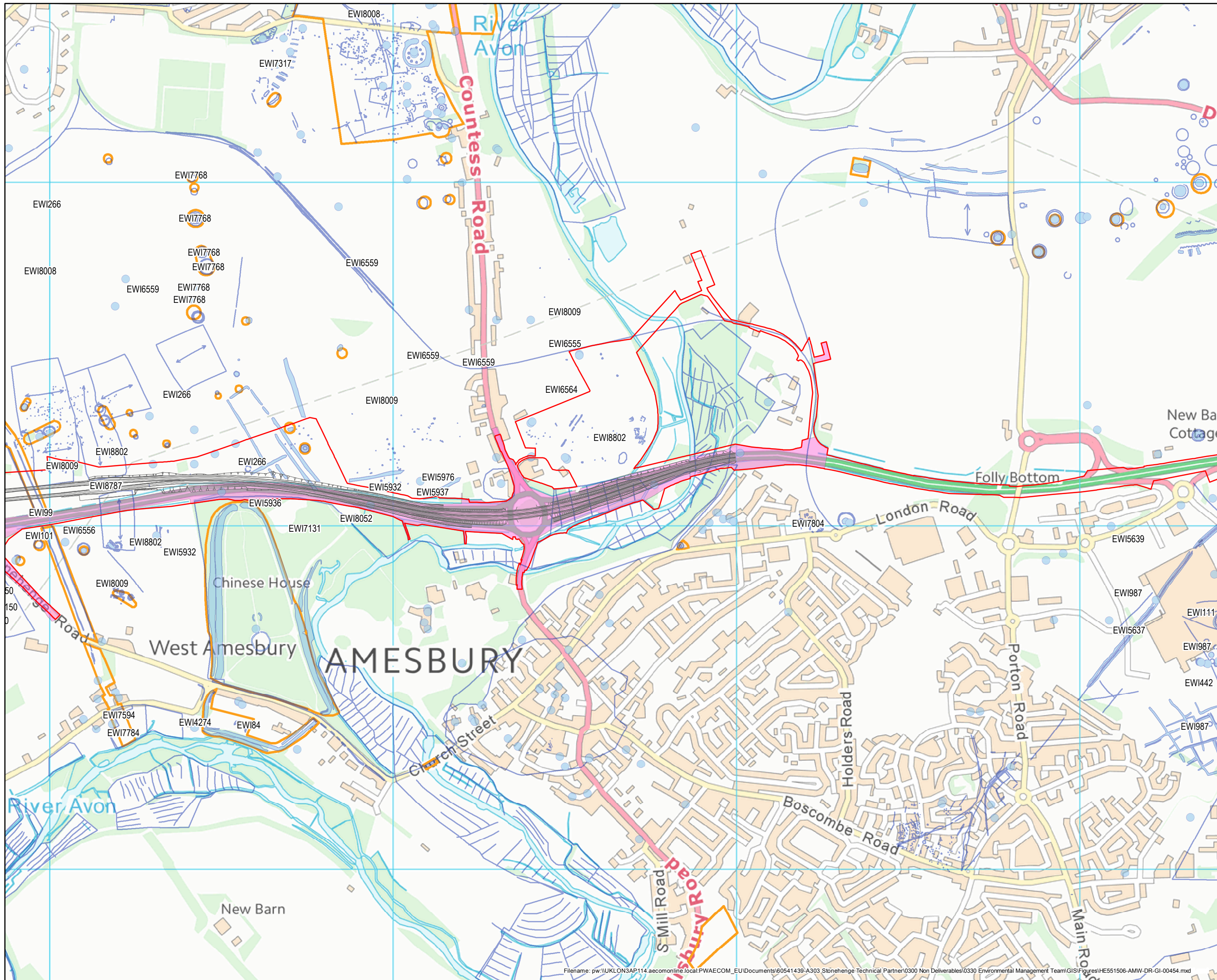
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SCHEME WIDE		DR	GI 00453
Location	Type	Role	Number



- NOTES / LEGEND
- Proposed scheme boundary
 - Proposed route alignment
 - HER Monuments (Point)
 - HER Monuments (Line)
 - HER Monuments (Polygon)
 - Scheduled Monument
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Working on behalf of

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A303 AMESBURY TO BERWICK DOWN

Drawing Title
ANNEX 4
FIGURE 17
PREVIOUS ARCHAEOLOGICAL INVESTIGATIONS COUNTESS ROUNDABOUT

Designed	Drawn	Checked	Approved	Date
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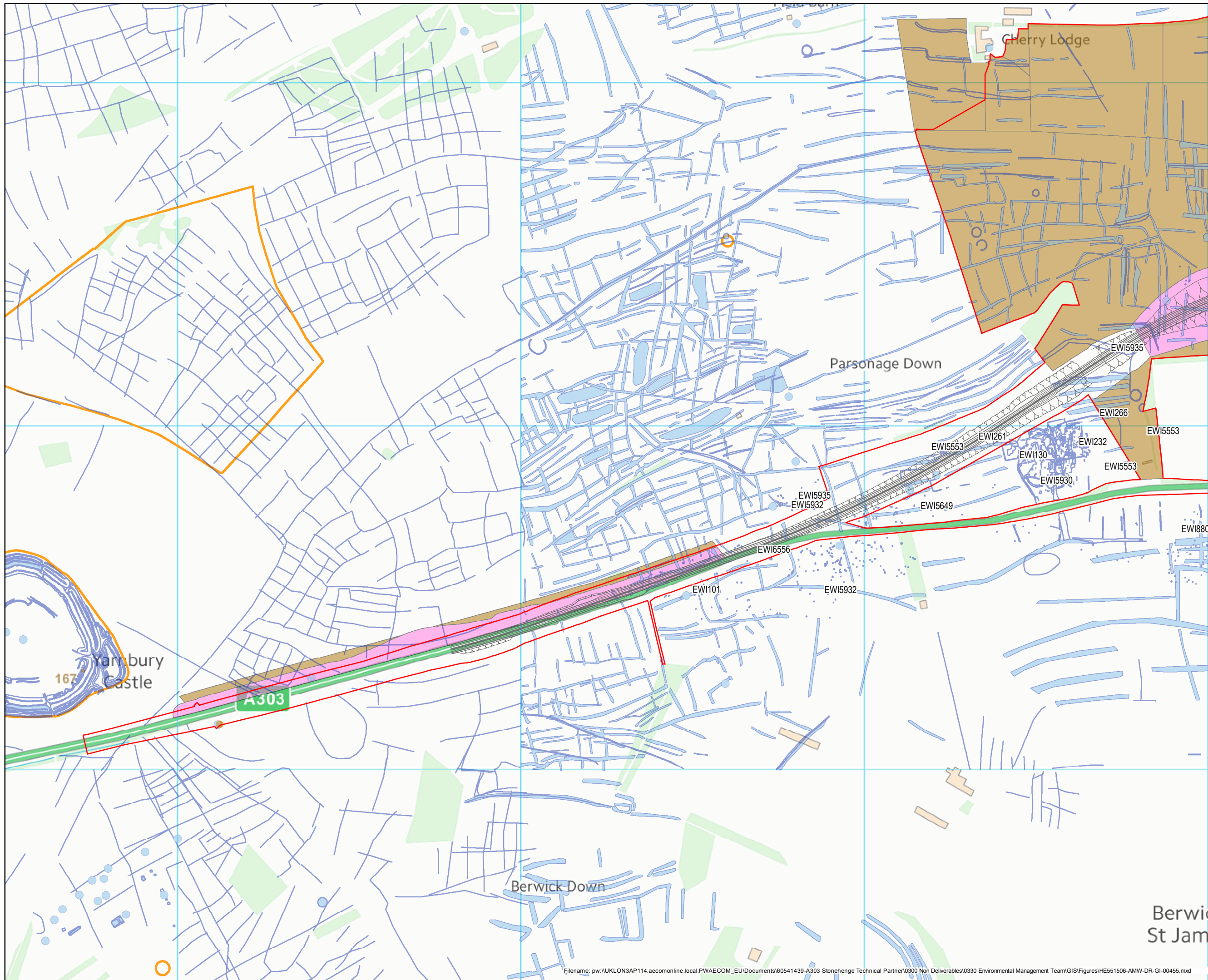
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HE551506	AMW	AMW	GEN	01
SCHEME WIDE		DR	GI	00454
Location	Type	Role	Number	



- NOTES / LEGEND
- Proposed scheme boundary
 - Proposed route alignment
 - HER Monuments (Point)
 - HER Monuments (Line)
 - HER Monuments (Polygon)
 - Scheduled Monument
 - Surface artefact collection, geophysical survey and Trench Evaluation
 - Geophysical survey

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Drawing Title
**ANNEX 4
FIGURE 18
PREVIOUS ARCHAEOLOGICAL
INVESTIGATIONS WINTERBOURNE STOKE
BYPASS WEST**

Designed	Drawn	Checked	Approved	Date
JB	GM	CC	JB	04/09/18

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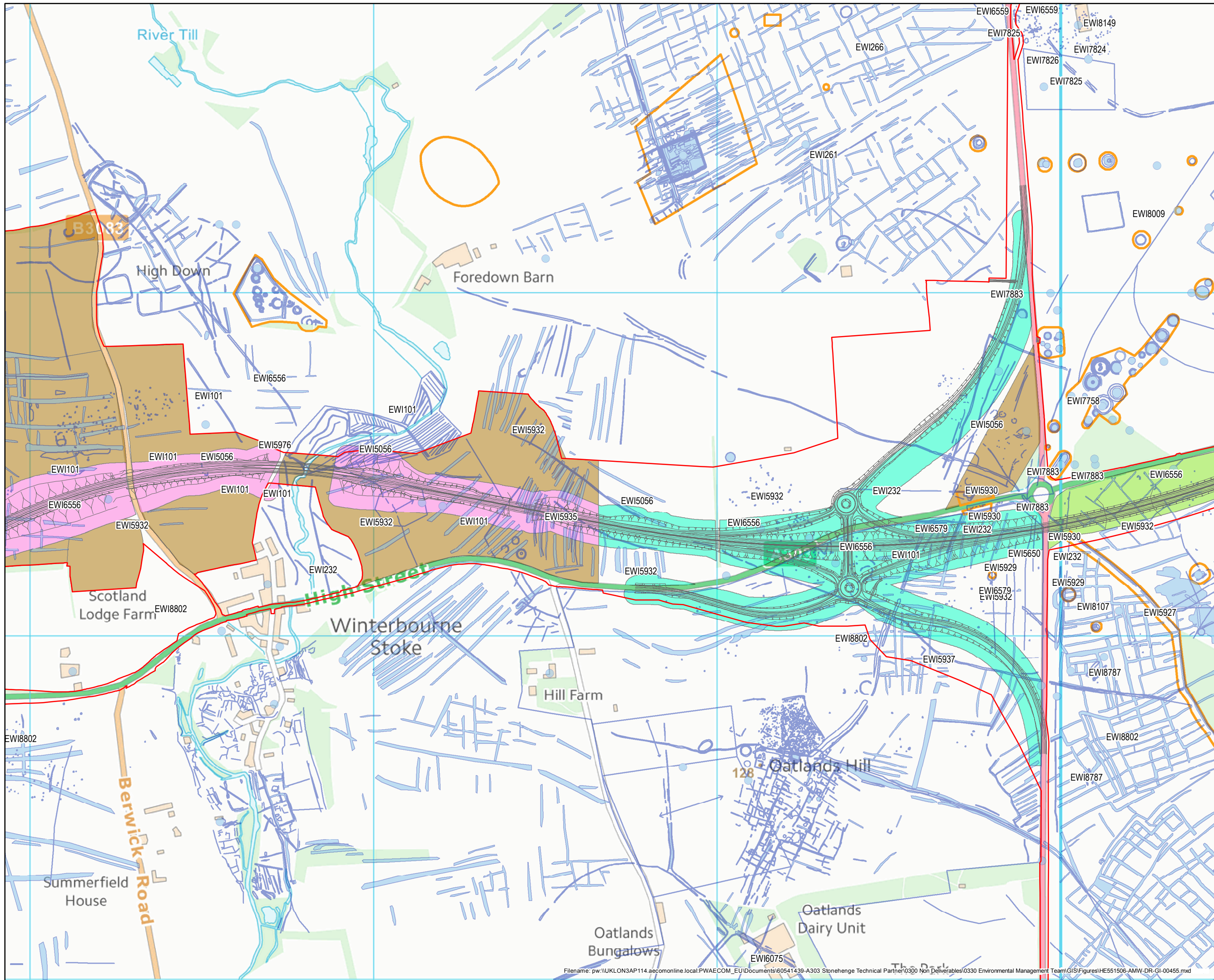
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HE551506	AMW	GEN	01	
SCHEME WIDE		DR	GI	00455
Location	Type	Role	Number	



- NOTES / LEGEND
- Proposed scheme boundary
 - Proposed route alignment
 - HER Monuments (Point)
 - HER Monuments (Line)
 - HER Monuments (Polygon)
 - Scheduled Monument
 - Surface artefact collection, geophysical survey and Trench Evaluation
 - Ploughzone artefact sampling and Trench Evaluation
 - Geophysical survey
 - Surface artefact collection and Trench Evaluation

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Project Title: **A303 AMESBURY TO BERWICK DOWN**

Drawing Title: **ANNEX 4
FIGURE 19
PREVIOUS ARCHAEOLOGICAL
INVESTIGATIONS WINTERBOURNE STOKE EAST
AND LONGBARROW JUNCTION**

Designed	Drawn	Checked	Approved	Date
JB	GM	CC	JB	04/09/18

Internal Project No: **60547200**

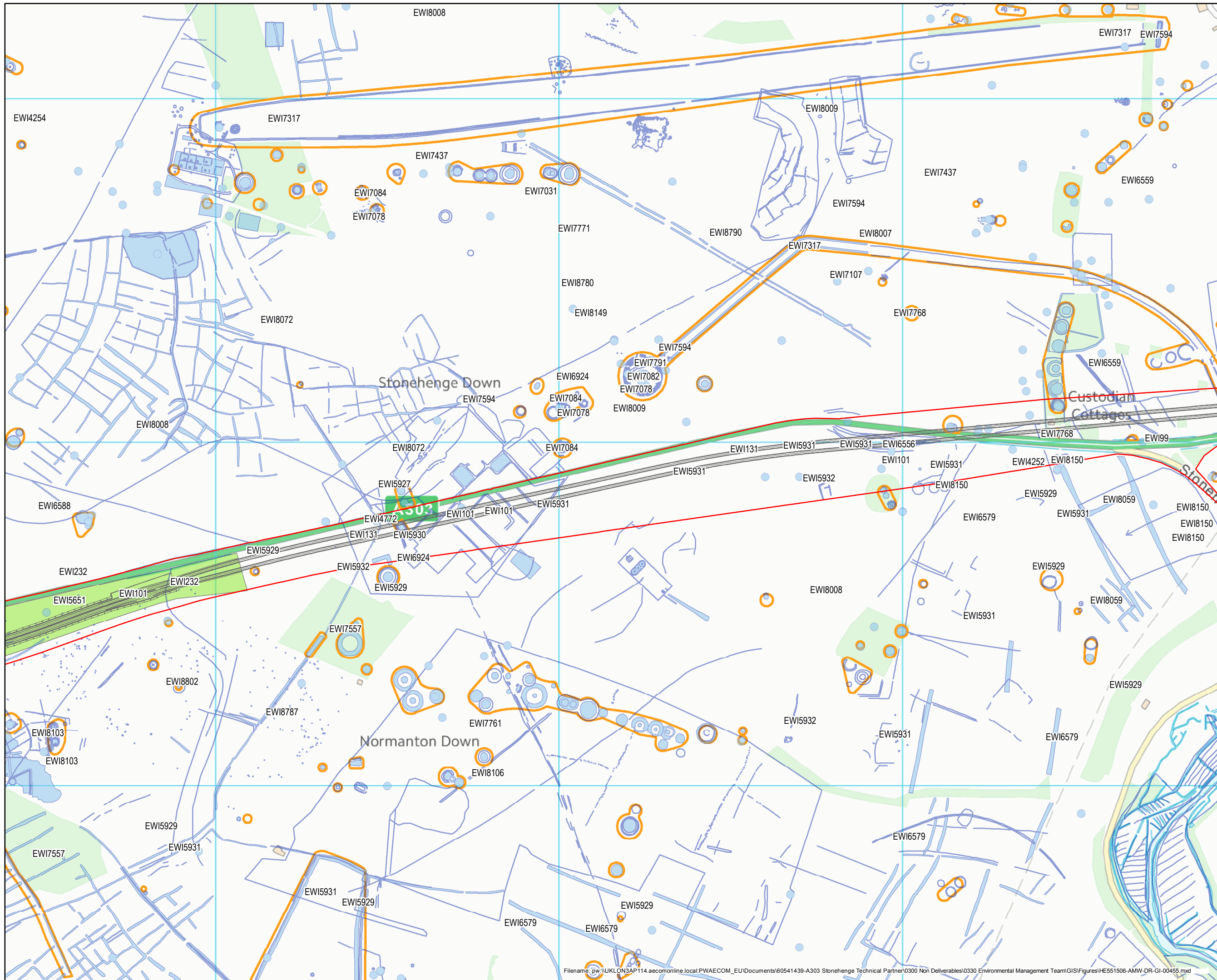
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SCHEME WIDE		DR	GI	00455
Location	Type	Role	Number	



- NOTES / LEGEND
- Proposed scheme boundary
 - Proposed route alignment
 - HER Monuments (Point)
 - HER Monuments (Line)
 - HER Monuments (Polygon)
 - Scheduled Monument
 - Ploughzone artefact sampling and Trench Evaluation

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Project Title
A303 AMESBURY TO BERWICK DOWN

Drawing Title
ANNEX 4
FIGURE 20
PREVIOUS ARCHAEOLOGICAL
INVESTIGATIONS TUNNEL AND PORTALS

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Location	Type	Role	Number	

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