

High Speed Rail (West Midlands - Crewe)

Environmental Statement

Volume 5: Technical appendices

CA2: Colwich to Yarlet

Cultural heritage baseline report (CH-001-002)

July 2017 ES 3.5.2.2.4



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1 Introduction

1.1 Structure of the cultural heritage appendices

- 1.1.1 The cultural heritage Appendices for the Colwich to Yarlet community area (CA2) comprise:
 - a baseline report (this Appendix);
 - a gazetteer of heritage assets (Volume 5: Appendix CH-002-002);
 - an impact assessment (Volume 5: Appendix CH-003-002); and
 - survey reports, incorporating geophysical survey and remote sensing studies, which are available in the Background Information and Data document¹.
- 1.1.2 In addition there are two route-wide cultural heritage Appendices:
 - a historic landscape character report (Volume 5: Appendix CH-005-000); and
 - a geoarchaeological desk study report (Volume 5: Appendix CH-oo6-ooo).
- 1.1.3 Maps referred to throughout the cultural heritage Appendices are contained in the Volume 5: Cultural Heritage Map Book.

1.2 Study area

- The Colwich to Yarlet study area lies entirely within Stafford district, within the County of Staffordshire, and comprises all or parts of the civil parishes of Colwich, Hixon, Stowe-by-Chartley, Weston, Ingestre, Tixall, Hopton and Coton, Salt and Enson, Sandon and Burston, Marston, Creswell, Seighford, and Whitgreave.
- All non-designated and designated assets within the land required for the Proposed Scheme and within 500m of it have been detailed in this baseline report. In addition, designated heritage assets have been examined within the zone of theoretical visibility (ZTV).
- All identified assets are listed in Volume 5: Appendix CH-002-002 Gazetteer of heritage assets and shown in Cultural Heritage Map Series CH-01-205b CH-01-209a and CH-02-202b CH-02-204a (Volume 5: Cultural Heritage Map Book).

1.3 Data sources

1.3.1 Sources examined as part of this baseline assessment include published secondary sources, cartographic sources, Historic Environment Record (HER) data for non-designated heritage assets and Historic England National Heritage List (NHL) for designated assets. A full list of published sources can be found in Section 8 of this Appendix.

¹ HS2 Ltd (2017), High Speed Two (HS2) Phase 2a (West Midlands - Crewe), Background Information and Data, Cultural heritage survey reports, BID-CH-004-002, www.gov.uk/hs2

1.4 Survey undertaken

- 1.4.1 The following surveys were undertaken as part of the environmental impact assessment (EIA) process:
 - Light detection and ranging (LIDAR) survey of the majority of the land required for the Proposed Scheme and land around it (see BID- CH-004-002 Cultural heritage survey reports);
 - a programme of non-intrusive surveys including geophysical prospection, (see BID- CH-004-002); and
 - field walkover and targeted field walking, and site reconnaissance field inspections to review the setting of historic assets and the character and form of the historic landscape.

2 Geology, topography and landform

2.1 Overview

- The solid geology of the study area is dominated by rocks formed during the Triassic period (250 200 million years ago). These rocks largely comprise dominantly red and, less often, green-grey mudstones, siltstones and salt deposits (halites) of the Mercia Mudstone Group. They are widely distributed across the northern half of the study area from Rugeley to north of Stafford. Deposits of Bromsgrove sandstone (also of Triassic age; 237 251 million years old) also occur running along the length of the study area, along with interbedded sandstone and pebble conglomerates of the Kidderminster Formation along the southern half of the study area, particularly to the west of Stafford; all are part of the Sherwood Sandstone Group, which form the remainder of the Triassic sequence.
- The solid geology is overlain across a large proportion of the study area by superficial deposits formed during the Quaternary period (last 2.5 million years) as a consequence of the repeated advance and retreat of the ice sheets. The area is close to the margins of the last major ice sheet to have affected mainland Britain during the Late Devensian (approximately 30,000 15,000 Before Present (BP)), which on present evidence reached a line roughly from Lichfield to Wolverhampton and largely removed evidence for earlier ice sheets and palaeodrainage. Although the majority of deposits are likely to be more recent, the precise limits of the ice sheet are still a matter of debate, and isolated remnants from earlier glacial-interglacial periods (with associated Lower to Upper Palaeolithic archaeology and palaeoenvironmental deposits) may be buried beneath the Devensian deposits. The superficial geology can be divided between four main deposit types; 1) glaciofluvial sands and gravels, including glacial outwash and river terrace gravels; 2) till; 3) Holocene alluvium, and 4) peat.
- 2.1.3 Sands and gravels occur in the study area along the course of the River Trent and its tributaries in the form of fluvioglacial sands and gravels and river terrace deposits, the latter occurring almost continuously in the study area along the course of the River Trent from Rugeley to Aston-by-Stone. The river terrace deposits are relatively modest in extent compared to those within the lower and middle Trent Valley, where the earliest terraces date to the end of the Anglian glaciation approximately 450,000 years ago². The river terrace deposits within the study area occur at an attitudinally low level and are likely to have been deposited during the most recent Devensian glaciation.
- Only very small deposits of fluvioglacial sands and gravels occur in the study area, largely along the course of the River Sow, deposited either by seasonal meltwater outwash at the edge of the ice sheet or laid down by the ice sheet as subglacial, englacial and supraglacial deposits. However, although classified by the BGS at 1:50,000 as fluvioglacial sheet deposits, at 1:650,000 they are classified as undifferentiated river terrace deposits. In practice fluvioglacial sands and gravels may be difficult to distinguish from river terrace deposits without exposures, but the

² Bridgland, D.A., Howard, A.J., White, M.J. and White, T.S. (2014), The Quaternary of the Trent, Oxford: Oxbow Books

difference is significant in terms of the potential of river terrace deposits to contain unstratified Palaeolithic artefacts or to seal stratified organic horizons of late glacial interstadial or earlier date.

- 2.1.5 During the repeated advance of glaciers, deposits of poorly sorted tills (previously termed boulder clay) were laid down by ice sheets, most recently during the latter stages of the Devensian Ice Age (approximately 20,500 13,500 years ago). Till deposits are mostly present within the study area as small deposits around Little and Great Haywood but with more significant deposits to the south of Stone. Although the majority of the deposits are likely to be Devensian in date, debate over the precise southern extent of the ice sheet raises the possibility that some of the deposits could date to earlier glacial episodes.
- 2.1.6 Deposits of Holocene alluvium are present where former and extant river courses cut across the course of the proposed scheme. Alluvium associated with the course of the River Trent is present north of Rugeley to Great Hayward and to the south of Stone into the Stone and Swynnerton area (CA₃). Alluvium is also present associated with the course of the River Sow, a tributary of the Trent heading west towards Stafford.
- 2.1.7 Deposits of peat are present in two distinct areas, the first along the northern bank of the River Sow where they appear likely to represent the course of former channels (palaeochannels) of the River Sow close to its confluence with the River Trent. The second concentration of peat deposits occur at Marston along the northern edge of Stafford where they may be associated with the former palaeodrainage of the Marston Brook a tributary of the River Sow. It is also possible that the peat infills former kettle holes or areas of impeded drainage formed within the glacial/periglacial topography.
- The geology of the study area supports a range of soils from loamy and clayey floodplain soils along the Rivers Trent and Sow, with freely draining slightly acid loamy and clayey soils across the remainder of the study area. Land-use is predominantly arable along with pasture and some patches of deciduous and coniferous woodland. The most fertile soils are to be found within the valleys of the Rivers Trent and Sow.
- The corridor of the proposed scheme within the study area is situated with a relatively low-lying and gently undulating landscape, ranging between approximately 70 100m above sea level (ASL) along the majority of the route, but locally increasing to approximately 130m ASL north-west of Ingestre.
- In summary, the form and historic character of the landscape are largely determined by past geological processes, particularly those during the Quaternary period associated with successive glaciations that scoured and deposited sediment across the landscape. The post-glacial soil cover is likewise heavily influenced by the solid and superficial geologies. The River Trent and its tributaries form the dominant feature of the landscape, containing substantial deposits of alluvium and river terrace deposits of both archaeological and geoarchaeological potential.

2.2 Geoarchaeological characterisation

- The following geoarchaeological characterisation zones (GCZ) have been identified within the Colwich to Yarlet area (see Volume 5: Appendix CH-oo6-ooo Geoarchaeology desk study report):
 - GCZ 13 comprises Holocene alluvium associated with the course of the Moreton Brook;
 - GCZ 14 principally comprises slightly acidic loamy and clayey soils developed on the Mercia Mudstone bedrock, with dispersed patches of glacial till. This zone extends from Moreton Brook to the River Trent;
 - GCZ 15 comprises Pleistocene river terrace deposits on the eastern bank of the River Trent;
 - GCZ 16 comprises Holocene floodplain alluvium within the Trent Valley;
 - GCZ 17 comprises Pleistocene river terrace deposits on the western bank of the River Trent;
 - GCZ 18 comprises slightly acid loamy and clayey soils developed on the Mercia Mudstone solid geology;
 - GCZ 19 is devoid of superficial deposits, apart from a small area of glacial till adjacent to the A518 Weston Road north-east of Stafford;
 - GCZ 20 comprises fluvioglacial sands and gravels and till, which outcrop
 within the southern half of this zone, forming the northern extent of a large
 deposit of Pleistocene and Holocene sediments concentrated in and around
 Stafford;
 - GCZ 21 comprises slightly acid loamy and clayey soils developed on the Mercia Mudstone solid geology, with relatively small patches of glacial till around Yarlet;
 - GCZ 22 is largely devoid of superficial geology except for a small patch of glacial till; and
 - GCZ 23 extending north to the Filly Brook, this zone principally comprises loamy and clayey soils developed on the Mercia Mudstone solid geology, with small areas of glacial till present along the fringe of the proposed route.

3 Archaeological and historical record

3.1 Introduction

- 3.1.1 This section provides a chronological overview of the wider archaeological context of the study area. This is intended to enable the potential for unidentified archaeological remains to be assessed, and their likely location and form to be identified.
- 3.1.2 All identified assets are listed in Volume 5: Appendix CH-002-002 and shown in Cultural Heritage Map Series CH-01-205b CH-01-209a and CH-02-202b CH-02-204a (Volume 5: Cultural Heritage Map Book).

3.2 Early prehistory

Palaeolithic 500,000BC - 10,000BC

- The British Palaeolithic comprises the archaeological and environmental remains of early human societies that occupied Britain during the warm periods (interglacials) before, between and immediately after the three successive glaciations (Anglian, Wolstonian and Devensian) that impacted upon Britain. Britain was joined to the continent by a land bridge ('Doggerland') throughout this period and would have been deserted at the coldest times.
- The first, Lower Palaeolithic artefactual evidence of the early human occupation of the West Midlands dates to the pre-Anglian Cromerian interglacial, to approximately 500,000 years ago, and was also found in sediments laid down by the Bytham River. The most significant finds to date have been made at Waverley Wood to the north of Warwick, where an assemblage of five handaxes in fresh condition and bones of a straight-tusked elephant were found in the organic deposits filling a former river channel³. This common association of early remains with rivers likely indicates that animals and early humans would have moved along such riparian corridors because of the constant access to water and food sources they afforded.
- River terrace deposits are, therefore, key contexts for archaeological and geoarchaeological investigation. They represent fluvially deposited sediments (typically sands and gravels) that have been subsequently incised through and preserved as evidence of former floodplains along the sides of current and former river valleys. The earliest river terrace deposits in the Upper Trent Valley (i.e. the Trent Valley to the north of the Trent-Sow confluence) date to approximately 450,000 years ago. However, the earliest such deposits within the study area were probably laid down at the edge of the Late Devensian ice sheet between 30,000 and 15,000 years ago⁴, in the Upper Palaeolithic, though they may overlie earlier river terrace deposits. They may contain the remains of Upper Palaeolithic (and Middle and Lower Palaeolithic if they seal earlier terrace deposits) human activity sites. They may also contain in-situ floral and faunal remains that may allow terrace deposits to be securely dated and contemporary environmental conditions to be ascertained, and they may contain in-situ or disturbed Lower and Middle Palaeolithic artefacts. The articulated

³ Garwood, P. (2011), The earlier prehistory of the west midlands, in: S. Watt, ed., *The Archaeology of the west midlands: a framework for research*, Oxford: Oxbow Books, pp. 9-99

⁴ Bridgland et al. (2014)

skeleton of a woolly rhinoceros was recovered, along with the disarticulated bones of other woolly rhinoceri, wolves, mammoth, horse, reindeer and bison, from a quarry at Whitemoor Hay, at the Trent-Tame confluence, approximately 18km to the southeast of the study area. These remains were dated by means of radiocarbon and optically stimulated luminescence techniques to approximately 30,000 years ago⁵. There may also be archaeological and palaeoenvironmental potential associated with peat deposits present within the Sow Valley close to its confluence with the River Trent, and at Marston, along the line of the Marston Brook. Archaeological and environmental remains of Palaeolithic date may also be sealed beneath glacial till. Deposits of till within the study area are likely to have been deposited by the Late Devensian ice sheet between 30,000 and 15,000 years ago, although it is possible that the Devensian ice sheet did not extend this far south and that the till was deposited by previous glaciations and may seal deposits of Middle or Lower Palaeolithic date.

3.2.4 A total of 451 Lower, Middle and Upper Palaeolithic artefacts have been recovered from Trent-Valley sediments⁶. None of these, and no environmental remains of Palaeolithic date, have been recovered from within the study area, although unstratified Palaeolithic handaxes have been found at Kings Bromley within or adjacent to the Fradley to Colton area (CA1).

Mesolithic 10,000BC - 4,000BC

- At the end of the last Ice Age, Britain was still connected to the European mainland by the Doggerland land bridge. Rapid climatic change led to the replacement of the late-glacial tundra initially by birch and pine within a still open landscape, and subsequently by much denser mixed deciduous woodland comprising oak, alder, willow, hazel and elm. Environmental evidence suggests that in the West Midlands this process of succession spanned the period from approximately 9,500/8,500BC 7,200/7,000BC⁷. The land bridge also facilitated colonization by red and roe deer, aurochs, boar, elk, wild pig and horse.
- The material record of the Mesolithic in Britain comprises mostly lithic assemblages, though structural and organic remains have been identified; a well-dated palaeoenvironmental sequence has been recovered from the King's Pool, Stafford⁸. Early Mesolithic (pre-6,500BC) assemblages are typically of broad-blade type, adapted to large-game hunting. After 6,500BC, Late Mesolithic assemblages are of narrow-blade type, suitable for a more diverse range of hunting and processing tasks⁹.
- 3.2.7 The densities of Mesolithic finds within the West Midlands and even more so within Staffordshire are low in comparison with other parts of Britain¹⁰. In part, this is likely to be a result of the low incidence of systematic collection of artefacts from the surface of ploughed fields that has taken place across the region and within the study area. Where systematic survey has been undertaken, it has indicated a preference within the West Midlands during the Mesolithic for well-drained elevated terrain close

⁵ Buteux, S. and Chapman, H. (2009), Where Rivers Meet: the archaeology of Catholme and the Trent-Tame confluence, York: Council for British Archaeology Research Report 161, pp. 42-44

⁶ Bridgland et al. (2014)

⁷ Garwood (2011), p. 27

⁸ Garwood (2011), p. 27

⁹ Garwood (2011), p. 26

¹⁰ Garwood (2011), pp. 26-27

to water sources¹¹. Within the study area, the heathland parishes of Ingestre, Tixall and Hopton, which occupy higher ground above the Rivers Trent and Sow would perhaps fit this definition. It is likely that valley floor locations were also exploited during the Mesolithic but that they have been buried beneath alluvial and colluvial material, which has likely meant they are under-represented in the artefactual and environmental record¹². Although no sites or finds of Mesolithic date have been identified within the study area, a diffuse scatter of worked flint, including Mesolithic or Early Neolithic cores, flakes and blades was found during field walking over two fields to the north of Rake End, Mavesyn Ridware. The low density of material found suggests that it represents background activity rather than a settlement or other activity site.

Neolithic 4,000BC - 2,200BC

- During the Early Neolithic (approximately 4,000BC 3,300BC), domesticated animals 3.2.8 (cattle, sheep and pigs) and plant species (principally wheat and barley) were introduced to Britain from the continent, marking a transition from a mobile huntergatherer lifestyle to one of sedentary cultivation. There remains much debate at the national level as to the speed of this transition, though current models suggest a predominantly wooded environment during the Early Neolithic. This would appear to have been exploited by small mobile communities herding domesticated stock and engaging in hunting and gathering. These communities would also appear to have been practicing shifting the cultivation of cereals in clearings for one or more seasons before moving on. In this model, the move to more permanent settlements and a greater emphasis on cereal production happened in the later Neolithic 13. Although there is currently insufficient evidence to determine whether or to what extent the West Midlands fits this national model, the available pollen evidence from the region suggests that large-scale woodland clearance for cultivation did not happen before approximately 3,000BC14.
- 3.2.9 Structural remains of farmsteads or villages of the period are rarely found within Britain, and none have been found within the study area or the West Midlands region. Settlement evidence within the wider region is generally characterised by spreads of struck flints, dispersed, low-density scatters of pits, postholes and gullies, mostly of unknown purpose and forming no obviously coherent plan, and occasional hearths ¹⁵. No such settlement evidence has been discovered to date within the study area, although this absence may reflect the low incidence of archaeological excavation and systematic surface artefact collection within the study area. In addition, any evidence of settlement within the Trent Valley could lay buried beneath alluvial or colluvial deposits.
- 3.2.10 Two polished stone axes (COYo48¹⁶) recovered from fields in the Trent Valley near Hoo Mill Lane, Ingestre, may be indicative of tree clearance ahead of cultivation at this

¹¹ Myers, A. (2007), The Upper Palaeolithic and Mesolithic archaeology of the West Midlands, in: P. Garwood, ed., *The Undiscovered Country: the earlier prehistory of the West Midlands*, Oxford: Oxbow Books, p. 31

¹² Knight, D., Howard, A.J. and Elliott, L. (2004), *Trent Valley Landscapes: The Archaeology of 500,000 Years of Change*, King's Lynn: Heritage Marketing and Publications Ltd, 38; Myers (2007), p. 31

¹³ Knight and Howard (2004), p. 70

¹⁴ Garwood (2011), pp. 35-36; Buteux and Chapman (2009), p. 60

¹⁵ Knight and Howard (2004), pp. 66-67; Buteux and Chapman (2009), p. 86

¹⁶ Asset reference numbers throughout refer to the Unique Identifier provided for each asset in the gazetteer (Volume 5:Appendix CH-002-002)

location sometime during the Neolithic. Whether the clearance preceded shifting or sedentary cultivation and where the people who cleared the trees were living is unknown. Artefacts including an Early Neolithic leaf-shaped arrowhead and a fragment of a Neolithic stone axe recovered from the Pool Farm area of Weston in the 1950s (COY089) are perhaps indicative of a mixed economy of cultivation and hunting. Beyond the study area, evidence for tree clearance ahead of cultivation was uncovered along the line of the M6 Toll Road at Shenstone, near to Wall. This took the form of two pits containing Early Neolithic bowl pottery, sparse cereal grains and hazelnut shells¹⁷. Staffordshire HER monument reports reveal that stone axes have been found various locations a short distance beyond the study area including Alrewas Hayes, Kings Bromley and Wrinehill within the Fradley to Colton area (CA1).

- Since the 1960s, aerial photography has revealed the cropmark remains of a complex 3.2.11 landscape of ritual and ceremonial sites of Neolithic and Bronze Age date (along with settlement enclosures and fieldscapes of Iron Age and Roman date) on the sand and gravel terraces flanking the River Trent, and upon the adjacent valley sides and plateaux. There are no certain ritual or ceremonial sites of Neolithic date visible within the cropmarks in the study area, but a ring ditch (the circular remains of a levelled round barrow) with a diameter (30m) approximately three times the size of adjacent ring ditches may be a 'great barrow' of Middle Neolithic date $(3,300 - 2,900BC)^{18}$. Beyond the study area, there are cropmark remains of an ovoid, triple-ditched Early Neolithic causewayed enclosure, measuring approximately 250m by 210m, to the north-west of Fradley. A similar-sized and shaped enclosure, at Mavesyn Ridware, and a much smaller, third example, measuring approximately 97m by 62m and comprising a single interrupted ditch circuit is present to the north-east of Handsacre. Causewayed enclosures are thought to have been gathering places for Early Neolithic communities 19 so this concentration of such enclosures between Alrewas and Mavesyn Ridware suggests that multiple Early Neolithic communities were resident within the Trent Valley or on the higher ground above adjacent to the study area.
- There are cropmark remains of a Middle Neolithic cursus monument and contemporary mortuary enclosure in the Trent Valley at Hill Ridware and Pipe Ridware respectively, both within the Fradley to Colton area (CA1). A ceremonial landscape comprising four cursus monuments, a hengi-form monument, a circular monument comprising radiating lines of pits (dubbed the 'sunburst monument' by its excavators), and a monument comprising 39 radiating lines of post-pits forming five concentric rings, which resembles Woodhenge in Wiltshire, developed during the Middle and Late Neolithic (2,900BC 2,200BC) at the confluence of the Rivers Trent and Tame, approximately 18km from the study area²⁰. Finally, 18 sherds of residual Later Neolithic Grooved Ware pottery were found during the excavation of the King's Low

¹⁷ Powell, A.B., Booth, P., Fitzpatrick, A.P. and Crockett, A.D. (2008), *The Archaeology of the M6 Toll, 2000-2003*, Oxford-Wessex Monograph 2, Oxford and Salisbury: Oxford Wessex Archaeology, p. 504

¹⁸ Garwood, P. (2007), Late Neolithic and Early Bronze Age funerary monuments and burial traditions in the West Midlands, in: P. Garwood, ed., *The Undiscovered Country: the earlier prehistory of the West Midlands*, Oxford: Oxbow Books, pp. 141-142

¹⁹ Ray, K. (2007), The Neolithic in the West Midlands, in: P. Garwood, ed., *The Undiscovered Country: the earlier prehistory of the West Midlands*, Oxford: Oxbow Books, p. 58

²⁰ Buteux and Chapman (2009), pp. 63-80

Bronze Age round barrow on Tixall Heath, discussed at some length in the following section²¹.

3.3 Late prehistory

Bronze Age 2,600BC - 700BC

- 3.3.1 At the end of the Neolithic, the ceremonial landscapes comprising communal monuments ceased to be developed and maintained. These were replaced initially by single-phase circular burial mounds that contained single crouched inhumations with ceramic beakers and occasionally copper daggers and gold ornaments (though rarely in the West Midlands) and that attracted few or no secondary burials. From approximately 2,200BC 1,500BC, multi-phase round barrows were constructed in the West Midlands, some of which saw iterative structural elaboration and which contained multiple secondary burials. Initially, the regional burial rite would appear to have been mixed, but later standardized upon urned and unurned cremation. The earliest barrows would appear to have celebrated individuals, and the later ones, lineages. The pace of round-barrow construction in the West Midlands appears to have increased rapidly from approximately 1,900BC²².
- 3.3.2 Within the West Midlands, concentrations of round barrows and ring ditches (the circular or annular remains of levelled round barrows) can be found within and on the high ground above the region's major river valleys²³. Within Staffordshire, concentrations of ring ditches have been identified, principally through aerial reconnaissance, at the confluence of the Rivers Trent and Tame, where approximately 120 ring ditches have been identified²⁴, and on the sand and gravel terraces of the River Trent at Kings Bromley, Handsacre and the Ridwares, where a similar number of barrows are suggested.
- Within the study area, there is bowl barrow approximately 36om east of Bishton Hall, 3.3.3 which survives as a slight mound and surrounding ditch, the latter visible as a cropmark on aerial photographs. It is located on gently sloping ground to the west of the River Trent and is a scheduled monument (COY013). There is a pair of adjacent ring ditches, each with an external diameter of approximately 10m, visible as cropmarks to the west of Hoo Mill (COYo45), and a line of three ring ditches similarly visible to the south-east of Little Ingestre (COYo48). Two of the three aligned ring ditches have external diameters of approximately 8m and 12m, whereas the third has a diameter of approximately 30m. Round barrows and ring ditches more than 30m in diameter are deemed to be 'exceptionally large'. Exceptionally large mounds in lowlying positions such as this one may represent attempts to enhance monument visibility or to expand vistas through the creation of viewing platforms. Some exceptionally large mounds may be Middle Neolithic 'great barrows' 25. There is a sixth ring ditch (COYo51) located between Manor Farm and Coneygreaves Plantation, Ingestre. It has an external diameter of approximately 14.5m and a prominent central

²¹ Lock, G., Spicer, D. and Hollins, W. (2013), Excavations at King's Low and Queen's Low: two Early Bronze Age barrows in Tixall, North Staffordshire, Oxford: Archaeopress., p. 20

²² Garwood (2011), pp. 64-65

²³ Garwood (2007), p. 201

²⁴ Buteux and Chapman (2009), p. 85

²⁵ Garwood (2007), pp. 141-142

feature, presumably a burial pit. Each of these six ring ditches is located on the sand-and-gravel terrace flanking the western side of the River Trent. A circular mound approximately 20m in diameter (COYo65) is contained within Ingestre Wood and may be a Bronze Age round barrow, although it could be a viewing mound associated with the medieval deer park or post-medieval landscape park of Ingestre Hall.

- A round barrow called Queen's Low (COYo76), east of Lower Hanyards Farm on Tixall 3.3.4 Heath, was excavated in 1993 and 1994 by the Stoke-on-Trent Museum Archaeological Society. In the early 20th century, Queen's Low was approximately 20m in diameter and stood approximately 2m high. At the time of excavation, the mound had been ploughed down and survived as a barely perceptible rise in the ground level. Excavations failed to reveal any evidence of an encircling ditch, but they did reveal a partial circuit of kerb stones, which are likely to have fully encircled the barrow when first built. Excavations recovered the disturbed and fragmentary remains of at least six beakers (all presumably residual) and of a minimum of seven Collared Urns, as well as a faience bead. The remains of three cremations were found, only one in a primary context. It contained the remains of an older adult (45 years old or more), and its peripheral location suggests it may have been a secondary burial. The two disturbed cremations were of a sub-adult (less than 18 years old) and an adult (18 years old or more). The sex of the three cremated individuals could not be ascertained²⁶.
- The Stoke-on-Trent Museum Archaeological Society conducted a rescue excavation of a second barrow on Tixall Heath, approximately 190m outside the study area, between 1986 and 1992. Located within Blackheath Covert, King's Low once measured approximately 36.5m in external diameter and 2.7m in height in 1908, but had been reduced to 28m in diameter and 1.2m in height by the time of excavation. Excavation revealed a central primary cremation (of a sub-adult) in a substantially complete collared urn, a probable secondary cremation placed in a second collared urn, and a possible tertiary cremation. The mound was increased in height and diameter at least once in antiquity, and perhaps twice. Eighteen sherds of Later Neolithic Grooved Ware and fragments from a minimum of five Beaker vessels were recovered and derive from pre-barrow activity on the site²⁷. The cropmark remains of a third barrow upon Tixall Heath, known as 'Weetman's Ring Ditch' (COY081), are visible on aerial photographs to the east of Park Farm, Stafford.
- 3.3.6 There is virtually no direct evidence of Early Bronze Age settlement in the West Midlands, and none within the study area. Most of our evidence for Bronze Age activity is cropmark related, and the unenclosed settlements typical of this period tend to produce remains that are too slight to promote cropmark formation. Nevertheless, it has been suggested that ring ditches in river terrace locations may have been sited close to settlement areas²⁸.
- 3.3.7 In the Middle Bronze Age (approximately 1,600BC 1,200BC), round-barrow burial gave way to cremation burial in flat cemeteries, which, once again, tend not to be visible in the cropmark record. Nevertheless, continuity of burial activity is suggested

²⁶ Lock, Spicer and Hollins (2013)

²⁷ Lock, Spicer and Hollins (2013)

²⁸ Garwood (2011), p. 75

at Barton-under-Needwood, in the Trent Valley, where an unanticipated Middle Bronze Age flat cemetery containing 21 urned cremations was encountered during the excavation of a pair of ring ditches²⁹. Similar continuity may perhaps be anticipated elsewhere within the region.

- Targeted survey (principally stream and field walking) within Birmingham and the 3.3.8 Black Country has identified between 40 and 50 burnt mounds. All but one of the radiocarbon dates so far obtained are in the range 1700BC - 1000BC³⁰. A further 21 burnt mounds have been found to date in Staffordshire, one of which has been excavated. Radiocarbon dating suggested the mound was originally created in the Early Bronze Age, but that it seems to have been reused until the Late Bronze Age³¹. It has been argued that within the region, burnt mounds derive from steam bathing, that the burnt mound represents the location of the fire on which the stones were heated, and that a sweat-lodge structure would typically be located up to 10m from the mound and might be indicated by deposits of charcoal-free heat-shattered stones. It has further been hypothesized that contemporary settlement may be anticipated on slightly higher and drier ground, perhaps within approximately 50m of the burnt mound in any direction³². There are no known burnt mounds within the study area, but four have been identified along the Moreton Brook immediately to the south of it. It is possible that systematic and targeted survey would identify similar burnt mounds along the part of Moreton Brook that lies within the study area, within the Trent Valley (where they may be buried beneath alluvial and colluvial deposits), or along the unnamed watercourses at Hopton and Marston/Yarlet.
- 3.3.9 Although no certain evidence of Bronze Age land division is known within the study area, some of the pit alignments visible on the Trent-Valley gravels and described in more detail below could be of Middle or Late Bronze Age date, although are more likely to be of Iron Age or Roman date.

Iron Age 800BC – AD43

- 3.3.10 Eleven certain or probable hillforts have been identified within Staffordshire. Having their origins within the late Bronze Age or Early Iron Age, they are approximately evenly spread across the county³³. Although none is located in or immediately adjacent to the study area, Bury Bank multivallate hillfort is situated approximately 5.5km to the north of the study area, the northern parts of which, at least, may have been within its territory.
- 3.3.11 It is likely that the landscape within the study area was first enclosed during the Iron Age, probably initially by pit alignments and subsequently by means of continuous ditches. Nationally, pit alignments can date to the Neolithic or Bronze Age³⁴. However, in the West Midlands they would appear to have been first constructed in the Middle Iron Age. Excavations at the Trent-Tame confluence, approximately 16km

²⁹ Wardle, C. (2017), The Late Bronze Age and Iron Age in Staffordshire: the torc of the Midlands? in: D. Hurst, ed., Westward on the High-Hilled Plains: The Later Prehistory of the West Midlands, Oxford: Oxbow Books, p. 97

³⁰ Hodder, M. (2017), Burn't mounds and beyond: the later prehistory of Birmingham and the Black Country, in: D. Hurst, ed., Westward on the High-Hilled Plains: The Later Prehistory of the West Midlands, Oxford: Oxbow Books, pp. 29-36

³¹ Wardle (2017), pp. 99-101

³² Hodder (2017), pp. 29-36

³³ Wardle (2017), pp. 101-102

³⁴ English Heritage (2011), *Prehistoric Linear Boundary Earthworks*

south-east of the study area, dated the initial pit alignments to the Middle Iron Age, by means of radiocarbon assay and artefact typologies. Two of the pit alignments marked off the Catholme ceremonial complex of Neolithic and Bronze Age monuments, suggesting that the pit alignments may have fossilized archaeologically invisible earlier boundaries. The pit alignments were replaced by continuous ditches that were maintained into the Early Medieval period. The Iron Age pit alignments typically ran back from, and at right angles to, the River Trent, dividing the landscape into a series of blocks containing a cross-section of the resources available in the landscape: river, adjacent wetland, arable on the well-drained river terrace and valley sides, and pasture and woodland resources on the plateau above³⁵. Two sherds of Middle Iron Age pottery were found in a pit alignment at Wishaw Hall Farm along the M6, at Sutton Coldfield³⁶, and pit alignments at Ling Hall Quarry, Lawford Heath, Warwickshire were clearly dated to the Iron Age³⁷.

- A double pit alignment (COYo48) is visible as a cropmark on aerial photographs to the 3.3.12 east of Ingestre Hall Park. Located on the river terrace flanking the western side of the River Trent. It runs west from the vicinity of Thatchholme Covert towards Lionlodge Covert for approximately 300m, after which it survives as a continuous hollow way for a further 170m. It presumably defined a track or drove-way that ran between the riverside and upland pastures. The need to constrain movement within a bounded corridor may suggest that the river terrace was under arable cultivation at this time. The pit alignment can be seen to run across the top of the cropmark remains of the 'exceptionally large' ring ditch (COYo48), the remains of a round barrow of probable Bronze Age although possible Middle Neolithic date. This indicates both that the pit alignment post-dates the barrow, and that the barrow had been entirely or substantially flattened by the time of the alignment's construction, perhaps due to ploughing. At its eastern end, the pit alignment was subsequently blocked by a probable square barrow, visible as a cropmark (COYo48), which is likely to be of Middle or Late Iron Age date (discussed below). A cropmark complex to the west of Hoo Mill (COYo45), also located on the western terrace of the River Trent, contains a second pit alignment that is approximately 105m long and runs parallel to the River Trent, and a third that runs at right angles to it and is visible for approximately 30m. A fourth pit alignment, incorporating short lengths of a continuous ditch, survives as a crop mark to the south of Park Farm, Stafford, at the northern end of Tixall parish (COY148). Several continuous lengths of field ditches on the terrace flanking the western side of the River Trent in Tixall and Ingestre parishes (COY045 and COY054) are also likely to be of Iron Age or Roman date.
- 3.3.13 Settlement remains become visible in the cropmark record in and around the study area for the first time during the Iron Age, principally because of a move from unenclosed to enclosed settlement at this time. Four such ditched enclosures have been identified within the study area to date, as cropmarks on aerial photographs. Each is likely to be of Iron Age or Roman date. The most southerly (COYo19), measuring approximately 67m by 50m, is located above a deposit of Diamicton to the south of Tolldish Lane, Colwich, approximately 1km to the east of the River Trent. The second (COYo54) measures approximately 110m by 83m externally and is served by a

³⁵ Buteux and Chapman (2009), pp. 102-107

³⁶ Powell et al. (2008), pp. 360

³⁷ Powell et al. (2008), pp. 512

double-ditched trackway, visible as cropmarks approximately 240m south of Lionlodge Covert, Tixall. This second enclosure may have been sited to control a salt spring known to have existed on the site of Lionlodge Covert before it was drained into the River Trent in the early 19th century³⁸. A third, rectangular enclosure measuring approximately 33m by 15m (COYo54), identified by geophysical survey within survey area CA2-1312 (BID-CH-004-002), is located approximately 140m to the north-west of the second one. The fourth and final ditched enclosure of probable Iron Age or Roman date, once again identified by geophysical survey (within survey area CA2-1453), is situated to the south of Park Farm, Stafford, at the northern end of Tixall parish (COY148). The full circuit of the enclosure ditch was not revealed, so accurate dimensions are not known. Nevertheless, it measured at least 38m by 31m externally and contained what would appear to be the remains of a single roundhouse. This fourth enclosure was located adjacent to the pit alignment within COYo81, described above. Each of these four enclosures is similar in size and shape to the two rectilinear enclosures of Iron Age date excavated along the line of the M6 Toll and also an Iron Age enclosure excavated at Fisherwick at the Trent-Tame confluence. At Fisherwick, an enclosure measuring approximately 52m by 42m contained two round houses. Its enclosure ditch yielded Scored Ware pottery of Iron-Age date³⁹.

- There are cropmark remains of two probable Iron Age square barrows (i.e. a square 3.3.14 burial mound within a square-ditched enclosure) within the study area. One lies to the south of Lionlodge Covert and approximately 120m to the north-east of the largest of the three enclosures described above (COYo54), and the other is located at the eastern end of the pit alignment that runs west from Thatchholme Covert (COYo48). The former barrow measures approximately 10m by 10m, whereas the latter, which survives as a partial circuit, measures approximately 9m by 7m. Beyond the study area, a possible third square barrow survives as a cropmark on the northern river terrace of the River Trent at Pipe Ridware. Square barrows are chiefly associated with the Arras Culture that flourished within the tribal territory of the Parisi in East Yorkshire between the 5th century BC and the start of the 1st century BC. More than 1500 square barrows have been identified there through the study of aerial photographs and by means of excavation. They were typically grouped into cemeteries that could contain several hundred barrows, though individual and small clusters of square barrows are known. In East Yorkshire, the earlier square barrows were often fairly irregular in shape and typically measured between 144m² and 225m². Later barrows (as with the two probable barrows identified within the study area) tended to be more regular in shape and measured between 64m² and 121m². Twenty excavated East Yorkshire square barrows have been found to contain chariot burials 40. Whether the Staffordshire square barrows reflect an indigenous rite or are reflective of cultural links with East Yorkshire cannot be known in the absence of excavation. Such links could feasibly have been forged via the River Trent, which debouches into the River Humber opposite Parisian tribal territory.
- 3.3.15 Our knowledge of the Iron Age within the study area and within Staffordshire more widely derives principally from cropmarks. These form most readily and reliably on the

³⁸ Woodhouse, M. (2013), Appendix 2: Pasturefields SAC: Comments on HRA Screening Report, in: Andrews, A., ed., *High Speed Rail: Investing in Britain's Future Consultation on the route from the West Midlands to Manchester, Leeds and beyond: Response by Ingestre with Tixall Parish Council*³⁹ Buteux and Chapman (2009)

⁴⁰ Halkon, P. (2013), *The Parisi: Britons and Romans in Eastern Yorkshire*, Stroud: The History Press, pp. 69-82

well-drained soils that form upon sand and gravel river terraces and above sandstone geology. All of the sites discussed above are located upon such well-drained soils. The cropmark data may be biased against mudstone geologies that are present within the study area to the north of the heathland parishes of Ingestre, Tixall and Hopton, which produce more poorly draining soils. Consequently, there may be archaeological remains above mudstone geologies within the study area that have yet to be detected. Nevertheless, the geophysical survey undertaken within the study area has been performed across various geologies and has confirmed the apparent river valley and heathland focus of Iron Age activity. A valley based settlement pattern is also suggested by the distribution of Iron Age find-spots within the county⁴¹. This suggests a model of valley floor or valley side settlement, with arable cultivation of the light soils at those locations. The heavier soils of the plateaux and more distant interfluves may not have been so readily cultivated using the primitive ploughing technology available (the ard), and there may have been no population pressure to cultivate them. Such areas may have been exploited principally by lowland settlements as seasonal grazing areas and for woodland resources.

3.4 Romano-British AD43 – AD410

- 3.4.1 The Roman army entered what would become Staffordshire in the late 4os AD. They built at least 21 temporary camps within the county. However, seventeen of these are in the west of the county and it may be that they supported efforts to contain and subdue the Welsh tribes rather than the Corieltauvi and Cornovii of Staffordshire.

 There is certainly no historical record of any battles within Staffordshire⁴².
- The camps were supported by a network of military roads. The first to be built is likely to have been Watling Street, which ran from east to west across the southern end of the county, heading to Wroxeter, the tribal centre of the Cornovii. Ryknield Street crossed Watling Street to the east of Wall, heading north-east to Yorkshire and exiting the county at Stretton. A third road runs east to west across the northern part of the county, entering it at Rocester and leaving it west of Chesterton/Holditch. A fourth road is conjectured to run from Penkridge, north through Stafford and Stone⁴³.
- In due course, the temporary camps were replaced by more permanent forts, six of which are known or conjectured within the county. Five of these are located on the network of known military roads (Greensforge, Wall, Penkridge, Rocester and Chesterton/Holditch), while the sixth is at Holly Wood, east of Stone, adjacent to the conjectured road running north through the centre of the county. All military activity within the county is likely to have ceased by the mid 2nd century⁴⁴.
- 3.4.4 With the exception of the fort at Holly Wood and the putative road running north through Stafford and Stone, all of the military structures within the county were distant from the study area, and there is currently no evidence within the archaeological record that military activity and arrangements impacted upon the communities within the study area and upon their economies.

⁴¹ Wardle (2017), pp. 104-106

⁴² Wardle, C. (2002), Roman Staffordshire: the Five Towns and Beyond, West Midlands Regional Research Framework for Archaeology, Seminar 3, pp. 4-5

⁴³ Wardle (2002), pp. 5-6

⁴⁴ Wardle (2002), pp. 6-16

- 3.4.5 Five Roman small towns have been identified within Staffordshire (Greensforge, Wall, Penkridge, Rocester and Chesterton/Holditch) and each originated as a vicus (civilian settlement) attached to a Roman fort⁴⁵. Again, each of these was distant from the study area and had no discernible effect upon it.
- 3.4.6 There are seven definite villa sites (Romanised farmsteads) within Staffordshire, and six are adjacent to Roman roads⁴⁶. It has been suggested that the West Midlands was a 'resource procurement zone' in the Roman period, with its mineral, timber and agricultural resources being exported to supply the army garrisons in Wales and the North⁴⁷. The county's villas, located on the road network, would have been well placed to have engaged in the export trade. Excavations at the Trent-Tame confluence discovered that Iron Age farmsteads engaged in a mixed arable and pastoral economy were replaced by stock enclosures served by a droveway and only ephemeral traces of season occupation. This suggested to its excavators that a cattle ranch had been imposed and was being managed from a distance, possibly from the villa lying to the west of Barton-under-Needwood and Ryknield Street, and that the produce was likely to have been consumed at or traded from Roman Wall⁴⁸.
- The nearest known villa to the study area is at Acton Trussell, approximately 6km from the study area⁴⁹, and there is no indication within the cropmark record that it had any effect on farming practices within the study area. The available evidence suggests that farmsteads within small, single-ditched enclosures (COYo19, COYo54 and COY148) practicing mixed agriculture within the river valleys and exploiting upland grazing and timber resources perhaps on a seasonal basis continued uninterrupted across the period divide between the Iron Age and Roman period.
- Finds of Romano-British artefacts recorded in the Staffordshire HER cluster around 3.4.8 the county's Roman towns and villas, and along the road network. They are spread far more thinly away from these centres of Romanization⁵⁰. The eastern third of the county is thought to have lain within the civitas⁵¹ of the Corieltauvi (formerly known as the Coritani), with the western two thirds (including the study area) lying within that of the Cornovii⁵². The Cornovii would appear to have been far more reluctant to embrace Roman culture than the Corieltauvi: Graham Webster writing about the Cornovii in 1991 recorded that only eight certain villas had been identified in the civitas Cornoviorum at that date 53. Malcolm Todd, on the other hand, writing about the Corieltauvi in the same year, reported 70 known villa sites within the civitas Corieltauvorum⁵⁴. Furthermore, the study area is located approximately 40km from Wroxeter (south-east of Shrewsbury), the civitas capital of the Cornovii, and approximately 60km from Ratae (Leicester), the civitas capital of the Corieltauvi. Given its liminal location in the marches between two civitates, on the edge of a region that had failed to wholeheartedly embrace Romanization, the Romano-British

⁴⁵ Wardle (2002), pp. 6-16

⁴⁶ Wardle (2002), pp. 16-18

⁴⁷ Esmonde Cleary, S. (2011), The Romano-British period: an assessment, in: S. Watt, ed., *The Archaeology of the west midlands: a framework for research*, Oxford: Oxbow Books, pp. 129-132

⁴⁸ Buteux and Chapman (2009), pp. 135-146

⁴⁹ Wardle (2002), pp. 6-8

⁵⁰ Wardle (2002), pp. 23-25

 $^{^{51}}$ A civitas is a Roman term for a city or large town

⁵² Wardle (2002), p. 3

⁵³ Webster, G. (1991), *The Cornovii*, Stroud: Alan Sutton, p. 97

⁵⁴ Todd, M. (1991), The Coritani, Stroud: Alan Sutton, 84

residents within the study area may have had neither the desire nor the compulsion to engage with the market economy to more than a minimal degree and adopt a Romanized way of life.

3.5 Early medieval AD410 – AD1066

- 3.5.1 Written documents, such as charters and the Tribal Hidage, a 7th or 8th century Mercian or Northumbrian tribute list, suggest that at the end of the Roman period, political power fragmented into numerous small, often warring, British and Anglo-Saxon political units⁵⁵. One such small political unit (or a component part thereof) may have comprised the Ridwares (Mavesyn, Hill, Pipe and Hamstall), along with Yoxall⁵⁶, located on the north bank of the River Trent within the Fradley to Colton area (CA1), approximately 2.5km to the south of the study area.
- During the 7th and 8th centuries, these small political units were formed into a smaller number of larger kingdoms, the most powerful of which were Northumbria, Mercia and Wessex. The Tribal Hidage references a territory called 'Original Mercia', that is the heartland of the Mercian kingdom before it expanded under Penda and Offa in the 7th and 8th centuries respectively. Staffordshire probably formed the core of Original Mercia, and is likely to have done so since the late 6th or early 7th century⁵⁷.
- Despite Staffordshire's early incorporation into the Anglian kingdom of Mercia, it may 3.5.3 well have remained culturally British until the late 7th century⁵⁸. The evidence for this is primarily the small number and peripheral location of pagan cemeteries within the county (the Mercian royalty adopted Christianity after 658). Thus, there is a small group of pre-Christian burial sites on the limestone uplands of north-eastern Staffordshire, and another at Stapenhill, Wychnor and Catholme in the Trent Valley. These are generally viewed as the most westerly manifestations of the early medieval pre-Christian archaeology of the East Midlands, and do not provide evidence of the English penetration of the West Midlands⁵⁹. A second strand of evidence is the absence of sunken-featured buildings (ancillary buildings with a floor suspended above a sub-rectangular pit; a highly visible and diagnostically Anglo Saxon settlement feature) within the cropmark evidence on the river terraces of the River Trent, with the absence of the settlement excavated at Catholme (discussed below), which lay in an equally peripheral location. Place-names such as Ridware, which include Brittonic and Old English elements, namely 'Rid' (from Rhyd: ford) and 'ware' (dwellers) respectively, indicate the co-existence of English- and British-speaking communities within 2.5km of the study area 60, and perhaps date to a period of cultural mixing in or around the late 7th century.

⁵⁵ Basset, S. (1989), In search of the origins of Anglo-Saxon kingdoms, in: S. Bassett, ed., *The Origins of the Anglo-Saxon Kingdoms*, London: Leicester University Press, pp. 3-27

⁵⁶ Palliser, D.M. (1976), *The Staffordshire Landscape*, London: Hodder and Stoughton, pp. 56-57

⁵⁷ Brooks, N. (1989), The formation of the Mercian kingdom, in: S. Bassett, ed., *The Origins of the Anglo-Saxon Kingdoms*, London: Leicester University Press, pp. 159-170; Gelling, M. (1992), *The West Midlands in the Early Middle Ages*, London: Leicester University Press, pp. 78-79; Yorke, B. (2001), The Origins of Mercia, in: M.P. Brown and C.A. Farr, eds, Mercia, an Anglo-Saxon Kingdom in Europe, London: Leicester University Press, pp. 18-19

⁵⁸ Yorke (2001), p. 21

⁵⁹ Gelling (1992), pp. 29-30

⁶⁰ Gelling (1992), p. 61

- After peaking during the Late Roman period, population declined during the $\mathbf{5}^{\text{th}}$ and 3.5.4 6th centuries ⁶¹. Nevertheless, although there was some regeneration of woodland and reversion of arable to pasture, environmental evidence suggests there was no dramatic change in land use during the Early Saxon period 62.
- The Early Saxon (approximately 410 650) settlement pattern would almost 3.5.5 everywhere appear to have been dispersed, with individual settlements comprising single farmsteads or hamlets. These settlements would appear to have 'drifted', that is shifted their locations over time, and to have shown a preference for lighter, welldrained soils, such as river terrace deposits, possibly because the primitive ploughs (ards) then available were incapable of working heavier clays⁶³. No Early Saxon settlements have been identified within the study area, but one has been excavated at Catholme, at the Trent-Tame confluence, on river terrace deposits. Sixty-five buildings, including 13 sunken-featured buildings, were excavated, and likely comprised approximately six farmsteads in existence at any one time, each within a ditched enclosure. The settlement existed from at least the early 7th until the late 9th century. A concentration of Late Roman pottery and the 6th century pagan cemetery at Wychnor to the south suggest Roman origins for the hamlet, which drifted northwards during the Early Medieval period⁶⁴.
- During the Middle Saxon period (approximately 650 850), it is conjectured that 3.5.6 settlements were subsumed into multiple estates, comprising a principal manor ('caput'), with a penumbra of dependent, specialist settlements 65. Multiple estates were served by minster churches. The composition of any such estates within the study area is unknown. Multiple estates progressively fractured into the manors of Domesday during the Middle and Late Saxon periods (approximately 850 - 1066). These manors were typically coextensive with a townships or a part thereof. Also during the Middle and Late Saxon periods, individual settlements became fixed in the landscape (they ceased to drift), and a dispersed settlement pattern was, to a greater or lesser degree, replaced by a nucleated one. Settlement expanded onto the heavier soils on the plateaux and interfluves, made possible by the introduction of the heavy mouldboard plough in the Middle or Late Saxon period 66. Domesday Book, which was compiled in 1086 but comprises a record of Late Saxon society, records proto-manors at Moreton, Great Haywood, Hixon, Ingestre, Tixall, Hopton, Enson, and Marston, that are in virtually all the civil parishes crossed by the study area. The manor of Ingestre contained a part share of a water mill in 1086, while the manor of Great Haywood contained a whole water mill.
- Fields in the Early and Middle Saxon periods had tended to be enclosed with ditches, 3.5.7 banks or hedges and were of varying sizes and configurations ⁶⁷. During the Middle

⁶¹ Williamson, T. (2013), Environment, Society and Landscape in Early Medieval England: Time and Topography, Woodbridge: The Boydell Press, pp.

⁶² Dark, P. (2000), *The Environment of Britain in the First Millennium AD*, London: Duckworth pp. 130-156

⁶³ Hooke, D. (1998), The Landscape of Anglo-Saxon England, London: Leicester University Press, pp. 106-107; Hills, C. (2009), Early Historic Britain, in: J. Hunter and I. Ralston, eds., The Archaeology of Britain: An Introduction from Earliest times to the Twenty-First Century, London: Routledge, pp. 219–240; Williamson (2013), p. 13 ⁶⁴ Buteux and Chapman (2009), pp. 150-158

⁶⁵ Jones, G.R.J. (1979), Multiple Estates and Early Settlement, in: P. H. Sawyer, ed., English Medieval Settlement, London: Edward Arnold, pp. 9-34; Hooke, D. (2011), The post-Roman and the early medieval periods in the west midlands: a potential archaeological agenda, in: S. Watt, ed., The

Archaeology of the West Midlands: A Framework for Research, Oxford: Oxbow Books, pp. 61-63

66 Hamerow, H. (2014), Rural Settlements and Society in Anglo-Saxon England, Oxford: Oxford University Press, pp. 147-149; Williamson (2013), pp. 16-18

⁶⁷ Hooke (1998), p. 115

and Late Saxon periods these were progressively replaced by open fields farmed communally across much of the country including south-eastern and central Staffordshire ⁶⁸. The chronology of the adoption of open-field agriculture, how it related to settlement nucleation and the extent to which open-field agriculture coexisted with enclosed field systems during the Early Medieval period within the study area is not known.

In 874, moving up the River Trent and its tributaries from their base at Repton in Derbyshire, the invading Danes overran the heartland of Mercia and the independent Kingdom of Mercia soon ceased to exist⁶⁹. The study area lay on the frontier of the Danelaw in the early 10th century. Aethelflaed, 'Lady of the Mercians' and eldest daughter of Alfred the Great, had a fortified burh built at Stafford in 913. It was located on a promontory surrounded by marshes in a bend of the River Sow, and was presumably intended to hold the central lowlands of Staffordshire against a Danish thrust along the River Trent and River Sow⁷⁰. It would appear to have achieved its objective, because there are no Scandinavian place names within the study area⁷¹.

3.6 Medieval AD1066 – AD1540

- 3.6.1 The medieval period divides naturally into two halves. From the 11th until the mid 14thcentury, the population of the country doubled or trebled and existing settlements expanded and new ones were formed; with much woodland and waste being brought into agricultural production. From 1348 to approximately 1520, repeated outbreaks of bubonic plague reduced the population of England by a third or a half, which precipitated social and economic changes that caused the economically and socially weaker settlements to shrink and some to become deserted.
- Medieval and post-medieval England are typically divided into two broad character 3.6.2 areas by landscape historians: champion and woodland. Champion landscapes predominated across a strip of country running north-east from Somerset to County Durham, including the East Midlands. Woodland landscapes predominated in the east and west of the country, including the West Midlands. In champion landscapes, each parish usually contained a single settlement, typically a nucleated village, and all or the vast majority of the agricultural land in the parish was divided into two or three large open fields, farmed communally. Farmhouses in champion regions were usually located within the village, rather than amongst the fields. There was typically little woodland and permanent pasture, and beasts, principally used for traction, grazed upon whichever of the two or three open fields was lying fallow that year. In woodland landscapes, there was frequently more than one settlement in any parish. Open-field agriculture was also practiced in woodland landscapes too, and there is evidence that a two- or three-field communal system was practiced throughout Staffordshire, but it may be the case that separate systems operated in parishes that contained multiple settlements, and it is likely that open-field agricultural systems operated beside enclosed fields that were farmed individually. Woodland landscapes typically contained reserves of pasture and woodland that could be brought into agricultural use as the population expanded, and they contained a much higher incidence of

⁶⁸ Hooke (2011), pp. 163-164

⁶⁹ Palliser (1976), p. 49

⁷⁰ Palliser (1976), p. 50; Zaluckyj, S. (2001), Mercia: The Anglo-Saxon Kingdom of Central England, Logaston: Logaston Press, pp. 214-216

⁷¹ Horovitz, D. (2005), *The Place-Names of Staffordshire*, Brewood: David Horovitz

moats than champion districts. Woodland landscapes also had a higher incidence of deer parks and rural industry than champion ones. The Staffordshire landscape in general was a woodland landscape⁷². However, settlements within the south-east of the county and the Trent Valley exhibited many of the characteristics of those within champion districts⁷³. The form of the settlements within and around the study area during the medieval period has been somewhat obscured by late-medieval or early post-medieval settlement contraction and by the social and economic strategies of the post-medieval country estates at Ingestre, Tixall and Shugborough. The communities through which the route passes will be discussed from south to north, below.

- 3.6.3 During this period, rural resources were exploited, surpluses were extracted and elites were maintained by means of the manorial system. Manors comprised broadly selfsufficient estates that were coextensive with parishes, or with a part thereof. Some of the land of the manor was retained by the lord for his own use (demesne land); most of the remaining land was shared out to tenant farmers in return for rents or labour services on the lord's demesne. Domesday⁷⁴ records two small manors at Moreton, at the southern end of the study area. One contained land for two ploughs, approximately 0.01km² (two acres) of meadow and six peasant households. The other was similarly sized: it contained land for two ploughs, and four peasant households. Although Domesday documents the resources of manors, it gives no indication as to the forms and locations of settlements present within them. It is difficult to ascertain these for Moreton, because the settlement was deserted some time before 1679^{75} . However, it may be noted that there are two surviving, isolated, post-medieval farmsteads at Moreton that include the Moreton place-name within the farm name: Moreton Farm (COYoo8 - to the east of Moreton House), and Upper Moreton Farm (COYoo2), approximately 900m to the south. Given that there were two manors at the time of Domesday and that each was small, it is possible that these two farms are on the site of two medieval hamlets and that they are, technically shrunken, rather than deserted, settlements. A square earthwork platform approximately 50m across, surrounded by a flat-bottomed moat or ditch approximately 10m wide (COY009), located approximately 200m to the north-east of Moreton Farm (COY008), may be the location of the medieval manor of one of the Moreton settlements. A barn is depicted here on the Ordnance Survey surveyor's drawing of 1832, but had been demolished by the first published large-scale map edition of 1881.
- 3.6.4 The Domesday manor of Haywood (Great and Little) contained land for 10 ploughs, approximately 0.02km² (six acres) of meadow, woodland, 14 peasant households and a water mill. If each peasant household is assumed to have contained an average of five people, the population of the manor of Haywood is already approximated to be 70 in 1086. The manor of Haywood also included three dependent, outlying estates (berewicks), at Hixon, Wolseley and Fradswell⁷⁶.

⁷² Rackham, O. (1986), *The History of the Countryside*, London: Dent, pp. 4-5; Dyer, C. (2000), Woodlands and Wood-Pasture in Western England, in: J. Thirsk, ed., *The English Rural Landscape*, Oxford: Oxford University Press, pp. 97-99; Roberts, B.K. and Wrathmell, S. (2000), *An Atlas of Rural Settlement in England*, London: English Heritage, pp. 55-56

⁷³ Palliser (1976), pp. 76-77

⁷⁴ Williams, A. and Martin, G.H. (1992), *Domesday Book: A Complete Translation.*, London: Penguin, pp. 675 and 687

⁷⁵ Palliser (1976), p. 82

⁷⁶ Williams and Martin (1992), p. 675

- A single manor is recorded in Domesday Book at Ingestre. It contained land for four ploughs, nine acres of meadow, woodland and a part share of a water mill (COYo44). It also contained 11 peasant households. The medieval manor house is believed to have been situated on the site of the later Jacobean Ingestre Hall⁷⁷. The medieval manor was served by a chapel of ease (Ingestre lay within the ancient parish of St Mary, Stafford). Its location is not known, but it is thought to have lain to the west of Ingestre Hall, upon The Mounts⁷⁸. Alternatively, it may have lain within Church Field, which lies to the south of The Mounts and is crossed by the Proposed Scheme. If so, it is not visible in the cropmark record. Being a chapel of ease, it is unlikely to have had a burial ground.
- In addition to the chapel of ease, there was a healing well dedicated to St Erasmus at 3.6.6 Ingestre, which was served by its own priest and chapel. This second chapel was built in the reign of Henry VII (1485-1509), and was dissolved in 1547. The location of the chapel and well is unknown. On the assumption that the spring that charged the well was a salt spring, it has recently been suggested that St Erasmus' Well and Chapel may have been located on the site of Lionlodge Covert⁷⁹, which will be truncated by the Proposed Scheme. A brine spring is known to have arisen at this location before it was drained into the River Trent in the 19th century, and fields at this location are named Great Salt Clod, Rough Salt Clod and Little Salt Clod on Yates' 1789 Map of Ingestre Estate⁸⁰. Walter Chetwynd, writing in 1680, also thought the spring was salt and suggested its location was "on the waste of Ingestre", wherever that may have been⁸¹. However, Robert Plot, writing in 1686, described how the spring was tested and was found to have "no very eminent either smell or tast (sic)"82. This would seem to indicate that it was a freshwater spring and so was located elsewhere. Plot placed the well "in the grounds of the Worshipful Walter Chetwynd Esq." 83. Before 1803, the landscape park and pleasure gardens of the Chetwynds (which arguably comprised the grounds) lay entirely to the north of Ingestre Hall, outside the land required for the Proposed Scheme. Only further fieldwork has the potential to identify the true location of St Erasmus' Well and Chapel.
- 3.6.7 The medieval Manor of Ingestre included a deer park (COY146). Morden's 1695 Map of Staffordshire depicts the deer park as lying to the north of Ingestre Hall, and running north to the edge of Hopton Heath and Weston. The deer park thus depicted lies outside the land required for the Proposed Scheme. The first documentary reference to the deer park at Ingestre dates to 1417, but the park is likely to have been laid out in the 13th or 14th century, the heyday of the Staffordshire medieval deer park⁸⁴.
- 3.6.8 The modern village of Ingestre (COYo52) comprises a group of Victorian buildings on the west side of the road running up towards Ingestre Hall. It is peripheral to Ingestre Hall Park, contains only late buildings and lies approximately 800m from the putative location of the medieval chapel of ease (COYo62). As such, it has many of the

⁷⁷ Andrews, A. (2013), A Short History of Ingestre, Tixall: Hanyards Press, p.8

⁷⁸ Andrews (2013), p. 63

⁷⁹ Woodhouse (2013), p. 5

⁸⁰ Woodhouse (2013), p. 5

⁸¹ Chetwynd-Stapylton, H. E. (1892), The Chetwynds of Ingestre, being a history of that family from a very early date, London: Longmans, Green, and Co., pp. 133-134

⁸² Plot, R. (1686), The Natural History of Stafford-shire, Oxford, p. 99

⁸³ Plot (1686), p. 99

⁸⁴ Cantor, L.M. (1962), The medieval deer-parks of north Staffordshire, in NSJFS Vol. II, p. 77

characteristics of an estate village, and it has been proposed that the original village lay in Town Field, to the west⁸⁵. If so, its remains are not visible in the cropmark record.

- 3.6.9 There were two Domesday manors at Tixall. One was held by Henry de Ferrers of Earl Roger and had land for four ploughs, approximately o.o1km² (two acres) of meadow, woodland and one peasant household. The other was held by Hugh of Robert of Stafford and comprised land for six ploughs, approximately o.o2km² (six acres) of meadow, woodland, and contained nine peasant households and three slaves. By 1166/1167, Tixall was held by the de Wasteney family, and came into the hands of the Astons, through marriage, in 1481. The Aston family would build the Tudor Hall, Gatehouse (COYo7o) and the Georgian Hall. The medieval manor house is likely to have been on the same site as these and lies outside of the study area.
- 3.6.10 The medieval Manor of Tixall also included a deer park (COY149). Morden's 1695 Map of Staffordshire depicts it lying immediately to the south of Ingestre Deer Park, a short distance to the north-west of Tixall Hall, which lay just outside the park pale. The earliest documentary reference to Tixall Deer Park dates to 1497⁸⁶. However, the place-name Hanyards, which survives today in the names of a road (Hanyards Lane) and of two farmsteads (Upper and Lower Hanyards) and which is often applied to breaks in earthworks and entrances to parks, here Tixall Deer Park, is first referenced in a document of approximately 1220⁸⁷. The northern part of the former Tixall Deer Park is now enclosed agricultural land. Upper Hanyards Farm (COY077), which is of post-medieval construction, lies within the land required for the Proposed Scheme.
- 3.6.11 At the time of Domesday, the manor at Hopton comprised land for six ploughs, approximately 0.02km² (four acres) of meadow, scrubland, 10 peasant households and two slaves. There was also a single manor at Marston. It contained land for 10 ploughs and approximately 0.05km² (12 acres) of meadow. It contained four peasant households and two slaves. Eighteen burgesses in Stafford were also attached to this manor. The settlement at Marston was subsequently deserted, presumably in the late medieval or early post-medieval period, presumably because of the changed economic and social conditions consequent upon the Black Death of 1348 and subsequent outbreaks of bubonic plague.
- The earthwork remains of possible house platforms, an eroded moat, fish pond and hollow ways and an extensive area of broad ridge and furrow earthworks likely to be of medieval date survive principally to the east, but also to the west of Marston Lane (COY130). Marston was a chapelry in the parish of St Mary, Stafford during this period; and remains so today. That being the case, the medieval residents of Marston would likely have been buried at Stafford, and not within the village. At Hopton, a possible building platform (COY095) and a sub-rectangular parcel of land containing numerous faint earthworks (COY097) may be evidence of late-medieval or early post-medieval settlement contraction.

⁸⁵ Horovitz (2005), p. 335

⁸⁶ Cantor (1962), p. 76

⁸⁷ Horovitz (2005), p. 298

- 3.6.13 The manor at Yarlet comprised land for six ploughs and approximately 0.02km² (five acres) of meadow in 1086. There were eight peasant households and two slaves⁸⁸. The manor was granted to the monastery of Combermere (Cheshire) in the reign of Henry II (1154 1189) and was depopulated and turned into a monastic grange (outlying farm worked by lay brethren)⁸⁹. A hollow way, banks and upstanding ridge and furrow visible around and particularly to the north of Yarlet Hall (COY137), which were particularly visible in 2003 but less so by 2010, are likely to be the remains of the 12th century settlement. A land boundary forming an oval around Yarlet Hill (COY142), still very much visible in the landscape today, may well originally have defined the extent of the medieval grange.
- 3.6.14 Open-field agriculture was practiced during the medieval period in all parts of Staffordshire, initially on a two- and from the 13th century a three-field rotation⁹⁰. Ridge-and-furrow earthworks of probable medieval date that are likely to be indicative of open-field agriculture survive widely within the study area principally as cropmarks, including within the probable moated site to the west of Moreton Farm (COYoog), within Ingestre Park Golf Club golf course (COYo53), as earthworks in pasture in the Sow Valley between Shugborough and Tixall (COYo68), at Hopton (COY092, COY094, COY103, COY105, COY106 and COY121), at Marston (COY128, COY130, COY131 and COY135), and at Yarlet (COY137 and COY141). In the latermedieval period (after 1348), population reduction led to wage increases and a drop in grain prices. This led to a gradual change from arable to pastoral farming and, with it, the piecemeal enclosure of the open fields⁹¹. Some of the cropmarks visible on aerial photographs within the study area that are indicative of enclosed field systems may be of late-medieval date, including those at Ingestre (COYo51, COYo53), and Tixall (COYo66).

3.7 Post-medieval AD1540 – AD1901

A battle was fought upon Hopton Heath on 19th March 1643, during the English Civil 3.7.1 War between the forces of the King and those of Parliament. The Royalist position in Staffordshire was of such concern to King Charles I that he dispatched the Earl of Northampton north from Banbury to retrieve the situation. After failing to take Lichfield, Northampton joined with the North Midland forces of Colonel-General Henry Hastings and together they secured Stafford. Fresh from his victory at Lichfield, the Parliamentarian commander, Sir John Gell, marched north with the aim of capturing the county town. The two armies met on Hopton Heath. The Royalist forces comprised some 1,200 men, nearly all mounted troops. The Parliamentarian army was 1,500 men strong and was a more balanced force of horse and foot. The battle was fought in the middle of the afternoon and ended only at nightfall. Although the Earl of Northampton was killed, the Royalists had the better of the encounter. Beyond saving Stafford for the Royalist cause and facilitating the subsequent recapture of Lichfield, the Battle of Hopton Heath was not of great strategic importance. William Yates' 1775 Map of Staffordshire and an unsigned, possibly 17th century plan of the battlefield locality indicate that the landscape in 1643 was one of heathland with birch scrub but

⁸⁸ Williams and Martin (1992), p. 678

⁸⁹ Palliser (1976), pp. 73-74

⁹⁰ Phillips A.D.M. and Phillips C.B. (2011), An Historical Atlas of Staffordshire, Manchester: Manchester University Press, p. 44

⁹¹ Phillips and Phillips (2011), pp. 44-45

with enclosed grazing land around the present-day Heathyards⁹². The land was enclosed and improved in the 18th century, and a Ministry of Defence (MoD) depot was constructed upon the southern part of the Registered Battlefield in the 20th century.

- 3.7.2 A number of country house estates were developed within and around the study area during this period. The finest of these is the Grade I listed Shugborough Hall (COYo35) and its Grade I Registered Park and Garden (COYo34), which contains a wealth of designated parkland and garden structures (COYo34 and COYo36). See section 4.2, below, for a fuller description and discussion of these heritage assets.
- 3.7.3 Bishton Hall (COYo12) was rebuilt in approximately 1770 by the banker John Sparrow, and was extended in the 19th century. Its garden and garden structures are described and discussed in section 5.2, below.
- Ingestre Hall (COYo63) was built in approximately 1638, probably on the site of the medieval manor house. Its south front is described by Pevsner as "the foremost display of Jacobean grandeur in the county" The original Jacobean north front was replaced by a classical façade, designed by the Wren office, in the late 17th century A. The classical façade was in turn replaced by a Jacobean façade designed by Nash, in 1808 1810. The Hall was restored by John Birch after it was gutted by a fire in 1882. The Grade I listed Church of St Mary, Ingestre (COYo62) built on a new site to a design by Christopher Wren in 1676, lies to the east of the Hall, and is the only Wren church outside London. The 18th century Orangery (COYo59) and Old Stables (COYo60), and the 19th century New Stables (COYo58), each listed at Grade II, complete the ensemble of buildings at the heart of the Ingestre Estate. Ingestre Hall Park (COY144) and Ingestre New Park (COY145) are described and discussed in section 5.2, below.
- In 1555, Sir Edward Aston built a half-timbered Hall at Tixall, in Tudor style. In 3.7.5 approximately 1580, his son, Sir Walter Aston, added a fine stone gatehouse (COY070) in Elizabethan style in front of and to the south of the Hall. Mary Queen of Scots was imprisoned in Tixall Hall or Gatehouse in September 1585, while her guarters at Chartley were being searched upon the discovery of the Babington Plot⁹⁵. The Hall and Gatehouse are depicted in an engraving by Michael Burghers included in Robert Plot's Natural History of Staffordshire of 1686⁹⁶. The roof of the Tixall Gatehouse is paved with flagstones, an indication that it was used to take the views of the surrounding landscape 97. The gatehouse survives and is listed at Grade I; it was acquired and restored by the Landmark Trust in 1977 and is let by them. The Tudor Hall was superseded by a Georgian Hall built a short distance to the east and completed in the 1770s, by Thomas Clifford. The Tudor Hall was partially demolished during the 18th century, but survived as a roofless ruin in a 19th century print of the Georgian mansion⁹⁸. When Thomas Aston Clifford Constable consolidated his estates in Yorkshire, Tixall Hall was sold to Earl Talbot of Ingestre in 1845 and rented out. It

⁹² English Heritage (1995), English Heritage Battlefield Report: Hopton Heath 1643

⁹³ Pevsner, N. (1974), The Buildings of England: Staffordshire, Harmondsworth: Penguin, p. 154

⁹⁴ Pevsner (1974), p. 154

⁹⁵ Landmark Trust, The (2013), Tixall Gatehouse: History Album, p. 5

⁹⁶ Plot (1686)

⁹⁷ Mowl, T. and Barre, D. (2009), *The Historic Gardens of England: Staffordshire*, Bristol: Redcliffe, p. 26

⁹⁸ Landmark Trust (2013), p. 36

was demolished in 1927. Today, there are no above-ground remains of either the Tudor or the Georgian Hall.

- 3.7.6 After the dissolution of Combermere Priory in 1538 and the subsequent sale or grant of its assets, Yarlet Hall (COY138) was established upon Yarlet Hill in the 17th century. The Hall is depicted on the 1816 Ordnance Survey surveyor's drawing at a location marked today by earthwork platforms and a possible banked defensive enclosure. The 17th century Hall was replaced in 1870 by the building now used as Yarlet School.
- 3.7.7 During this period, the landscape of the study area was enclosed and its associated dispersed farmsteads were either established afresh, or they were rebuilt. Staffordshire's open fields were, overall, enclosed early and piecemeal, whereby consolidated land holdings were achieved through exchange and purchase rather than by Parliamentary Act. When Celia Fiennes journeyed from Stafford to Ingestre Hall in 1698, after crossing the River Sow at St Thomas Bridge to track along the valley side before passing between Tixall and Ingestre landscape parks, she observed that the countryside around was mostly enclosed 99. Cropmark remains of a post-medieval piecemeal enclosure landscape survive within the Ingestre Park Golf Club golf course (COYo53) and within Tixall Park (COYo66) and may be amongst the enclosures observed by Celia Fiennes.
- 3.7.8 The chronology of the piecemeal enclosure of Staffordshire and, with it, the study area is imperfectly understood. Nevertheless, in 1686, Robert Plot thought that a third of the county was woodland or waste, whereas an analysis of Yates' 1775 Map of Staffordshire has indicated that 15.6% of the county was waste, forest, woodland or parks. This would suggest that more waste and woodland was reclaimed in this period of approximately 90 years than in the whole period of enclosure by Parliamentary Act¹⁰⁰. Some open fields remained to be enclosed by means of planned enclosure in the 18th or 19th centuries, such as those at Whitgreave, enclosed in 1774. Elsewhere, most planned enclosure was of heathland, such as Tixall Heath, enclosed by an Act of Parliament in 1749, and Hopton Heath, enclosed between 1770 and 1778.
- 3.7.9 The post-medieval period was a time of agricultural improvement. Throughout the study area to the east of the River Trent and to the north-west of Hopton, away from the river terraces and heathland parishes, the remains of marl pits survive as ponds or shallow depressions. Marling involved digging pits through the relatively acidic topsoil down to alkaline subsoil, which was extracted and spread upon arable fields to reduce acidity and increase fertility. Marling had a long history, but was perhaps practiced most during the 18th century¹⁰¹.
- 3.7.10 A second type of agricultural improvement, the water meadow, was common in Staffordshire. The date of their introduction to the county is not known, but they are likely to have flourished primarily in the 18th and 19th centuries. Various water meadow systems operated across the country but in Staffordshire the 'bedwork' system would appear to have predominated. In this system, a leat ('main carrier') taken off a watercourse some distance upstream fed water into channels ('carriers') that ran along the tops of parallel ridges. The water overtopped the drains and flowed

⁹⁹ Morris, C., ed. (1947), The Journeys of Celia Fiennes, London: The Cresset Press, p. 174

Welch, C. (2003), Early Post-medieval Staffordshire, West Midlands Regional Research Framework for Archaeology, Seminar 6, p. 3

¹⁰¹ Williamson, T. (2002), The Transformation of Rural England: Farming and the Landscape 1700 - 1870, Exeter: University of Exeter Press, p. 67

continuously down the sides of the ridges ('panes') into drains in the corresponding furrows, which returned it to the river. The artificial inundation of grassland by these means with continuously flowing water during winter raised the ground temperature sufficiently to stimulate an early growth of grass, which reduced the need for winter fodder. Furthermore, once the flocks had moved onto summer pastures in May, supplementary irrigation could produce substantial secondary hay crops in June or July¹⁰².

- 3.7.11 Within the study area, there are extensive remains of water meadows within the Trent Valley to the north of Great Haywood (COYo46). Within the land required for the Proposed Scheme, well-preserved earthwork remains of main carrier drains and ridges survive to the south-west and west of Hoo Mill Lock and Bridge (COYo42). More eroded earthworks survive to the west and vestigial earthworks to the southwest, of Great Haywood Marina. A second water meadow (COY132) that lies partially within the study area to the west of Marston survives as vestigial earthworks.
- As trade and industry expanded during the 18th century, a network of canals was built 3.7.12 to reduce the cost of transporting raw materials, such as coal, flint and clay, to manufacturing centres, such as the North Staffordshire Potteries, and to reduce the cost of transporting finished goods to market. The Trent and Mersey Canal (COYo₃₇), designed by James Brindley, was supported by Josiah Wedgewood, as well as salt producers in Cheshire, brewers in Burton upon Trent, iron and coal merchants in Staffordshire and cheesemongers in Derbyshire, Staffordshire and Cheshire 103. It was authorised in 1766 and it opened in 1777. It links the River Trent at Derwent Mouth (Derbyshire) to the River Mersey, via the Bridgewater Canal, which it joins at Preston Brook, in Cheshire. Several contemporary canal locks, lock-keepers' cottages, bridges and mileposts survive within the study area (COY037, COY038, COY039, COY042 and COYo43), each designated at Grade II. The Staffordshire and Worcestershire Canal (COYo4o) was the second component of Brindley's Grand Cross design for canals linking the Mersey with the Thames and the Trent with the Severn, and ran from Great Haywood to Stourport on Severn in Worcestershire. It received its Act of Parliament in 1766, the same day as the Trent and Mersey Canal. In addition to the canal itself, Bridge 109 (COY040), which is listed at Grade II and is also a scheduled monument, is the only canal structure within the 500m study area.
- 3.7.13 Turnpike roads were an alternative means of freight and passenger transport to the canal. The A51 Lichfield Road where crossed by the Proposed Scheme at Great Haywood follows the line of the Lichfield to Stone turnpike, sanctioned under an Act of Parliament in 1729, although it retains little of its historic character. A former toll house survives at the junction of the A51 Lichfield Road and Tolldish Lane at Great Haywood, though it is much extended and hardly recognisable as such¹⁰⁴.
- 3.7.14 Railways superseded canals in Victorian Britain. The North Staffordshire Railway (COYo31), which was opened in 1848 to serve the potteries and which runs south along the River Trent connected to the Trent Valley Line at Colwich, is crossed by the Proposed Scheme at Great Haywood. The Trent Valley Line, which was built in 1845 -

¹⁰² Williamson (2002), p. 59; Breeze, P., Challis, K. and Kincey, M. (2008), Staffordshire Water Meadows Survey, pp. 6-9

¹⁰³ Lindsay, J. (1979), *The Trent and Mersey Canal*, London: David & Charles, p. 11

Jenkinson, T. and Taylor, P. (2014), *The Toll-houses of Staffordshire*, Ipswich: Polystar Press, p. 79

1847, also runs through the study area, running past Bishton Hall and through Shugborough Park. The line of the former Stafford and Uttoxeter Railway, which opened in 1867 and was built to transport cattle from Wales to the East Midlands, is crossed at Hopton. The line was only 21km (13 miles) long. Passenger services closed by the 1930s and freight services had ceased by 1951.

3.8 Modern AD1901 – present

- 3.8.1 Several of Staffordshire's country houses ceased to be domestic residences during the 20th century. Within the study area, the Shugborough Estate was granted to the nation in lieu of death duties in 1966, albeit the 6th Earl of Lichfield still uses a private apartment there. Tixall Hall was demolished in 1927 and Ingestre Estate was sold by the 21st Early of Shrewsbury in 1960. Ingestre Hall and some of the grounds, is now owned by Sandwell Metropolitan Borough Council and is used as a residential arts centre. Moreton House (COY006), now known as Mayfield Children's Home, is a home for autistic children that attend Rugeley School. Yarlet Hall (COY140), built as a private residence in 1870, is now an independent preparatory school, known as Yarlet School.
- 3.8.2 Staffordshire re-established its relationship with military matters during the modern period. MOD Stafford (COY113) originated as Royal Air Force (RAF) Stafford in the 1930s. It was originally the home of No. 16 Maintenance Unit, and became home to No. 2 Mechanical Transport Squadron in 1958. RAF Stafford officially ceased to be an RAF station on 31 March 2006 and became Beacon Barracks. RAF Stafford contained at least nine semi-sunken pre-cast concrete air raid shelters with earth mound coverings, which are thought to have been built in 1939. They have now been demolished but six of them were recorded by means of archaeological building survey pre-demolition.
- There was a Second World War firing range (COY114) near Brick House Farm, to the 3.8.3 north-east of Staffordshire University, which survives only as five parallel earthwork banks visible on aerial photographs and identified by the National Mapping Programme (NMP). The NMP has also identified a former Second World War military depot visible on aerial photographs in the northern estate grounds of Ingestre Hall. The site consisted of a circuit of roads, some of which appear to have been constructed for the depot and others which may have been modified from existing driveways to Ingestre Hall. Numerous military buildings were dispersed along the roadside or adjacent to the present-day Birch Hall. The 1945 vertical photography displays hundreds of military vehicles parked in the grounds, suggesting this to be a vehicle depot, possibly for the sale or break-up of the vehicles in the post-war period. Most of the roads are present on the latest 2010 vertical photographs, but only a few buildings are visible. The land required for the Proposed Scheme crosses one of the surviving military roads, which now provides access to Park Farm, Stafford and Deer Park Farm, Tixall. It also contains the site of a Second World War military building measuring approximately 15m by 8m, which has since been demolished and the site returned to agricultural use.
- 3.8.4 Historic map regression shows that Great Haywood extended outwards beyond its historic core during the 1960s, as did Hopton, although on a smaller scale, during the 1970s and 1980s. Stafford expanded outwards towards Hopton from the 1950s. Most

- other settlements within the study area have seen lower levels of post-war expansion and retain their erstwhile rural character.
- 3.8.5 In the middle and later years of the 20th century, the increased mechanisation of farming led to the amalgamation of many previously small fields and the consequential loss of historic hedgerows and landscape character, particularly within the civil parishes of Ingestre, Tixall and Hopton, but also at Colwich.

4 Built heritage

4.1 Introduction

- This section provides baseline information relating to all built heritage assets within the land required for the Proposed Scheme; all designated and key non-designated built heritage assets within 500m of the land required for the Proposed Scheme; and any built heritage assets that lie between 500m and 2km from the land required for the Proposed Scheme and within the ZTV of the Proposed Scheme, where the Proposed Scheme will have adverse effects of moderate or major significance.
- Further information on all these assets, plus any designated assets that lie between 500m and 2km from the land required for the Proposed Scheme and within the ZTV but are not described below, can be found in Volume 5: Appendix CH-002-002.
- 4.1.3 All assets are depicted in Cultural Heritage Map Series CH-02-201 to CH-02-202, (Volume 5: Cultural Heritage Map Book).

4.2 Built heritage assets within the land required for the Proposed Scheme

Tithebarn Farm Cottages (COYo17)

These mid 19th century cottages appear for the first time on late 19th century mapping. They are located to the west of Tithebarn Farm, where the former historic courtyard farm, which also appears to date from the mid 19th century, was replaced in the late 20th century by the current large pre-fabricated metal farm buildings. The building comprises two attached brick cottages located on a north-facing slope to the west of the track that leads to Tithebarn Farm from Moreton Lane.

The contribution setting makes to the significance of the asset

The significance of the cottages lies firstly in their relationship to Tithebarn Farm.
They were almost certainly built to accommodate farm labourers when the farm was built. Secondly, they look northwards across an area of open farmland, across a shallow valley to Moreton Lane. Modern arable farming techniques have caused substantial change to the local landscape in recent decades, with the removal of many hedgerows in this area to create fewer, larger fields than was historically the case. This has degraded the historic setting of the cottages.

Trent and Mersey Canal Conservation Area (COYo₃₇)

The Trent and Mersey Canal was opened in 1772, and was designed to join these two great historic rivers, enabling trade to pass from the east to the west coast. The support of the Stoke potteries, and specifically Wedgewood, was essential in its construction. It was the first piece of modern transport infrastructure built along this section of the Trent Valley and provided a major stimulus to trade and industry from the time it was built until the coming of the railways. There are two locks and six bridges along the section of the Canal between Colwich and Weston. At Great Haywood, the Staffordshire and Worcestershire Canal (completed in 1771) met the Trent and Mersey Canal, connecting it with the Severn at Stourport in Worcestershire. The wharf at this junction also includes a tollhouse, historic warehouses and a mill.

The contribution setting makes to the significance of the asset

The significance of the canal lies in its value as an exceptionally well-preserved artefact of early industrial transport infrastructure. The quality and sustainability of its conception, design and construction are testified to by its longevity and ongoing use for largely leisure purposes up to the present. The repeating rhythm of locks, bridges and lock cottages, together with the tow path are the core elements of its design. These are built to standardised designs. Its landscape setting along this section of its route includes, to the east, other elements of linear infrastructure running along the Trent Valley, including the North Staffordshire Railway. To the west lies the River Trent, fields of pasture and, beyond them, the rising ground of Ingestre.

North Staffordshire Railway (COYo31)

The North Staffordshire Railway, completed in 1848, runs north along the east side of the Trent Valley from Colwich. For much of its route in this area it also runs immediately east of the Trent and Mersey Canal, that had been constructed some 75 years earlier, while to the west runs the A51 Lichfield Road. The railway crosses Mill Lane on an arched ashlar bridge to the south of Great Haywood Marina and, to the north of the Proposed Scheme, crosses Hoo Mill Lane immediately to the east of Hoo Mill Wharf. Along this section of the route the railway is elevated above the adjacent canal, with views looking west across the Trent Valley.

The contribution setting makes to the significance of the asset

The significance of the railway lies equally in its surviving historic fabric (including the spatial, functional and historic relationships between the track and its associated buildings and structures), in its historical value as a piece of transport infrastructure dating from the industrial revolution, and in its landscape setting, which affords an understanding of the engineering constraints and opportunities imposed and offered by the natural topography along the route of the railway.

Hoo Mill, Ingestre (COYo44)

4.2.7 Hoo Mill is shown on the earliest historic maps of the area and may well date back to Domesday, when Ingestre was the only manor in Staffordshire within which a mill is listed. The surviving building on the site appears to be the miller's house, a brick building apparently dating from the 18th century. As shown on historic maps, this formerly stood at the western end of the historic mill building, with the mill pool to the south. During the 19th century, the mill ground flint to provide temper for the clay used by the potteries (although it was presumably a wheat mill originally). It was connected to Hoo Mill Wharf, on the canal to the east, by a tramway that ran along a straight section of causeway, which is still in evidence today. There was originally a wooden and a metal waterwheel, with the sluice emptying into the Trent to the north of the bridge that led eastwards towards the canal. The main mill building was demolished and the millpond infilled in the early 20th century.

The contribution setting makes to the significance of the asset

4.2.8 The immediate surroundings of the mill house form an important element of its significance, including the earthwork traces of the former mill-pond, the channels of the river passing to west and east of the mill, and Hoo Mill Lane that passes from east

to west across the property. These would historically have provided access to the mill from both sides of the river. Its 19th century industrial heritage is marked by the presence of the remains of the tramway connecting to the canal wharf to the east.

Finger Post, Hoo Mill Lane, Tixall (COYo56)

This wooden finger post stands in Ingestre at the crossroads of Hoo Mill Lane and Mill Lane to the south-east of Lionlodge Covert. The white-painted wooden post, dating from the 19th or 20th centuries, has four arms pointing direction to Hoo Mill Lane, Ingestre (church and hall), Great Haywood and Little Haywood and Milford and Stafford.

The contribution setting makes to the significance of the asset

4.2.10 This historic piece of rural street furniture is fundamentally associated with the road junction between the road leading to Ingestre Manor and the lane leading to Hoo Mill.

Ingestre Conservation Area (COYo49)

Ingestre Conservation Area includes the historic core of the Ingestre Estate: the Jacobean hall (COYo68) and associated buildings, the remnants of the 18th century Capability Brown landscape to its north, the village to its south and elements of the 19th century landscape park, also to the south. The core of the group (the hall and church) dates from the 17th century; the landscape to the north largely from the 18th century while the parkland to the south was laid out at the turn of the 19th century. The sale of the estate in the 1960s led to its division between different landowners, leading to the gradual degradation of its integrity as a single coherent landscape. This included the transformation of the parkland to the south of the house into a golf course, albeit retaining the avenue that once led from Lion Lodges north to the hall.

The contribution setting makes to the significance of the asset

The significance of the conservation area lies in the common historical and spatial 4.2.12 association of its various elements. Each phase of the manor's development has left significant and valuable historical buildings and landscape features, albeit the relationships between some of these elements are increasingly difficult to distinguish as the result of property partition and changes of land use. For example, the view south from the hall down the tree lined drive that leads to the Lion Lodges has been partially blocked by an evergreen hedge along the property boundary that divides the hall from the golf course. Other important views remain open, such as the one northwest along the approach to Ingestre taken from north of the lion Lodges; the views south-east towards Hoo Mill taken from the Lion lodges and from Ingestre Road adjacent to the Dower House; the contrasting views to west and east at the entrance to Ingestre Golf Club; views north-west from Ingestre Hall across Wood Field towards Weston, and north from the Hall towards Birch Hall and Trent Drive; views east and west between Ingestre Pavilion and Trent Drive at Trent Lodge; and views along the Long Walk to and from Ingestre Orangery 105. Ingestre Conservation Area also has an intimate historical and landscape connection with Tixall estate immediately to the west, which developed in parallel as a landscaped park and monumental manor. The

¹⁰⁵ Tixall with Ingestre Parish Council and Stafford Borough Council (2015), *Ingestre Conservation Area Appraisal*, pp. 24-27

same, to a much lesser degree, is true of its spatial and landscape relationship to the Shugborough Estate on the opposite side of the River Sow to the south.

Upper Hanyards Farm (COY077)

The place-name Hanyards is first referenced in a document of approximately 1220. Upper Hanyards Farm is first referenced in a will of 1675. The earliest accurate maps show a farm at this location, lying just north of Hanyards Lane, which connects Ingestre Hall to Stafford. The current brick farmhouse, on the west side of the lane leading north from Hanyards Lane, probably dates from the 18th century, although it may incorporate elements of older structures. It previously formed a courtyard with ranges of brick buildings to the east of the farm lane, but these have been replaced in recent decades by large steel farm sheds.

The contribution setting makes to the significance of the asset

4.2.14 The group value of the farm buildings and associated historic enclosures at Upper Hanyards are of central significance to the historic farmhouse, providing it with a sense of place and purpose. The farm's relationship to the surrounding rural landscape, including the fields, tracks, extraction pits, sandstone quarries and woodlands, is fundamental to its character. Its association with Hanyards Lane, connecting the farm with the early medieval settlements of Stafford to the southwest and Ingestre to the east is also important. The farm historically fell within the Tixall estate, making its relationship with the village and the former manor of Tixall Hall to the south a very important part of its historic significance. The track that formerly connected it to Tixall Hall has now been lost (along with many other field boundaries and historic landscape features) as the result of modern farming practices.

Milepost, Staffordshire County Showground, Stafford (COYo88)

A 19th century cast-iron milepost of hollow triangular section stands on the north side of the carriageway of the A518 Weston Road just north of Staffordshire Country Showground. The angled triangular front panel features the parish name of Hopton and Coton. The signage of the left-hand side reads Stafford (3 miles). The signage of the right-hand side reads Weston (1 3/4 miles), Uttoxeter (11 miles).

The contribution setting makes to the significance of the asset

4.2.16 The significance of the asset lies equally in its historic fabric and in its location beside the A518 Weston Road.

Lowerhouse Farm, Hopton (COY100)

This farm is one of many in the area that appears to have been established in the later 18th century, from which time it appears on historic maps. The oldest part of the brick farmhouse appears to date from this period, with a number of the later single storey farm buildings appearing to date from the early to mid 19th century. Together they form a historic farm courtyard through which the track leading south from Hopton village formerly continued southwards across the fields. All of the farm buildings have now been converted into residential property.

The contribution setting makes to the significance of the asset

The significance of the farm buildings lies primarily in their historic and functional relationship with one another. The location of the farm at the foot of the sandstone escarpment upon which Hopton village stands is also important, expressing its traditional connection both with the village community and with the farmland to the south.

Mount Farm, Hopton Lane, Hopton (COY108)

This group of farm buildings stands on the south side of Hopton Lane to the west of the village core. Beside the road is a farmhouse with attached outbuilding that appears to date from the 18th century, but which has been heavily restored and shows little sign of this from the outside. A courtyard of single storey brick farm buildings to the south appears to date to the later 19th century along with further, detached outbuildings. The whole complex has now been converted to residential use.

The contribution setting makes to the significance of the asset

The significance of the asset lies principally in the surviving historic fabric of the farmhouse and farm buildings and in their regular courtyard plan, which is one of the characteristic plan types of post-medieval farmsteads in Staffordshire ¹⁰⁶. Views across agricultural fields to the south of the asset are also indicative of its historic functional association with the surrounding agricultural landscape, and therefore add some value.

Lowerbridge Farm, Hopton (COY109)

4.2.21 A historic smallholding lying on the north side of Hopton comprising a single storey farm outbuilding and detached, pebble-dashed farmhouse forming a loose courtyard adjacent to the road. The smallholding may have been established here by the late 18th century although there is little indication that any of the surviving buildings are of so early a date.

The contribution setting makes to the significance of the asset

The significance of the asset lies principally in the surviving historic fabric of the farmhouse and farm buildings and in their irregular courtyard plan, which is one of the characteristic plan types of post-medieval farmsteads in Staffordshire¹⁰⁷. The views across open country to the north and west are a reminder of the historic agricultural context of this group of buildings and therefore make some contribution to the significance of the asset.

Edwards and Lake (2010)

¹⁰⁶ Edwards, R. and Lake, J. (2010), West Midlands Farmsteads and Landscapes Project, County Summary Report for Staffordshire.

4.3 Designated and key non-designated built heritage assets within 500m of the land required for the Proposed Scheme

Moreton Grange (COYoo4)

A building is shown on the site of what is now known as Moreton Grange lying at the crossroads of Bishton Lane and Moreton Lane (leading to Colton) on the Yates map of 1775. The construction of Moreton House to the north at the end of the 18th century led to significant changes in the local landscape, including the diversion of the lane to Colton that dwindled into the intermittent local trackway that it is today. The first Ordnance Survey of 1832 shows a small group of buildings at this junction, although it only developed into a full courtyard farm in the later 19th century (relatively late by comparison with many local farms). Its slightly unusual mid to late Victorian character is also signalled by a mansard roof above a projecting bay incorporating the front door. The name Moreton Grange seems to have been transferred to this property from what is now known as Upper Moreton Farm at this time.

The contribution setting makes to the significance of the asset

The cluster of farm buildings provides group value to the individual elements of the buildings at Moreton Grange. Its position at a historic junction of rural lanes leading from south-west and south-east was probably the original reason for the construction of a smallholding at this location. The farm forms one element of the scatter of farms in this area that makes up the settlement of Moreton, first known from its inclusion in Domesday. Its relationship with these other farms, with Moreton House on the hill to the north and with the surrounding rural landscape is fundamental to its historic and communal significance.

Upper Moreton Farm (COY002)

This is an isolated farmstead of early 19th century origin, first depicted on the Ordnance Survey surveyor's drawing of 1832. It is located on high ground overlooking the valley of Moreton Brook to the north-east. The current building comprises a detached farmhouse to the south with an L-plan range of outbuildings to the north-west, which together form a regular courtyard layout. The west wing of the outbuildings includes an unusually well-preserved brick barn (non-renovated unlike most barns in the area) with decorative ventilation brickwork. The north wing, formerly a stable, where, according to current owner, graffiti from Second World War German prisoners working on the farm can be seen.

The contribution setting makes to the significance of the asset

The spatial relationship between the well-preserved 19th century farm buildings contributes to their significance, by indicating their historic relationship and function. Its connections with surrounding farms are marked by the road that winds up the hill towards the farm from Moreton Grange to the north-east. The relationship of the farm buildings on high ground overlooking the surrounding farmland is indicative of its direct functional relationship historical and continuing relationship with this land.

Moreton Farm (COYoo8)

The historic farm at Moreton is shown on historic maps dating back to back to at least 1775, when only it and the linear group of farm buildings to the west (COYo1o) were present in this area (Moreton House only being built at the end of the 18th century). By 1832, a courtyard arrangement seems to have developed. This can be seen more clearly on the first detailed survey of 1881, by which time double courtyard arrangement had developed with the main farmhouse on its north-western side. Many of the buildings shown at this time have survived up to the present. The surviving T-shaped, two storey farmhouse, recently renovated, appears from external appearance to date back to the late 18th/early 19th century. Numerous adjacent single storey farm buildings have also been recently renovated while a series of large modern, steel farm buildings now stand to the south-east.

The contribution setting makes to the significance of the asset

4.3.6 The significance of the various historic elements of the farm is demonstrated by their proximity and spatial relationships with one another. It is further demonstrated by the fact that they appear to lie at or close to the historic core of the Domesday settlement of Moreton, and there are numerous surrounding earthworks (largely of ridge and furrow) that are indicative of this and therefore an important part of its setting. In wider landscape terms, the relationship of the buildings to the surrounding agricultural land is indicative of its historical role as the place from which it has been farmed for many centuries.

Farm buildings at Moreton (COYo10)

4.3.7 This linear group of brick farm buildings is situated at the base of the slope to the north of Moreton House and west of Moreton Farm. Buildings at this location appear to be indicated on the 1775 Yate map and are shown on all subsequent maps. Immediately to the north is a possible moat. This may indicate that this is the location of Moreton's medieval manor house. The linear farm layout is often viewed a sign of an early foundation.

The contribution setting makes to the significance of the asset

4.3.8 The spatial relationship of the farm to the adjacent earthworks, and to the nearby Moreton Farm provides evidence of the medieval origins of settlement on this site. Similarly its relationship to the historic buildings at Moreton Farm to the east is significant in that they are both residual elements of the settlement of Moreton as described in Domesday. The proximity of a number of nearby farms and buildings, notably Moreton Grange and Moreton House, as well as the trackways that connect them are important in understanding the significance of the farm in its post-medieval context. The surrounding farmland forms an essential part of its character and significance.

Moreton House (COYoo6), listed Grade II

4.3.9 A large late 18th century two storey brick villa built on a hilltop immediately to the south of what appears to have been the historic core of Moreton. The house was built by William Hanbury, owner of collieries in Norton Canes and Brownhills on Cannock Chase. When built it was an ambitious structure, with a substantial walled garden to

the east of the house and surrounded by a landscaped garden. The farm immediately to the east of the house stands within the walls of the original walled garden. The Yate map of 1775 indicates that there was no previous building on the site of Moreton House.

The contribution setting makes to the significance of the asset

The remains of the adjacent walled garden and the surrounding gardens, albeit they have been substantially altered and degraded over the past two centuries, are essential contemporary elements of the house's setting and significance. The surrounding historic farms of Moreton, especially COYoo8 and COYo10 to the north, represent earlier stages in the development of the settlement. Others such as Moreton Grange Farm and Upper Moreton Farm are significant in terms of the development of the local landscape after the construction of the house. Views of the wider landscape would certainly have been an important part of the house's setting when first built, given its hilltop position, although these are partially curtailed at present by surrounding hedges.

Far Coley Farm (COYo15)

4.3.11 An isolated farmstead laid out around a regular courtyard with main L-plan range and detached farmhouse off to the west. The farmstead was established by 1775 and is shown as a single row of buildings on the 1881 1st edition. In this area, a linear plan is often a sign of a relatively early farm and may have been established in the earlier post-medieval period when the strip fields were being enclosed. The farm range as shown on mid to late 19th century mapping still appears to be extant, with a number of steel agricultural buildings added to the site in more recent times.

The contribution setting makes to the significance of the asset

Key elements of the farm's setting that contribute to its significance are its relationship with other historic farm buildings, in particular Near Coley Farm, approximately 600m to the west. Equally the setting of the farm in the agricultural fields is a central aspect of its significance in the rural history of the area.

Near/Higher Coley Farm (COYo16)

4.3.13 A farm on this site is shown on maps dating back to 1775. An isolated farmhouse to the east of Coley Lane. It comprises a rectangular courtyard with a main L-shaped range, with linear arrangement of detached farm buildings and the farmhouse to the west. The latter probably pre-date the L-shaped block, which is likely to have been added in the early to mid 19th century. The historic ranges are still extant, although large steel outbuildings have been added to the north.

The contribution setting makes to the significance of the asset

4.3.14 The spatial relationship of the historic farm complex with other nearby farms, articulated by the network of local lanes, is important context in understanding its heritage significance. Similarly important is its location within the landscape context of rural fields, with the aesthetic and evidential significance they hold for the past and present purpose of the farm.

Toll house on Tolldish Lane (COY025)

4.3.15 A former toll house, situated at the western end of Tolldish Lane, Great Haywood. The two storey toll building is rectangular in plan with rendered walls and a plain tile roof. The building is apparently of 19th century date but has been substantially renovated and extended.

The contribution setting makes to the significance of the asset

4.3.16 The location of the house in relationship to the local road network is fundamental to its significance given its former function as a tollhouse.

Great Haywood and Shugborough Conservation Area (COYo41)

- This conservation area encompasses both Shugborough Park and the historic settlement of Great Haywood, which is situated on the opposite side of the River Trent, to the north-east of the park. Shugborough Park retains much of its original character as an 18th century designed landscape of exceptional quality and interest, as indicated by its status as a Grade I Registered Park and Garden. The form and character of the village echoes the creation of the park, as it developed partly as a result of the relocation of the village community of Shugborough during the development of the designed landscape in the late 18th century. At its maximum extent in the 19th century, the park encompassed the eastern bank of the River Trent to the west of the road connecting Great Haywood in the north from Little Haywood in the south. The park, which was developed by the Anson family from 1720, is described in section 5.2, below.
- A series of historic structures create a coherent and aesthetically pleasing group immediately south of the confluence of the Rivers Sow and Trent. At this point the drive that leads north from Shugborough Park Farm crosses the River Trent and the Trent and Mersey Canal, and passes under the North Staffordshire Railway to connect with Trent Lane leading to the heart of Great Haywood. This progress is marked by series of historic structures:
 - the 17th century ashlar Essex Bridge, a Scheduled Monument and a Grade I listed building, is a rare surviving example of a packhorse bridge. It is known to have replaced an earlier wooden structure and is likely to mark a crossing place of the Trent dating back to at least the later middle ages;
 - the Trent Lane Canal Bridge, which crosses the Trent and Mersey Canal immediately south of a Lock and Lock Keeper's Cottage (Grade II);
 - a Grade II Railway Bridge under which Trent Lane passes beneath the North Staffordshire Railway; and
 - symmetrical terraces of Grade II low two storey cottages on either side of Trent Lane, with two larger Grade II listed buildings with porticoed entrances (Trent House and Great Haywood Post Office) marking the junction with Main Road.
- 4.3.19 The Grade II Church of St Stephen stands in a graveyard surrounded by trees, to the west of Main Road approximately 120m south of Trent Lane.

A second group of historic buildings stands at the northern end of Great Haywood on either side of Main Road: the Church of St John (Grade II), which originally stood at Tixall; Haywood House, a late 18th century town house (Grade II); Abbey House (Grade II), a large detached 17th century house; a Grade II barn to the north-east of Abbey House, and Churchyard Cottage (also Grade II).

The contribution setting makes to the significance of the asset

- 4.3.21 Most of Shugborough Park and the whole of the historic village of Great Haywood lie in the floodplain of the Trent Valley. Their form and layout has developed in response to the course of the rivers and, in recent centuries, the linear infrastructures (canal, rail and road) that has developed along them. As a consequence of the low-lying topography, there are relatively few long-distance outward or inward views. The key aspects of setting contributing to the significance of the Conservation Area are therefore largely internal¹⁰⁸. The most important of these relationships is, perhaps, that between the park and the village, which is articulated via the series of industrial, domestic and monumental structures running along the Trent Lane-Essex Bridge axis. The setting of each of these structures, owing to the topography and surrounding trees, is localised, with no long-distance vistas. The environment is largely peaceful and pastoral, with the elevated North Staffordshire railway running along the eastern side of the canal being the most modern element.
- There are outward views from the southern part of the park, which encompasses the northern fringe of Cannock Chase. This was made use of in the development of the designed landscape to provide a viewpoint from which Shugborough Hall, its parkland and parkland structures to the north, the Trent Valley beyond and the Ingestre and Tixall estates could be taken in (see Figure LV.01.526 in Volume 5: Appendix LV-001-002 Landscape and visual assessment and photomontages). A painting by Nicholas Dall, of approximately 1769, captures all of these elements of setting, although the view is from the south-eastern part of the park 109. The view from the Triumphal Arch east through north round to the north-west across the park and the Trent Valley beyond is identified as a key view in The Shugborough Parkland Management Plan and in the Great Haywood and Shugborough Conservation Area Appraisal 110. This location was provided a focus in 1765 with the construction of the Triumphal Arch, based on the Arch of Hadrian in Athens, built to commemorate Admiral George Anson whose fortune funded much of the 18th century landscaping.

Staffordshire and Worcestershire Canal Conservation Area

The Staffordshire and Worcestershire Canal opened in November 1771, just before the Trent and Mersey Canal. It runs along the Sow Valley to the west of Shugborough Park. Historic canal structures along this stretch are Oldhill Bridge (107), Tixall Lock and lock-keeper's cottage, Swivell Bridge (108) and an aqueduct across the River Trent. In the stretch leading north from Oldhill bridge, the canal passes between the Tixall Estate, with it surviving gatehouse, and Shugborough to the east with views to both being intermittently available to those passing along the canal. The section of

¹⁰⁸ Stafford Borough Council (2013), Great Haywood and Shugborough Conservation Area Appraisal, p. 4

¹⁰⁹ Cookson & Tickner Ltd (2014), *Shugborough Parkland Management Plan*, Fig. 4.11

¹¹⁰ Cookson & Tickner Ltd (2014), p. 46, fig. 4.11, view point 5; Stafford Borough Council (2013), p. 5

the canal that runs to the south-east of the former Tixall estate was broadened to form 'Tixall Wide' in order to provide a more attractive outlook from the former hall.

4.3.24 The important canal junction with the Trent and Mersey Canal is situated approximately 300m north of the Sow-Trent confluence. It is marked by a series of late 18th century structures, most of which fall within the Staffordshire and Worcestershire Canal Conservation Area. Haywood Bridge (no.109; a Grade II listed building and a scheduled monument) straddles the mouth of the canal as it widens out to enter the Trent and Mersey Canal. On the north-western side of this junction is a wharf with warehousing, a former corn mill, a small toll building.

The contribution setting makes to the significance of the asset

As a piece of late 18th century industrial infrastructure, the key contributors to the canal's significance are the various structures associated with its progress: locks, lock keepers' cottages, bridges and the Trent aqueduct. The canal was built as part of a single conception with the Trent and Mersey Canal, so the junction at Great Haywood is of high significance to both. The rural landscape to either side of the canal as it passes along the Sow Valley, and in particular its relationship to the designed landscape at Tixall Wide that is associated with the former Tixall Hall, are also important elements of the canal's historic character¹¹¹.

Cast iron milepost beside the Trent and Mersey canal north of Mill Lane crossing, Great Haywood (COYo39), listed Grade II

This cast iron milepost is situated in the verge of the towpath just to the north of the junction with the Staffordshire and Worcestershire Canal. It is characteristic of those erected beside the Trent and Mersey Canal, with its triangular section and black letters against a white background.

The contribution setting makes to the significance of the asset

4.3.27 The location of the milepost in this location beside the Trent and Mersey Canal is a defining aspect of its character and significance.

Middle Bridge (no. 75) across the Trent and Mersey Canal (COYo38), listed at Grade II

4.3.28 This Grade II listed canal bridge, of standard Trent and Mersey Canal brick construction with stone copings, was seemingly built to enable access between the meadows on either side of the canal. It has a pipe attached to its southern side. It is situated less than 400m to the north of the Mill Lane road bridge, just south of a bend in the canal within which Great Haywood Marina is now located.

¹¹¹ Stafford Borough Council (2015a), *The Staffordshire and Worcestershire Canal Conservation Area Appraisal*, pp. 6-7 and 29-30; Stafford Borough Council (2015b), *Tixall Conservation Area Appraisal (Consultation Draft)*, pp. 4 and 47-48

The contribution setting makes to the significance of the asset

4.3.29 The significance of Middle Bridge lies substantially in its functional and spatial relationship with the canal stretching away to the north and south. Its setting has been altered in recent years by the construction of Great Haywood Marina to the east.

Hoo Mill Lock, lock-keeper's cottage, bridge and adjacent cast iron milepost (COY042), listed Grade II

This group of structures is located over 1km north of the Mill Lane road bridge. It comprises a contiguous canal lock and bridge, with associated wharf, lock keeper's cottage and nearby cast iron milepost situated on the Trent and Mersey Canal at Hoo Mill Lane. During the late 18th and 19th centuries it was connected to Hoo Mill to the west by a tramline on a causeway, constructed to convey ground flint to the canal wharf. This was destined for use as temper in the Stoke potteries to the north. Although the tramway has gone, the causeway survives with traces of the former track attachments in places. The North Staffordshire railway runs on an embankment immediately east of the canal bridge.

The contribution setting makes to the significance of the asset

The most important part of the setting of Hoo Mill Bridge and the adjacent wharf, lock and cottage is their relationship with Hoo Mill itself to the west, which the wharf was constructed to serve ¹¹². The North Staffordshire rail line running parallel to the east, as another piece of early industrial linear infrastructure, echoes the functional and historical significance of the canal. Hoo Mill Lane runs through an arch in the railway embankment immediately to the east of the canal bridge.

Tixall Conservation Area (COY071)

This conservation area encompasses the medieval core of Tixall village, including the Grade II listed Church of St John the Baptist and a rotunda moved from Capability Brown's landscape at Ingestre to the east. It continues eastwards either side of Tixall Lane to include core of the former designed landscape: the surviving Grade II stables, Grade I Tixall gatehouse either side of the site of the hall, which was demolished early in the 20th century. Tixall Wide, which is the widened section of the Staffordshire and Worcestershire Canal, lies to the south-east, on the opposite side of Tixall Lane from this group of buildings. At the eastern end of the Conservation Area are two Grade II listed buildings to north and south of Tixall Lane: Tixall Farm to the north and the stone 'bottle lodge' to the south (COYo67).

The contribution setting makes to the significance of the asset

4.3.33 The role of setting in the significance of the Conservation Area resides primarily in the juxtaposition of the various historic elements of the settlement and estate with each other. The designed views south-eastwards across Tixall Wide are clearly an important part of the Conservation Area's significance¹¹³.

¹¹² Stafford Borough Council (2014), The Trent and Mersey Canal Conservation Area Appraisal, p. 44

Stafford Borough Council (2015b), pp. 4 and 47-48; Stafford Borough Council (2015a), pp. 7 and 29-30

Ingestre Conservation Area

- Ingestre Conservation Area incorporates the historic core of the Ingestre Estate including the Grade II* Hall, Grade I Church and the Grade II Orangery and Stables (both old and new). It also includes surviving elements of the landscaped park to the north of the hall, Ingestre Village and surviving elements of the early 19th century park, including Lionlodge Covert and the surviving avenue of trees within Ingestre Park Golf Club golf course that formerly flanked the drive to the Hall.
- 4.3.35 The Grade II* Jacobean hall was originally constructed in 1638, rebuilt 50 years later and then again in the later 19th century after a serious fire. The Grade I Church of St Mary was built in 1676 to replace the former parish church, which was apparently in ruinous condition. It is said to have been designed by Sir Christopher Wren and, if so, is the only Wren church surviving outside London.
- Walter Chetwynd laid out the formal terrace in the 17th century to the south of the hall with fruit trees, paths, and statues. To the north of the house was originally an avenue leading from the house to a lodge and a wooded 'wilderness' with formal walks. In 1756 Capability Brown completed plans for the wilderness to be cleared, with insertion of new walks and planned tree planting. The landscape has been largely taken over by agriculture, although closer to the hall original woodland planting and garden structures survive, such as the Grade II pavilion. The parkland to the south of the hall was created at the turn of the 19th century, with a new tree-lined drive leading to the hall from Lion Lodge, where Lionlodge Covert was planted in an area of former boggy ground.

The contribution setting makes to the significance of the asset

- 4.3.37 The degradation of the former parkland surrounding Ingestre Hall, as a result of a division of ownership following its break up in the 1960s, has reduced the contribution that setting makes to the historic significance of Ingestre Conservation Area. The most important aspects of the setting of the various historic elements of the area lie in their relationship with one another. There are very few significant outward views from (or external views towards) the Conservation Area as the result of extensive woodland cover.
- 4.3.38 The Capability Brown landscape to the north of the house still survives in recognisable form to the north of the hall. It is largely screened from the west by tree belts planted along the boundary between the estates (and parishes) of Tixall and Ingestre. The mid 18thcentury pavilion to the north-west of the hall (part of the Brown design) faces along a path running through the woodland to the west of the house. This axis is a central element of the building's significance as a focus of Brown's designed landscape 114.

Kents Barn Farm, Hopton (COY117)

4.3.39 This farm is located approximately 1km to the west of Hopton village on the north side of a lane leading west from the B5066 Sandon Road. An isolated L-plan farmstead

¹¹⁴ Tixall with Ingestre Parish Council and Stafford Borough Council (2015), p. 26

with attached farmhouse of probable early 19th century date. The farmstead survives relatively unaltered, although with new steel sheds added to the north and east.

The contribution setting makes to the significance of the asset

4.3.40 The primary associations of the farm are with the lane by which it is accessed and surrounding historic farms. The farming landscape over which it looks also lends significance to the farm.

Newbuildings Farm, Hopton (COY119)

This farm appears to have its origins in the early 19th century. A courtyard farmstead is shown on historic maps in this location as early as 1816. By the 1880s this had become a double courtyard. Many of the historic buildings survive, with an array of modern steel farm buildings to the west.

The contribution setting makes to the significance of the asset

The elements of the asset's setting that contributes most to its significance are the surrounding agricultural fields. These are very regular suggesting an extensive programme of enclosure of open fields.

Hollytree Farm, Marston (COY127)

4.3.43 An isolated linear-plan farmstead with an attached farmhouse and additional detached elements. A building is marked in the location on William Yates' 1775 map of Staffordshire and the farmstead is shown on Ordnance Survey 1 inch mapping from 1836. The farmstead appears to survive relatively unaltered.

The contribution setting makes to the significance of the asset

4.3.44 The elements of the farm's setting that contribute to most to its significance are the surrounding buildings of Marston focussed on Marston Lane, which together have a group value reflecting its historic origins as a medieval settlement. Beyond that the surrounding agricultural landscape, including the earthwork remains of medieval settlement, reflects the historic significance of the farm.

Church of St Leonard, Marston (COY133), listed Grade II

4.3.45 This late 18th century church stands on the western edge of what appears to be a shrunken medieval settlement at Marston. The church building is small and relatively simple, with a rectangular stone nave and a brick chancel. It seems likely that it is the successor of a medieval church, probably, but not certainly, on the same site. It stands within a small graveyard largely surrounded by trees.

The contribution setting makes to the significance of the asset

4.3.46 The location of the church adjacent to the earthworks of the shrunken medieval settlement of Marston, as well as to the scattered farms and houses of the modern village indicates its significance as the spiritual focus of the settlement. Its location at the centre of the wider parish is also an important aspect of its significance.

Marston New Farm (COY134)

4.3.47 Marston New Farm (now Grange Farm) stands on Yarlet Lane immediately west of the earthwork remains of the medieval settlement. An isolated farmstead of possible late 18th century date, the farm was originally laid out around a regular courtyard with additional detached buildings. A smithy appears to have been established to the west of the courtyard in the mid to late 19th century, although this has since been demolished. The farmhouse and the western side of the original courtyard range are still extant, but the remainder of the original buildings appear to have been replaced with new agricultural buildings.

The contribution setting makes to the significance of the asset

4.3.48 The elements of the farm's setting that contribute to most to its significance are the surrounding buildings and medieval earthwork remains. Beyond that the surrounding agricultural landscape reflects the historic significance of the farm.

Yarlet Hall (COY140)

Yarlet Hall (now School) is a neo-Gothic Hall constructed in 1870 by Henry Tunnicliffe to replace the old hall that stood approximately 250m to the south on Yarlet Hill. Henry died before it was completed and the estate was rented in 1873 by the Reverend William Earle, who established a prep school on the site. The house is surrounded by landscaped woodland and has a north-facing aspect. There is a small chapel in the woodland immediately south-west of the house.

The contribution setting makes to the significance of the asset

4.3.50 The most important elements of the hall's setting lie in its relationship with the surrounding buildings, most importantly the chapel and farm to the east. The surrounding landscaped woodland and lawns are an important designed element of the hall's setting. The adjacent A34 Stone Road and traces of an earlier trackway running to the east of the hall are also important, in that this road running from Stafford was one of the key reasons for the establishment of a settlement at Yarlet in the first place.

4.4 Key built heritage assets within 2km of the land required for the Proposed Scheme, where this also falls within the ZTV

- The criterion for inclusion within this section is that the Proposed Scheme is assessed in Volume 5: Appendix CH-003-002 Cultural heritage impact assessment table as having a major or moderate adverse effect upon a designated asset that lies within 500m and 2km of the land required for the Proposed Scheme and also lies within the ZTV of the Proposed Scheme. Descriptions of all designated assets within this area can be found in Volume 5: Appendix CH-002-002.
- There are no designated heritage assets within the above-defined area upon which the Proposed Scheme will have a major or moderate adverse significant effect.

5 Historic landscape

5.1 Introduction

- A process of historic landscape assessment has been carried out, identifying Historic Landscape Character Areas (HLCA) along the route of the Proposed Scheme. HLCA are based on historic landscape characterisation undertaken by Staffordshire County Council and Cheshire County Council and through consultation with these authorities and Historic England. HLCA have been defined where the historic landscape has a broadly distinct area of homogeneity. Descriptions of individual HLCA are presented in Volume 5: Appendix CH-005-000 Historic landscape character report.
- 5.1.2 HLCA identified within the Colwich to Yarlet area comprise:
 - HLCA5: Colwich, Hixon and Haywoods;
 - HLCA6: Shugborough Park;
 - HLCA7: Trent Valley and Weston;
 - HLCA8: Tixall and Ingestre Parklands;
 - HLCA9: Hopton and Salt; and
 - HLCA10: Marston and Yarlet.

5.2 Parks and Gardens

There is one registered and four non registered parks and gardens within the study area. These are described and discussed below.

Shugborough Grade I registered park and garden (COYo34)

- The development of Shugborough into one of the country's finest designed landscapes dates from the 1720s, when the estate passed to Thomas Anson. At that time, Shugborough village lay to the south of the Hall, where Park Farm now stands, within the current footprint of the park. Thomas inherited the copyhold of five village properties and acquired 21 more throughout his life. Once acquired, he removed any cottages they contained to make way for his new park. The majority of the village properties had been acquired and removed by the time of Thomas' death in 1773.
- Thomas Anson laid out a Rococo pleasure garden to the north and west of Shugborough Hall and stocked it with a series of cutting-edge buildings, including some of the earliest chinoiserie in the country. This included the Grade I listed Chinese House, which was built on an island within a lake formed from the remains of the medieval manorial moat and which was originally accessed by two Chinese fretwork bridges. The Chinese House was originally accompanied by a Chinese boat, which was moored in a Chinese style boathouse on the island. Of this ensemble, constructed in the 1740s, only the Chinese House survives. Other garden buildings principally in classical style and broadly contemporary with the chinoiserie comprise the surviving Grade II listed ruins, Shepherd's Monument (listed at Grade II*) and the Grade II listed Cat's Monument, as well as the former Doric Temple, Colonnade, Orangery and Gothic Pigeon House. Thomas Anson also built a number of Greek Revival buildings

out in the park, namely the Temple of the Winds (Grade II*), and the Lanthorn of Demosthenes/the Dark Lantern and the Triumphal Arch, both listed at Grade I. These parkland structures were funded by Thomas' inheritance of his younger brother Admiral George Anson's ('the father of the British Navy') considerable fortune in 1762. A view from the south-east of the park painted by N.T. Dall in approximately 1769 captures not only Shugborough Hall, Essex Bridge and a number of parkland buildings, but also Ingestre Hall in the distance¹¹⁵. Similarly, a view by Stebbing Shaw of the Ruins at Shugborough, painted between 1762 and 1802, depicts Tixall Hall in the distance¹¹⁶. It may be that the Ansons, who were social climbers, were keen to assert their arrival in the upper echelons of polite society through association with the long-established estates of the Chetwynds of Ingestre, who were Viscounts, and the Astons of Tixall.

- The next main phase of development of the park was undertaken by Thomas Anson II, who inherited the estate in 1789. Thomas married the daughter of Coke of Norfolk, the great agricultural reformer, and it may have been this association that decided Thomas to create a self-sufficient working estate. He commissioned the renowned architect Samuel Wyatt between 1800-1805 to design numerous buildings throughout the park, including the Park Farm, White Barn Farm, the Walled Garden and attached head gardener's house, each listed at Grade II*, and four entrance lodges, each listed at Grade II. Thomas Anson II also completed the removal of Shugborough village, relocating its tenants to Great Haywood, had an additional channel dug for the River Sow to the west of Shugborough Hall, creating an island between the old and new channels, and established the current system of drives within the park.
- Thomas William Hanson, who inherited the estate in 1818, continued to encroach upon the estate until the emparked area reached its present size, in 1825. Two railways were constructed through the estate during his tenure, the Trent Valley Line in 1845-1847 and the North Staffordshire Railway (COYo31) in 1848. This led to the construction of a pair of ornamental tunnel entrances adjacent to the Triumphal Arch and the Lichfield Drive railway bridge, each listed at Grade II.

Ingestre Hall Park and Ingestre New Park (COY144 and COY145)

Before 1802, Hanyards Lane, which was closed at Upper Hanyards Farm in that year, extended eastwards to run past the south front of Ingestre Hall and thence to Hixon. Before that date, Ingestre Hall Park and pleasure gardens (COY144) lay entirely to the north of the road, as depicted on Yates' 1775 Map of Staffordshire. His 1789 Ingestre Estate Map depicts Church Field to the south of the road and directly opposite Ingestre Hall, and a field called Horse Pasture to the west of that and to the south of The Mounts¹¹⁷. Burghers' engraving of Ingestre Hall, reproduced in Plot¹¹⁸, depicts a complex series of formal gardens enlivened by statuary to the south, west and north of Ingestre Hall in the late 17th century. These are the gardens described by Celia Fiennes in 1698¹¹⁹. A 'wilderness' comprising woodland dissected by radiating avenues, located a short distance to the north-west of the Hall would have been

¹¹⁵ Cookson & Tickner Ltd (2014), p. 26, fig. 4.2

¹¹⁶ Mowl and Barre. (2009), p. 118, fig. 44

¹¹⁷ Andrews (2013), p. 66

¹¹⁸ Plot (1686)

¹¹⁹ Morris (1947), pp. 174-176

broadly contemporary. A ha-ha was built around the wilderness in 1702¹²⁰ and a Pavilion (COYo64), Rotondo and a pentagonal tower on a bastion were inserted into the wilderness as eye-catchers shortly after 1720. By 1743, the formal gardens depicted in Plot had been removed, and in 1756 Capability Brown was commissioned to naturalize the wilderness by replacing the geometrically radiating avenues with serpentine walks, effected by new planting. Capability Brown retained the Pavilion (COYo64), the Rotondo and the pentagonal tower and bastion in his redesigned wilderness and inserted a canal with integral obelisk on the main axis of the Hall¹²¹. Capability Brown's design had been almost entirely swept away by 1789 and had been replaced by an ornamental shrubbery by 1815¹²². The only elements of these evolving pleasure gardens that survive today are the Pavilion (COYo64) and the ha-ha; the Rotondo remained in place until the 1960s when it was removed to Kennels Farm, Tixall, upon the sale and break-up of the Ingestre Estate.

Shortly after 1802, when Hanyards Lane was closed, Ingestre New Park (COY145) was established to the south of the road, across what had been Church Field, Horse Pasture and Townfield. The tree-lined drive running between the Hall and Lion Lodges had been established by 1813¹²³. Lionlodge Covert was established between the survey that informed the Ordnance Survey drawing of 1817, and that of the Ordnance Survey 1881 - 1882 edition 1:2,500 map. Much of the 19th and 20th century planting was removed when the Ingestre Park Golf Club golf course was established in the late 20th century, although most of the tree-lined drive, the Lion Lodges and all of Lionlodge Covert survive. The route of the Proposed Scheme will cross Ingestre New Park (COY145), as modified by the golf course.

Tixall Park (COY149)

- Morden's and Yates' Map of Staffordshire, dated 1695 and 1775 respectively, show Tixall Park (COY149) as being situated a short distance to the north-west of Tixall Hall, running north to abut Ingestre Hall Park. Yates depicts a tree-lined avenue running from a lodge north-east across the centre of the park to the junction of Hanyards Lane and Ingestre Hall Park (COY144). The Ordnance Survey surveyor's drawing indicates that by 1817 all land to the west of that avenue had been disparked and was now, at least in part, under cultivation. The avenue may have been an exclusive drive leading to Ingestre Hall that that avoided Hanyards Lane, which was then the public highway. It may be that Yates' map of 1775 was a snapshot in time that captured a planned reduction in the size of the park coupled with the routing of a private drive along its planned new western perimeter.
- In the 1770s, Capability Brown was consulted and William Emes was employed on the landscaping of the Tixall estate¹²⁴. If they landscaped the park that lay to the northwest of the Hall and Gatehouse, as described above, which will be crossed at its northern extend by the Proposed Scheme, their work cannot be identified today, unless they planted some of the coverts and perimeter planting that survive today, or unless they adapted the medieval fish pond within the park to a boating lake, which is

¹²⁰ Andrews (2013), p. 45

¹²¹ Mowl and Barre (2009), p. 99

¹²² Andrews (2013), p. 51

¹²³ Andrews (2013), p. 92

¹²⁴ Landmark Trust (2013)

the form it takes today. It may be that Brown and Emes limited their attentions to the land lying between the Hall and Gatehouse and the River Sow to the south. There is documentary evidence that both were involved in the modelling of a new, southerly approach to Tixall Hall via a handsome stone bridge built over the Sow at Hollisford in the 1770s¹²⁵. In 1766, Thomas Clifford had granted consent for the Staffordshire and Worcestershire Canal to be routed through the Tixall Estate, on the condition that the section of the canal that would run in front of the main southern façade of Tixall Hall was widened, so that it would appear as a lake when viewed from the Hall. It is also recorded that a bank of rock and many fences were removed thereafter and a lawn was laid that sloped down from the Hall, to improve the prospect of the canal ¹²⁶. It is possible that Brown and Emes' attentions were confined to the south of the Hall and Gatehouse, well away from the line of the Proposed Scheme.

Bishton Hall Garden (COYo11)

Bishton Hall (COYo12) was rebuilt in approximately 1770 by the banker John Sparrow, and was extended in the 19th century. After his death, his wife Elizabeth and his daughter Charlotte Sparrow laid out a formal garden (COYo11) to the rear (north) of the Hall. It is defined on its northern side by a screen that incorporates a central summer house in the form of a Greek Doric temple with flanking porticos. The screen is fronted by a broad terrace and steps that lead down to the formal garden, which originally contained an elaborately shaped central parterre, but which was subsequently converted to a fish pond. This ensemble must have been completed by 1838, when Thomas Peploe Wood sketched the garden. Consequently, the primary motive for building the screen cannot have been to screen the garden and the Hall from the nearby Trent Valley Railway Line, which was built not built until 1845 - 1847¹²⁷.

Moreton House Garden (COYoo7)

Moreton House (COYoo6), a Grade II listed, late 18th century brick-built villa built on a new hill-top site by William Hanbury, owner of collieries in Norton Canes and Brownhills on Cannock Chase, was originally equipped with a walled garden to the rear and was surrounded by a landscaped garden (COYoo7). The walled garden is surrounded by a cavity wall, and it is said locally that a coal-fired furnace heated the wall to force the growth of fruit trees. The encircling landscaped garden (COYoo7) was defined by an oval-plan ha-ha¹²⁸, which is depicted on Ordnance Survey surveyors drawing of 1832. The remains of the ha-ha can still be seen along the southern boundary of the garden, where it is flanked internally by a belt of Spanish oaks.

¹²⁵ Landmark Trust (2013)

Landmark Trust (2013)

¹²⁷ Mowl and Barre (2009), pp. 229-230

A ha-ha is a recessed landscape design element that creates a vertical barrier while preserving an uninterrupted view of the landscape beyond

6 Archaeological risk mapping

6.1 Introduction

6.1.1 The archaeological character of the route has been broken down into a series of Archaeological Character Areas (ACA) and Archaeological Sub-Zones (ASZ). These are described below and depicted in Cultural Heritage Map Series CHo₃-20₅b – CHo₃-20₉a.

6.2 Archaeological character areas

ACA3: Trent Valley at Great Haywood and Ingestre

- 6.2.1 This ACA is focussed upon the Pleistocene river terrace deposits and Pleistocene or Holocene alluvium that flank the River Trent where it is crossed by the route of the Proposed Scheme at Great Haywood and Ingestre.
- 6.2.2 The river terrace deposits at Ingestre contain the cropmark remains of one probable and one possible Iron Age square barrow and two broadly contemporary pit alignments. Also present is a large rectilinear cropmark enclosure with associated double ditched trackway and field boundaries. The morphology of these features suggests that these are likely to be of Iron Age or Romano-British date. They lie adjacent to the square barrows and to Lionlodge Covert, which contained one or more brine springs prior to their diversion in the 19th century. It is possible that the brine springs at this location were exploited for salt production in the prehistoric or Romano-British period. However, no fieldwork has been undertaken to date to test any such hypothesis. Where crossed by the route of the Proposed Scheme, the prehistoric cropmark remains that are present on the river terrace deposits to the west of the River Trent at Ingestre are entirely absent from the similar deposits along the eastern side of the River Trent. There may be potential for archaeological remains of prehistoric to medieval date to be preserved beneath or within the alluvial deposits that flank the River Trent throughout this ACA.
- Domesday Book records the presence of a water mill at Ingestre in 1086. It is possible that it was located on the site of Hoo Mill. The post-medieval mill building at Hoo Mill was demolished in early 20th century and the mill pond was infilled at the same time. The 18th century miller's cottage survives. The mill was connected to Hoo Mill Wharf on the Trent and Mersey Canal by means of a tramway during the 19th century, the remains of which survive today.
- During the post-medieval period, the Tudor Ingestre Gatehouse and Hall were built within this ACA. The Grade I listed Gatehouse survives, but the Tudor Hall was demolished and replaced with a Georgian Hall to the east. The Georgian Hall was, in turn, demolished in 1928. The buried archaeological remains of the two Halls lie uninvestigated within this ACA.
- 6.2.5 Capability Brown and William Emes consulted and worked on the grounds at Tixall Hall in the 1770s. The scope and focus of their efforts are not known, but the available documentary evidence suggests that they may have limited their attentions to the

- land lying between the Hall and Gatehouse and the River Sow¹²⁹. This land has not been subject to archaeological investigation but lies almost entirely within this ACA.
- There is earthwork, cropmark and map evidence that much of the floodplain land immediately adjacent to, and on each side of, the River Trent where crossed by the route of the Proposed Scheme was exploited as water meadows during the post-medieval period. The Trent and Mersey Canal, which opened in 1772, and the North Staffordshire Railway, which opened in 1848, run through this ACA.

ACA4: Stafford North uplands

- This ACA covers the section of the route of the Proposed Scheme running from the River Trent crossing at Great Hayward as far as Pirehill, to the south of Stone. The ACA extends across a ridge of high ground, at between 75m and 150m above Ordnance Datum (AOD), separating the River Sow and the River Trent. It largely comprises mudstone geology, which supports fertile agricultural soils. The only exception is the area around Salt, Hopton and Tixall, which is sandstone and supports relatively acidic soils. This has tended to mean lower levels of cultivation in these areas. Occasional streams, at Hopton and Marston, drain southwards towards the River Sow.
- There are known traces of prehistory scattered across the area, including Bronze Age burial mounds in Tixall and stray finds of Neolithic axes at Hopton. A possible Iron Age or Romano-British settlement enclosure was identified to the east of the Staffordshire showground in the 2016 geophysical surveys (see BID-CH-004-002). Generally, though, archaeological and documentary evidence suggests that this area remained fairly thickly wooded into the early medieval period. This is reflected by the presence of medieval deer parks at Ingestre and Tixall, which frequently indicate the survival of forestry. The settlements at Tixall, Ingestre, Hopton, Marston and Yarlet were all listed in Domesday Book and can be traced back to the late Saxon period.
- The settlement pattern comprises a series of small villages of medieval origin (i.e. Yarlet, Marston and Hopton), all of which show signs of shrinkage in the later medieval period. To the east, the medieval settlements of Tixall and Ingestre were both shifted in the 18th century to make way for designed landscape parks. Both of these aristocratic estates were sold off and divided during the 20th century, leaving behind remnant elements of designed landscape and ornamental buildings such as Tixall gatehouse.
- The landscape shows widespread traces of early enclosure. The sandstone geology of Tixall and Hopton led to the development of substantial open heathlands, enclosed by acts of parliament in the later 18th century. The area remains largely agricultural land, with the removal of historic field boundaries leading to the creation of increasingly large arable fields. Around Hopton and the fringes of Stafford there has been considerable modern development, much of it relating to the Ministry of Defence base.
- 6.2.11 There has been some limited archaeological work carried out in this area, notably excavations of the Bronze Age burial mounds at Tixall and salvage excavations

¹²⁹ Landmark Trust (2013)

associated with the construction of the Audley to Alrewas gas pipeline. Significant earthwork remains of medieval settlement survive at Yarlet, Hopton and, potentially, Ingestre.

6.3 Archaeological sub-zones

ASZ20: Moreton Brook

This risk zone contains a narrow band of alluvium on each flank of Moreton Brook. The 6.3.1 alluvium has potential to contain stratified waterlogged archaeology and may contain interbedded organic (peat) horizons of high geoarchaeological potential. It may also contain or seal archaeological remains of prehistoric to medieval date. Its potential to contain Middle or Late Bronze Age burnt mounds and associated settlement may be particularly high, as four Bronze Age burnt mounds have been identified in a similar context within the valley of Moreton Brook within 400m of the study area. This risk zone is also adjacent to the Deserted Medieval Village of Moreton, and there may be potential for associated structures, features or deposits to be sealed by alluvium. It is possible that evidence of post-medieval farming practices, particularly of water meadows, may be present within this risk zone. The potential for stratified waterlogged archaeology and geoarchaeological potential could be assessed by means of geoarchaeological/palaeoenvironmental coring and trial trenching. The Bronze Age to medieval potential could be assessed by means of stream-walking, fieldwalking, geophysical survey and trial trenching. A walkover survey would likely be effective in identifying remains of any post-medieval water meadow, supplemented by earthwork survey and targeted excavation and recording of any associated structures.

ASZ21: Moreton Deserted Medieval Village

This risk zone is located on slightly acidic loamy and clayey soils developed on the 6.3.2 Mercia Mudstone bedrock, with dispersed patches of glacial till. There may be potential for important palaeoenvironmental, geoarchaeological and archaeological remains of Palaeolithic date to be preserved beneath deposits of glacial till, where present. Conversely, there is little such potential where till deposits are absent. This risk zone lies adjacent to ASZ20, and there may be potential for surviving prehistoric archaeological remains on higher ground overlooking Moreton Brook. In particular, there may be potential for Middle and Late Bronze Age settlement associated with any burnt mounds that may be present along Moreton Brook within the study area. This risk zone defines the likely extent of Moreton Deserted Medieval Village, albeit its location is poorly defined at present. There is significant potential for hitherto unidentified medieval and early post-medieval settlement remains to be present within this risk zone. The presence of ridge and furrow earthworks is no quarantee of the absence of such settlement remains, because this form of ploughing continued into the post-medieval period and often overlies earlier settlement remains. Archaeological potential within this risk zone could be tested by means of geophysical survey, fieldwalking and trial trenching.

ASZ22: Colwich

6.3.3 This risk zone is located on slightly acidic loamy and clayey soils developed on the Mercia Mudstone bedrock, with dispersed patches of glacial till. There may be

potential for important palaeoenvironmental, geoarchaeological and archaeological remains of Palaeolithic date to be preserved beneath deposits of glacial till, where present. Conversely, there is little Palaeolithic potential where till deposits are absent. This risk zone lies adjacent to ASZ20, and there may be potential for surviving prehistoric archaeological remains on higher ground overlooking Moreton Brook. In particular, there may be potential for Middle and Late Bronze Age settlement associated with any burnt mounds that may be present along Moreton Brook within this risk zone (four Bronze Age burnt mounds have been identified within the valley of Moreton Brook within 400m of the study area). This risk zone also surrounds Moreton DMV, the extent of which is inaccurately known; therefore there may be potential for deserted village or dispersed settlement remains to be present within this risk zone. The site of the Colwich Tithe Barn (COYo18) lies entirely within the land required for the Proposed Scheme. It is likely to have medieval origins and there may be potential for the survival of archaeological remains associated with the barn and any associated structures. A rectilinear enclosure (COYo19) of probable Iron Age or Roman date, visible as a cropmark toward the north-western end of this risk zone, may be indicative of more extensive settlement activity of late prehistoric or Roman date on the higher ground overlooking the Trent Valley. The Palaeolithic potential of the risk zone could be assessed by means of geoarchaeological/palaeoenvironmental coring. The archaeological potential of all other periods could be assessed by means of fieldwalking, metal detecting, geophysical survey and trial trenching.

ASZ23: Great Haywood gravels

This risk zone is located on Pleistocene river terrace deposits on the eastern bank of 6.3.4 the River Trent. River terrace sediments may preserve floral and faunal remains of Palaeolithic date that are instrumental in providing information on past climates and environments and developing secure chronostratigraphic frameworks through both relative and absolute dating. They may also contain Palaeolithic activity sites or artefacts in primary or, more likely, secondary contexts. Gravel terraces may also have been favourable locations for Mesolithic activity, since regional studies have indicated that well-drained soils above a watercourse may have been preferred. It falls within the study area of the Staffordshire Eastern Rivers Confluence NMP. The NMP recorded a wealth of prehistoric and perhaps Romano-British features on the western river terrace (ASZ25), but none in this risk zone. It is not known whether that is because of an absence of activity, or because of differential agricultural exploitation thereafter. In addition, several prehistoric periods are characterised by settlements and burial practices that are typically unconducive to cropmark formation. Consequently, this risk zone should be considered to have a high potential for containing hitherto unidentified archaeological remains of prehistoric to early medieval date. That potential could be assessed by means of geophysical survey, fieldwalking survey and trial trenching.

ASZ24: Trent crossing (Hoo Mill)

6.3.5 This risk zone comprises the alluvial floodplain of the River Trent. Holocene alluvium frequently contains palaeochannels, which are key contexts for understanding the physical evolution of the landscape, but also act as effective traps preserving both artefacts and ecofacts indicative of the surrounding environment and human activity. The higher-energy fluvial regime upstream of Rugeley means that palaeochannels are

not anticipated within the study area, but if they are present would be important, because of their rarity. Some of the archaeological remains visible as cropmarks on aerial photographs on the river terrace to the west (ASZ25) and mapped by the NMP, such as the Iron Age pit alignments within COY048 and COY045 would appear to terminate at the alluvium. In reality, they may continue towards the River Trent but be obscured from view by the alluvium. The alluvium could also mask any Bronze Age burnt mounds that may be present beside the River Trent, and could contain remains of, say, fish traps and landing stages of any date from prehistoric to medieval date. This potential could be tested by means of geoarchaeological/ palaeoenvironmental coring and trial trenching.

ASZ₂₅: Ingestre gravel terrace

6.3.6 This risk zone comprises the river terrace deposits on the western bank of the River Trent. The NMP has recorded extensive remains of Bronze Age, Iron Age and Iron Age or Roman date within this risk zone, in the form of cropmark remains of round barrows, pit alignments and square barrows, and rectilinear enclosures and trackways respectively. The exceptionally large ring ditch within COYo48 may be of Middle Neolithic date, and two polished stone axes of Neolithic date have been recovered from within this zone, in the fields to the west of Hoo Mill. It has been hypothesized that round barrows in river valley contexts may have been sited adjacent to contemporary settlements, and the Neolithic ritual landscape within the Fradley to Colton area (CA1) may also have been used by populations within the Colwich to Yarlet area. Settlements prior to the Middle Iron Age are likely to have been unenclosed and burials dating to between the Middle Bronze Age and Middle Iron Age are likely to have been in flat cemeteries; neither of these would be likely to be visible within the cropmark record if present on site. There may also be potential for Middle or Late Bronze Age burnt mounds to be present or, more likely at this elevated location, associated settlement. The well-drained soils of this risk zone, located above a reliable watercourse, may also have been attractive to Mesolithic hunters. The archaeological and palaeoenvironmental potential of this zone could be tested by means of fieldwalking, geophysical survey, trial trenching, and geoarchaeological/ palaeoenvironmental coring.

ASZ₂6: Ingestre village

6.3.7 This risk zone comprises slightly acid loamy and clayey soils developed on the Mercia Mudstone solid geology. It contains the cropmark remains (mapped by the NMP) and some surviving earthworks (visible in the LiDAR data) of a medieval and post-medieval agricultural landscape, comprising field boundaries, tracks, rectangular stack stands and marl pits (COYo53). There may be potential for medieval settlement remains to be present within or immediately adjacent to the land required for the Proposed Scheme within this risk zone. The present Ingestre village is small, contains only 19th century buildings and is conveniently peripheral to Ingestre New Park (COY145). It may be an estate village, and the ancient village may have spread across Town Field, which is crossed by the route of the Proposed Scheme. The location of the medieval chapel of ease is unknown; the current, replacement church was built in 1676 on a new site. The old church is thought to have been located on The Mount, but may have been situated within Church Field, which is crossed by the Proposed Route. Any village remains within Town and Church fields may be well preserved, because they

would have lain within Ingestre New Park after 1803 and within Ingestre Park Golf Club golf course since the later 20th century. Therefore, Town and Church Fields have not been cultivated since the end of the 18th century. It has recently been suggested that the former late-medieval St Erasmus' well and chapel may have been located on the site of Lionlodge Covert, which will be truncated by the Proposed Scheme. Yates' County Map of 1775 and the Ordnance Survey drawing of 1812 would appear to show that a private tree-lined carriageway ran to Ingestre Hall along the western edge of Tixall Park, before entering Ingestre New Park to the south of its junction with Hanyards Lane. This was replaced by the carriageway that ran from the Lion Lodges, which was established in the early 19th century. LiDAR data would appear to show that the arrangement of the old carriage survives as earthworks within the golf course. The presence or absence of remains of the well and chapel could be established by means of walkover (reconnaissance) survey. The presence of village remains within Church or Town Fields could be established by means of geophysical survey and trial trenching. The arrangement of the 18th century carriageway as it entered Ingestre New Park and how it joined to Hanyards Lane before it was stopped up in 1803 could be established by means of earthwork survey and trial trenching.

ASZ₂₇: Ingestre pleasure ground

6.3.8 This risk zone comprises slightly acidic loamy and clayey soils developed on the Mercia Mudstone solid geology. It comprises a portion of the medieval Ingestre deer park and of the post-medieval landscape park and pleasure gardens, which were laid out in formal, geometrical style in the later 17th century and which were naturalized by Capability Brown in later 18th century. There may be potential for identifying the arrangement and details of any lost features and structures associated with the southward extension of the park from the early 19th century, where crossed by the Proposed Scheme. There may also be potential for identifying surviving trees associated with the various phases of development. This could be established by means of vegetation and geophysical survey, coupled with intrusive excavation. This risk zone lies outside the land required for the Proposed Scheme.

ASZ28: Tixall estate

6.3.9 This risk zone comprises slightly acid loamy and clayey soils developed on the Mercia Mudstone solid geology, and sand-to-loams soils developed upon sandstone of the Bromsgrove Sandstone Formation in the northern part of the risk zone. It comprises a portion of the medieval Tixall deer park and of the post-medieval landscape park that superseded it. There may be potential for identifying the boundaries of the medieval deer park and an entry point into the park near Upper Hanyards Farm; the Hanyards place-name derives from an Old English word denoting an entrance into an enclosure or park. Through geophysical survey followed by targeted trial trenching, there may also be potential for identifying the boundaries and internal arrangements of the postmedieval landscape park, including the tree-lined avenue though/along the western side of Tixall park visible on Yates' County Map of 1775 and the Ordnance Survey Drawing of 1812 that would appear to have defined a private carriageway to Ingestre Hall. The dating of some of the cropmark field boundaries within the northern boundary of the landscape park, by means of targeted trial trenching, where crossed by the Proposed Scheme may perhaps enable the dating of a contraction or expansion of the park at that location. The northern part of the risk zone, which comprises the

former Tixall Heath, contains the remains of a Bronze Age round barrows (Weetmans Ring Ditch), as well as an Iron Age pit alignment revealed as cropmarks and a rectilinear enclosure apparently containing a roundhouse revealed through geophysical survey. There are two further round barrows a short distance to the south of the risk zone (King's and Queen's Low). This area would therefore appear to have significant prehistoric archaeological potential that could be tested by means of fieldwalking and geophysical survey, followed by targeted trial trenching.

ASZ29: Stafford showground

6.3.10 The solid geology of this risk zone comprises sandstone of the Bromsgrove Sandstone Formation and sandstone and conglomerate of the Kidderminster Formation. The zone is devoid of superficial deposits, apart from a small area of glacial till adjacent to the A518 Weston Road north-east of Stafford. This risk zone lies upon the former Tixall Heath and may also have prehistoric potential. It also lies within the northern part of the former Ingestre deer and subsequent landscape park, and may contain the remains of planting, structures (such as park lodges), access tracks/drives and boundary earthworks or walls. This potential could be tested by means of walkover, fieldwalking and geophysical survey, supplemented with targeted trial trenching.

ASZ30: Beacon Hill

The solid geology of this risk zone comprises sandstone of the Bromsgrove Sandstone Formation; it is devoid of superficial deposits. The name of the topographical feature and risk zone, which is recorded from the early 17th century, suggests that it may have been the site of a post-medieval warning beacon. This could be tested by means of walkover and geophysical survey, supplemented with targeted trial trenching. However, the risk zone lies outside of the land required for the Proposed Scheme.

ASZ₃₁: Hopton valley

The solid geology of this risk zone is sandstone and conglomerate of the Kidderminster Formation; it is devoid of superficial deposits. There are no previous archaeological investigations within the risk zone recorded in the Staffordshire HER, except for the Staffordshire NMP. Hopton Valley may contain Holocene alluvium that may have palaeoenvironmental potential. It may also have potential for containing archaeological remains of several periods, including Middle and Later Bronze Age burnt mounds, which are frequently located in similar topographical locations, and associated settlement. Palaeoenvironmental potential could be tested by means of geoarchaeological/palaeoenvironmental coring, while the archaeological potential could be tested by means of stream-walking, fieldwalking and geophysical survey, supplemented with trial trench of any targets revealed by non-intrusive survey and of any areas where thick alluvial cover would impede their efficacy.

ASZ32: Hopton village

6.3.13 The solid geology of this risk zone is sandstone and conglomerate of the Kidderminster Formation; it is devoid of superficial deposits. This risk zone has significant potential to reveal the early medieval or medieval origins and the evolving layout of the village and its religious provision from then until now. There is also potential for understanding the sandstone-quarrying industry that would appear to have flourished at Hopton during the post-medieval period, if not earlier.

The archaeological potential of this risk zone could be established by means of geophysical survey, test-pitting and targeted trial trenching.

ASZ₃₃: Stafford north-east fringe

The solid geology of this risk zone is sandstone and conglomerate of the 6.3.14 Kidderminster Formation across the eastern half of the risk zone, and mudstone and halite-stone of the Mercia Mudstone Group across its western half. There is some glacial till, glaciofluvial sheet deposits and peat on the fringe of the built-up area of Stafford, within the risk zone. There may be palaeoenvironmental and archaeological potential of Palaeolithic date within and below the glacial till and glaciofluvial sheet deposits, and similar potential but of Holocene date within and beneath the peat. There could also be archaeological remains of Holocene date elsewhere within the risk zone, which has been the subject of no archaeological investigations except for the Staffordshire NMP and some geophysical survey as part of the Proposed Scheme. The NMP dataset indicates that the land to the south of Hopton Village was within open fields within the medieval and/or post-medieval periods prior to enclosure. Palaeoenvironmental potential and the potential for the presence of land surfaces that could have hosted prehistoric activity could be ascertained by means of geoarchaeological/ palaeoenvironmental coring, while the archaeological potential could be tested by means of fieldwalking and geophysical survey, supplemented with trial trench of any targets revealed by non-intrusive survey and of any areas where thick alluvial cover would impede their efficacy. The chronology of enclosure could also be tested by means of trial trenching across cropmark field boundaries.

ASZ34: Hopton enclosures

6.3.15 The solid geology of this risk zone is sandstone of the Bromsgrove Sandstone Formation and sandstone and conglomerate of the Kidderminster Formation at and in the immediate vicinity of Hopton Village, and mudstone and halite-stone of the Mercia Mudstone Group to the west thereof. A tongue of glaciofluvial sheet deposits extends into the south-western corner of the risk zone. Several enclosed smallholdings are depicted on Yates' County Map of 1775 at this location, including, it would appear, Lowerbridge Farm, which lies within the land required for the Proposed Scheme. Consequently, there may be potential for ascertaining the chronology of enclosure and the dispersal of farmsteads beyond the village confines in the late medieval or post-medieval period. This could be tested by means of trial trenching across boundaries and recording of the historic buildings at Lowerbridge Farm.

ASZ35: Hopton fields

This risk zone comprises slightly acid loamy and clayey soils developed on Mercia Mudstone solid geology. This risk zone falls entirely within the study area of the Staffordshire NMP, which recorded only narrow ridge and furrow of probable post-medieval date. Fieldwalking, walkover (reconnaissance) and geophysical surveys and a construction watching brief were undertaken along the line of the National Grid Audley to Alrewas natural gas pipeline, which runs diagonally across the risk zone (while not crossing the proposed scheme). These failed to record any significant archaeological remains. There may be archaeological potential beyond the construction corridor of the Audley to Alrewas gas pipeline that would not be conducive to cropmark formation on this geology.

ASZ₃6: Marston Deserted Medieval Village

This risk zone is located on slightly acidic loamy and clayey soils developed on the Mercia Mudstone bedrock. This risk zone contains the surviving earthwork remains of Marston Deserted Medieval Village (COY130) and the surrounding land, because the extents of the former village remain to be established. There is significant potential for hitherto unidentified settlement and agricultural remains of early medieval to post-medieval date throughout this risk zone. Additionally, it is unknown whether the extant Church of St Leonard, Marston, built at the end of the 18th century, is on the site of its medieval predecessor, or whether the medieval chapel of ease was sited elsewhere. If the latter, there may be potential for encountering the below-ground remains of the medieval chapel within the land required for the Proposed Scheme. There may also be potential for ascertaining the chronology of late- or post-medieval enclosure at Marston. This potential could be ascertained through fieldwalking and geophysical survey across the study area within the land required, supplemented with targeted trial trenching.

ASZ₃₇: Marston till

This risk zone comprises glacial till that mantles the north-facing slopes of the Trent Valley. There may be potential for important palaeoenvironmental, geoarchaeological and archaeological remains of Palaeolithic date to be preserved beneath the till. Such an elevated location above a reliable watercourse would have been a favourable location for settlement of a range of archaeological periods. Palaeoenvironmental potential and the potential for the presence of land surfaces that could have hosted Palaeolithic activity could be ascertained by means of geoarchaeological/ palaeoenvironmental coring, while the archaeological potential could be tested by means of fieldwalking and geophysical survey, supplemented with trial trench of any targets revealed by non-intrusive survey or coring.

ASZ₃8: Marston fields

6.3.19 This risk zone is located on slightly acidic loamy and clayey soils developed on the Mercia Mudstone bedrock. The Staffordshire HER does not record any archaeological fieldwork as having been undertaken within this risk zone, and it was not covered by the Staffordshire NMP. It is an area of planned enclosure, with a weakly nucleated settlement pattern. The archaeological potential of this risk zone is poorly understood, because of the absence of archaeological investigation undertaken to date. Its potential could be ascertained by means of geophysical and fieldwalking survey, supplemented with targeted trial trenching.

ASZ39: Yarlet Deserted Medieval Village

6.3.20 This risk zone is located on slightly acidic loamy and clayey soils developed on the Mercia Mudstone bedrock. It comprises the site of the medieval village of Yarlet, which was depopulated by the Cistercian monks of Combermere Priory and turned into a grange in the second half of the 12th century. The remains of the deserted village (or alternatively of the grange centre) survive as hollow ways, a possible house platform and ridge and furrow earthworks. The archaeological potential of this risk zone could be established by means of earthwork, geophysical and fieldwalking survey, supplemented with trial trenching.

ASZ40: Yarlet hill top

The solid geology of this risk zone is halite-stone and mudstone of the Stafford Halite Member, which gives rise to loamy or silty soils. It is devoid of superficial geology. The hilltop contains the site of the 17th century Yarlet Hall, depicted on the 1816 Ordnance Survey surveyor's drawing at a location marked today by earthwork platforms and a possible embanked defensive enclosure. The 17th century hall was replaced in 1870 by the building now used as Yarlet School. The archaeological potential of the hilltop site could be ascertained by means of earthwork survey and trial trenching. This risk zone also contains the land within an oval boundary that is still present and visible in the landscape today that may fossilize the boundary of the medieval monastic grange. The internal arrangements of the grange are unknown and the estate centre could lie within the land required for the Proposed Scheme. The archaeological potential within the oval boundary could be assessed by means of geophysical survey, fieldwalking and trial trenching.

ASZ41: Peasley bank

The solid geology of this risk zone is halite-stone and mudstone of the Stafford Halite Member, which gives rise to loamy or silty soils. It is devoid of superficial geology. The fieldscape across the northern half of the risk zone comprises piecemeal enclosure. That across its southern half, planned enclosure. There is a dispersed settlement pattern throughout. The Staffordshire HER does not record any archaeological fieldwork as having been undertaken within this risk zone, and it was not covered by the Staffordshire NMP. The archaeological potential of this risk zone is poorly understood, because of the absence of archaeological investigation undertaken to date. Its potential could be ascertained by means of geophysical and fieldwalking survey, supplemented with targeted trial trenching.

7 Analysis and research potential

7.1 Introduction

7.1.1 A good general understanding of the character and significance of the archaeology within the study area can be reached using desk based sources and taking into account additional factors such as topography, geology, historic character and distribution of known archaeological finds, sites and assets.

7.2 Research potential and priorities

7.2.1 An Archaeological Research Framework for the West Midlands¹³⁰ provides an introduction to key research themes in the region by period. Reflecting the potential of the land required for the Proposed Scheme in this CA, and drawing on the general themes identified in the published research framework, the following questions could provide a focus for further investigation carried out in this study area in terms of period based and multi-period based research.

General

- Assess whether and to what extent the variable presence of cropmarks within the study area represents a real distinction in patterns of past activity or whether and to what extent it is a function of geology. Extensive and dense cropmark complexes are visible on the sand and gravel terraces of the River Trent, and, although less densely, above the sandstones of the Bromsgrove Sandstone Formation and of the Kidderminster Formation. Conversely, they are far less dense upon mudstones of the Mercia Mudstone Group. Can geophysical survey and intrusive investigations inform this assessment?
- Assess the archaeological, geoarchaeological and palaeoenvironmental research potential of the Pleistocene gravels associated with the River Trent and the Holocene alluvium lining the Moreton Brook, and possibly the minor watercourses at Hopton and Marston. Research potential may ascertainable by means of geoarchaeological/palaeoenvironmental coring.
- 7.2.4 Establish the chronostratigraphic framework of the study area and assess how it impacts upon the preservation and visibility of the cultural and environmental record, by means of geoarchaeological/palaeoenvironmental coring.
- 7.2.5 Establish, principally by means of geoarchaeological/palaeoenvironmental coring, how the natural landscape evolved during the Quaternary period and how has this affected and presented opportunities for human communities?

Early and late prehistory

7.2.6 What is the potential of the superficial deposits within the study area (principally the river terrace deposits associated with the River Trent but also deposits of till at various locations) to yield information on human activity within the Palaeolithic period and

¹³⁰ Watt, S., ed (2011), The Archaeology of the West Midlands: a framework for research, Oxford: Oxbow Books

- upon the environment within which Palaeolithic communities acted? Can this be established by means of geoarchaeological/palaeoenvironmental coring?
- 7.2.7 Identify the preferred locations of occupation and activity sites of Mesolithic date, by means of fieldwalking and test pitting across a range of soil types and topographic locations, in order to assist with future exercises in predictive modelling¹³¹.
- 7.2.8 Establish by means of geoarchaeological/palaeoenvironmental coring and trial trenching whether Mesolithic sites may be buried beneath alluvial deposits associated with the watercourses within the study area.
- 7.2.9 Establish whether the Neolithic communities that built and used the ceremonial monuments present within the Trent Valley within the Fradley to Colton area (CA1) were in part resident within the Colwich to Yarlet area. Non-intrusive survey and intrusive investigations within and adjacent to the Trent Valley have the potential to address this question.
- 7.2.10 Can a combination of fieldwalking, geophysical survey and trial trenching establish the presence of any surviving remains of Middle Bronze Age to Early Iron Age date within the study area, and particularly upon the river terrace deposits flanking the River Trent? None are visible in the cropmark data, but these periods may have been characterised by open settlements and burial within flat cemeteries the remains of which are typically not conducive to cropmark formation.
- Are there any remains of Bronze Age burnt mounds adjacent to water courses within the study area (there are four such sites at the north-western end of the study area, adjacent to Moreton Brook, while between 40 and 50 such mounds are known within Birmingham and the Black Country and a further 17 are known within Staffordshire)? If so, when were burnt mounds and associated structures built and used within the study area and are there any adjacent, contemporary settlement remains (it is hypothesized that such remains may be present on slightly higher and drier ground within approximately 50m of a burnt mound)? The mounds may be identifiable through stream-walking survey, while the settlements and mounds may be revealed by fieldwalking and geophysical survey, supplemented with trial trenching.
- Problem 3.2.12 By means of excavation, establish the form, function and currency of the pit alignments that are visible within the study area upon and adjacent to the terrace deposits of the River Trent. Excavations at the Trent-Tame confluence and along the line of the M6 Toll suggested that they date to the Middle Iron Age, within the West Midlands region.
- 7.2.13 Establish whether the River Trent terrace deposits at Ingestre and Tixall were under arable cultivation during the Middle Iron Age. The double pit alignment within COYo48 can be seen to run across the exceptionally large ring ditch within the same asset group, suggesting that the round barrow had been substantially reduced in height by the time the double pit alignment was constructed. Coupled with the need or desire to physically constrain movement across the river terrace, this may indicate that the river terrace was under crop rather than, say, uncultivated waste. The contemporary agricultural regime across the river terrace may be ascertainable

¹³¹ Garwood (2011), p. 30

through the environmental sampling of the fills of a sample of aligned pits during excavation.

- 7.2.14 Through excavation, establish whether the pit alignments within the study area constitute the earliest land boundaries at that location, or whether there is any evidence that they fossilized the lines of earlier, more ephemeral boundaries? Conversely, what is the evidence that pit alignments, perhaps re-excavated as continuous ditches, continued to structure the landscape into historic times?
- 7.2.15 What is the evidence for Iron Age settlement within the study area? Establish through excavation whether the rectilinear ditched enclosures visible as cropmarks and geophysical anomalies within and around the Trent Valley are settlement enclosures of Iron Age date? They would appear to conform closely in size and shape to ditched enclosures excavated at the Trent-Tame confluence and along the route of the M6 Toll, which were found to be Iron Age settlement enclosures that contained the remains of single or multiple round houses.
- 7.2.16 Establish by means of excavation whether there is any evidence for salt production within the study area. The large rectilinear cropmark enclosure within COYo48 lies close to the site of a brine spring present within Lionlodge Covert until drained into the River Trent in the 19th century.
- 7.2.17 Establish through excavation whether the putative square barrows within COYo48 and COYo45 are closely similar in date, form and burial rite to the square barrows of the East Yorkshire Arras Culture? Are they indicative of an exogenous cultural link or of endogenous development?

Romano-British

- 7.2.18 What is the evidence for Romano-British settlement within the study area? Can it be established through excavation whether any of the rectilinear enclosures visible as cropmarks on aerial photographs or as geophysical anomalies in and around the Trent Valley are of Roman date? Can any additional Romano-British settlement sites be identified through fieldwalking and geophysical survey both within and beyond the Trent Valley? Is there any evidence for the Romanization of farmsteads within the study area (none is visible in the cropmark evidence), or did farmsteads continue to be built in the native tradition into or even throughout this period?
- 7.2.19 Was there continuity or change in the rural economy in general and field systems in particular during and after the transition from the Iron Age to the Romano-British period? At the Trent-Tame confluence, Iron Age farmsteads engaged in mixed, subsistence agriculture would appear to have been superseded by stock ranches, perhaps controlled from a villa located to the west of Barton-under-Needwood. Can change or continuity within the study area be established through open-area excavation?
- 7.2.20 To what extent was a Romanised material culture adopted by communities resident within the study area?

Early medieval

- 7.2.21 Can any surviving remains of Early Medieval settlement and land use be identified within the study area? Were any of the rectilinear cropmark enclosures present in and around the Trent Valley occupied into this period?
- 7.2.22 Was settlement and farming restricted to the lighter, well drained soils that formed upon river terrace deposits within the early part of this period? If so, when were the heavier and wetter soils on the plateaux and interfluves settled and farmed?
- 7.2.23 When was an anglicized material culture adopted within the study area? Is there any evidence for the use of an Early Saxon material culture and for Germanic pagan burial within the study area, or does evidence from fieldwalking and intrusive investigation support the limited historical sources and archaeological dataset in suggesting anglicization was a Middle Saxon phenomenon in Staffordshire?
- 7.2.24 Can palaeoenvironmental remains clarify the extent to which there was a retreat from arable cultivation to pastoral farming and clarify the extent of any woodland regeneration during the transition from the Romano-British to the Early Medieval period? Unfortunately, the late Roman and early Medieval levels within the palaeoenvironmental samples extracted from King's Pool Stafford were disturbed.

Medieval

- 7.2.25 Can fieldwalking, supplemented by trial trenching, reveal the extent to which the medieval settlement pattern within the study area was nucleated and the extent to which it was dispersed? What was the chronology of nucleation?
- 7.2.26 To what extent were field systems open during the earlier part of this period and what was the chronology of their enclosure during the later medieval and post-medieval periods? Can this be ascertained through the excavation of existing and former field boundaries, the latter identified by cropmarks and geophysical survey?
- 7.2.27 Is there any evidence for settlement contraction or desertion within the land required for the Proposed Scheme? Deserted villages are known at Moreton, Marston and Yarlet, but the full extents of those settlements are poorly understood. Dispersed settlement, where it existed, may also have been abandoned during this period. Can deserted or shrunken settlements be identified by means of non-intrusive investigations? Where identified, can excavation clarify the chronology and perhaps the cause of contraction or desertion?
- 7.2.28 Do any remains of the Cistercian grange established at Yarlet survive within the land required for the Proposed Scheme? Can the oval land boundary that defines much of the extent of risk zone ASZ40 be dated, where crossed by the Proposed Scheme, and can it be identified as the boundary of the medieval grange?
- 7.2.29 Is there any evidence for rural industry within the study area? There is evidence for glass making at Colton within the Fradley to Colton area (CA1), while the Colwich place-name and references to the Collyer personal name at Colwich in medieval documents are indicative of charcoal burning there. Such industry may be identifiable through fieldwalking and, particularly, magnetic geophysical survey.

- 7.2.30 Can geophysical survey and intrusive investigation reveal the footprint and approximate foundation date of Tixall deer park? Can they reveal the date and form of any subsequent expansion or contraction of the park (there are cropmarks of enclosed fields within the northern part of the park), and can they reveal the form and location of the park pale and any opening in the pale, which place-name evidence locates near Upper Hanyards Farm?
- 7.2.31 Establish whether the site and any remains of the historically attested St Erasmus' well and chapel at Ingestre lie within the land required for the Proposed Scheme. Walkover (reconnaissance) survey could be used to test the theory that they were located on the site of Lionlodge Covert. Geophysical survey, supplemented with trial trenching, may be able to identify any remains within Town and Church Fields where crossed by the Proposed Scheme.
- 7.2.32 Establish, by means of geophysical survey and trial trenching, whether the medieval village or the medieval chapel of ease (additional to St Erasmus' chapel) at Ingestre extended into Town Field or Church Field, where crossed by the Proposed Scheme. If they did, when was the village moved or limited to its present site?

Post-medieval and modern

- 7.2.33 What was the chronology of the piecemeal enclosure of fields within the study area? Can this be established by means of trial trenching across extant or former field boundaries crossed by the Proposed Scheme?
- 7.2.34 What can non-intrusive survey and intrusive investigation tell us about the form and currency of Staffordshire's water meadows?
- 7.2.35 What is the chronology of other land improvements, such as marling, within the study area?
- 7.2.36 How did medieval manorial complexes and associated deer parks transition to Postmedieval country houses and landscape parks? Can this be tested by means of geophysical survey and intrusive investigations at Ingestre and Tixall?
- 7.2.37 Can Yarlet Hill be demonstrated to be the site of the 17th century Yarlet Hall (COY138)? If it can, how was the Hall constructed, what was its form, when was it built, abandoned and demolished, and what was its setting?
- 7.2.38 What form did the landscaped garden (COY007) at Moreton Hall take, when was it laid out and when was it abandoned?
- 7.2.39 Is there any evidence for rural industry within the land required for the proposed Scheme? Did a dual economy of industry and agriculture operate within the study area?
- 7.2.40 Is there any surviving evidence of Second World War activity or structures within the land required for the Proposed Scheme?

8 References

Andrews, A. (2013), A Short History of Ingestre, Tixall: Hanyards Press.

Barber, M. (2007), The Blank Country? Neolithic enclosures and landscapes in the West Midlands, in: P. Garwood, ed., *The Undiscovered Country: the earlier prehistory of the West Midlands*, Oxford: Oxbow Books, pp. 79-96.

Barton, N. (2009), The Lateglacial or Latest Palaeolithic occupation of Britain, in: J. Hunter and I. Ralston, eds, *The Archaeology of Britain: an introduction from earliest times to the twenty-first century*, Abingdon: Routledge, pp. 18-52.

Basset, S. (1989), In search of the origins of Anglo-Saxon kingdoms, in: S. Bassett, *The Origins of the Anglo-Saxon Kingdoms*, London: Leicester University Press, pp. 3-27.

Belford, P. (2011), The archaeology of everything – grappling with post-medieval, industrial and contemporary archaeology, in S. Watt, ed., *The Archaeology of the West Midlands: A Framework for Research*, Oxford: Oxbow Books, pp.211-236.

Breeze, P., Challis, K. and Kincey, M. (2008), Staffordshire Water Meadows Survey.

Bridgland, D.A., Howard, A.J., White, M.J. and White, T.S (2014), *The Quaternary of the Trent*, Oxford: Oxbow Books.

Brooks, N. (1989), The formation of the Mercian kingdom, in: Bassett, S., *The Origins of the Anglo-Saxon Kingdoms*, London: Leicester University Press, pp. 159-170.

Brown, M. and Farr, C.A. (2001), *Mercia, an Anglo-Saxon kingdom in Europe*, London: Leicester University Press.

Buteux, S. and Chapman, H. (2009), Where Rivers Meet, the archaeology of Catholme and the Trent-Tame confluence, York: Council for British Archaeology Research Report 161.

Cantor, L.M. (1962), The medieval deer-parks of north Staffordshire, in NSJFS Vol. II, pp. 72-77.

Chetwynd-Stapylton, H. E. (1892), *The Chetwynds of Ingestre, being a history of that family from a very early date,* London: Longmans, Green, and Co.

Cookson & Tickner Ltd (2014), Shugborough Parkland Management Plan.

Dark, P. (2000), The Environment of Britain in the First Millennium AD, London: Duckworth.

Dyer, C. (2000), Everyday Life in Medieval England, London: Hambledon & London.

Dyer, C. (2000), Woodlands and Wood-Pasture in Western England, in: J: Thirsk, ed., *The English Rural Landscape*, Oxford: Oxford University Press, pp. 97-121.

Edwards, R. and Lake, J. (2010), West Midlands Farmsteads and Landscapes Project, County Summary Report for Staffordshire.

English Heritage (1995), English Heritage Battlefield Report: Hopton Heath 1643.

English Heritage (2011), Prehistoric Linear Boundary Earthworks.

Erdeswick, S. (1844), A Survey of Staffordshire, London: J. B. Nichols and Son.

Esmonde Cleary, S. (2011), The Romano-British period: an assessment, in: S. Watt, ed., *The Archaeology of the west midlands: a framework for research*, Oxford: Oxbow Books, pp. 127-147.

Foard, G. and Morris, R. (2012), The Archaeology of English Battlefields: Conflict in the Pre-Industrial Landscape, York: CBA.

Garwood, P., ed. (2007), The Undiscovered Country: the earlier prehistory of the West Midlands, Oxford: Oxbow Books.

Garwood, P. (2011), The earlier prehistory of the West Midlands, in: S. Watt, ed., *The Archaeology of the west midlands: a framework for research*, Oxford: Oxbow Books, pp. 9-99.

Garwood, P. (2007), Late Neolithic and Early Bronze Age funerary monuments and burial traditions in the West Midlands, in P. Garwood, ed., *The Undiscovered Country: the earlier prehistory of the West Midlands*, Oxford: Oxbow Books, pp. 134-165.

Gelling, M. (1992), *The West Midlands in the Early Middle Ages*, London: Leicester University Press.

Gelling, M. (2000), *Place-Names in the Landscape*, London: Phoenix Press.

Halkon, P. (2013), The Parisi: Britons and Romans in Eastern Yorkshire, Stroud: The History Press.

Hamerow, H. (2014), *Rural Settlements and Society in Anglo-Saxon England*, Oxford: Oxford University Press.

Hills, C. (2009), Early Historic Britain, in: J. Hunter and I. Ralston, eds., *The Archaeology of Britain:* An Introduction from Earliest times to the Twenty-First Century, London: Routledge, pp. 219–240.

Hodder, M. (2017), Burnt mounds and beyond: the later prehistory of Birmingham and the Black Country, in: D. Hurst, ed., *Westward on the High-Hilled Plains: The Later Prehistory of the West Midlands*, Oxford: Oxbow Books, pp. 29-36.

Hooke, D. (1998), *The Landscape of Anglo-Saxon England*, London: Leicester University Press.

Hooke, D. (2001), Mercia: landscape and environment, in: M.P. Brown and C.A. Farr, eds, *Mercia*, an Anglo-Saxon Kingdom in Europe, London: Leicester University Press, pp. 161-72.

Hooke, D. (2011), The post-Roman and the early medieval periods in the West Midlands: a potential archaeological agenda, in: S. Watt, ed., *The Archaeology of the West Midlands: A Framework for Research*, Oxford: Oxbow Books, pp. 149-172.

Horovitz, D.(2005), The Place-Names of Staffordshire, Brewood: David Horovitz.

HS2 Ltd (2017), High Speed Two (HS2) Phase 2a (West Midlands - Crewe), Background Information and Data, Cultural heritage survey reports, BID-CH-004-002. Available online at: www.gov.uk/hs2.

Hunt, J. (2011), The Medieval Period, in: S. Watt, ed., *The Archaeology of the West Midlands: A Framework for Research*, Oxford: Oxbow Books, pp. 173-209.

Hunter, J. and Ralston, I., ed. (2009), *The Archaeology of Britain: An Introduction from Earliest times to the Twenty-First Century*, London: Routledge.

Hurst, D. (2011), Middle Bronze Age to Iron Age: a research assessment overview and agenda, in: S. Watt, ed., *The Archaeology of the west midlands: a framework for research*, Oxford: Oxbow Books, pp. 101-126

Hurst, D, ed. (2017), Westward on the High-Hilled Plains: The Later Prehistory of the West Midlands, Oxford: Oxbow Books.

Jenkinson, T. and Taylor, P. (2014), The Toll-houses of Staffordshire, Ipswich: Polystar Press.

Jones, G.R.J. (1979), Multiple Estates and Early Settlement, in: P.H. Sawyer, ed., *English Medieval Settlement*, London: Edward Arnold, pp. 9-34.

Knight, D., Howard, A.J. and Elliott, L. (2004), *Trent Valley Landscapes: The Archaeology of 500,000 Years of Change*, King's Lynn: Heritage Marketing and Publications Ltd.

Landmark Trust, The (2013), Tixall Gatehouse: History Album.

Lang, A. and Buteux, S. (2007), Lost but not forgotten: the Lower and Middle Palaeolithic occupation of the West Midlands, in: P. Garwood, ed., *The Undiscovered Country: the earlier prehistory of the West Midlands*, Oxford: Oxbow Books, pp. 6-22.

Lindsay, J. (1979), *The Trent and Mersey Canal*, London: David & Charles.

Lock, G., Spicer, D., and Hollins, W. (2013), Excavations at King's Low and Queen's Low: two Early Bronze Age barrows in Tixall, North Staffordshire, Oxford: Archaeopress.

Lewis, C., Mitchell-Fox, P. and Dyer, C. (2001), *Village, Hamlet and Field: Changing Medieval Settlements in Central England*, Macclesfield: Windgather Press.

Mileson, S.A. (2009), *Parks in Medieval England*, Oxford: Oxford University Press.

Mithen, S. (1999), Hunter –gatherers of the Mesolithic, in: J. Hunter and I. Ralston, eds, *The Archaeology of Britain: an introduction from the Upper Palaeolithic to the Industrial Revolution*, London: Psychology Press, pp. 35-57.

Morris, C., ed. (1947), The Journeys of Celia Fiennes, London: The Cresset Press.

Mowl, T. and Barre, D. (2009), The Historic Gardens of England: Staffordshire, Bristol: Redcliffe.

Myers, A. (2007), The Upper Palaeolithic and Mesolithic archaeology of the West Midlands, in: P. Garwood, ed., *The Undiscovered Country: the earlier prehistory of the West Midlands*, Oxford: Oxbow Books, pp. 23-38.

Palliser, D.M. (1976), The Staffordshire Landscape, London: Hodder and Stoughton.

Pevsner, N. (1974), The Buildings of England: Staffordshire, Harmondsworth: Penguin.

Phillips, A.D.M. and Phillips, C.B. (2011), *An Historical Atlas of Staffordshire*, Manchester: Manchester University Press.

Plot, R. (1686) *The Natural History of Stafford-shire*, Oxford.

Powell, A.B., Booth, P., Fitzpatrick, A.P. and Crockett, A.D. (2008), *The Archaeology of the M6 Toll*, 2000-2003, Oxford-Wessex Monograph 2, Oxford and Salisbury: Oxford Wessex Archaeology.

Rackham, O. (1986), The History of the Countryside, London: Dent.

Ray, K. (2007), The Neolithic in the West Midlands, in: P. Garwood, ed., *The Undiscovered Country:* the earlier prehistory of the West Midlands, Oxford: Oxbow Books, pp. 51-78.

Roberts, B.K. and Wrathmell, S. (2000), *An Atlas of Rural Settlement in England*, London: English Heritage, pp. 55-56.

Rowlands, M.B. (1987), The West Midlands from AD 1000, London: Longman.

Sawyer, P.H., ed., (1979), English Medieval Settlement, London: Edward Arnold.

Stafford Borough Council (2013), Great Haywood and Shugborough Conservation Area Appraisal.

Stafford Borough Council (2014), The Trent and Mersey Canal Conservation Area Appraisal.

Stafford Borough Council (2015a), *The Staffordshire and Worcestershire Canal Conservation Area Appraisal*, pp. 6-7 and 29-30

Stafford Borough Council (2015b), Tixall Conservation Area Appraisal (Consultation Draft).

Tixall with Ingestre Parish Council and Stafford Borough Council (2015), *Ingestre Conservation Area Appraisal.*

Thirsk, J., ed. (1987), *Agricultural Regions and Agrarian History in England*, 1500-1750, London: Macmillan.

Thirsk, J., ed. (2000), *The English Rural Landscape*, Oxford: Oxford University Press.

Todd, M. (1991), *The Coritani*, Stroud: Alan Sutton.

Wardle, C. (2002), *Roman Staffordshire: the Five Towns and Beyond*, West Midlands Regional Research Framework for Archaeology, Seminar 3.

Wardle, C. (2017), The Late Bronze Age and Iron Age in Staffordshire: the torc of the Midlands? in: D. Hurst, ed., Westward on the High-Hilled Plains: The Later Prehistory of the West Midlands, Oxford: Oxbow Books, pp. 97-109.

Watt, S. (2011), The Archaeology of the West Midlands: a Framework for Research, Oxford: Oxbow Books.

Webster, G. (1991), The Cornovii, Stroud: Alan Sutton.

Welch, C. (2003), Early Post-medieval Staffordshire, West Midlands Regional Research Framework for Archaeology, Seminar 6.

Williams, A. and Martin, G.H. (1992), Domesday Book: A Complete Translation, London: Penquin.

Williamson, T. (1995), *Polite Landscapes: Gardens and Society in Eighteenth-Century England,* Stroud: Alan Sutton.

Williamson, T. (2002), *The Transformation of Rural England: Farming and the Landscape 1700 – 1870*, Exeter: University of Exeter Press.

Williamson, T. (2013), Environment, Society and Landscape in Early Medieval England: Time and Topography, Woodbridge: The Boydell Press.

Woodhouse, M. (2013), Appendix 2: Pasturefields SAC: Comments on HRA Screening Report, in Andrews, A., ed., *High Speed Rail: Investing in Britain's Future Consultation on the route from the West Midlands to Manchester, Leeds and beyond: Response by Ingestre with Tixall Parish Council.*

Woodward, A. (2007), Ceremonial landscapes and ritual deposits in the Neolithic and Bronze Age periods in the West Midlands, in: P. Garwood, ed., *The Undiscovered Country: the earlier prehistory of the West Midlands*, Oxford: Oxbow Books, pp. 182-193.

Yorke, B. (2001), The Origins of Mercia, in: M.P. Brown and C.A. Farr, eds, Mercia, an Anglo-Saxon Kingdom in Europe, London: Leicester University Press, pp. 13-22.

Zaluckyj, S. (2001), *Mercia: The Anglo-Saxon Kingdom of Central England*, Logaston: Logaston Press.

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