2.0 Understanding 'Transforming the Trent Valley'

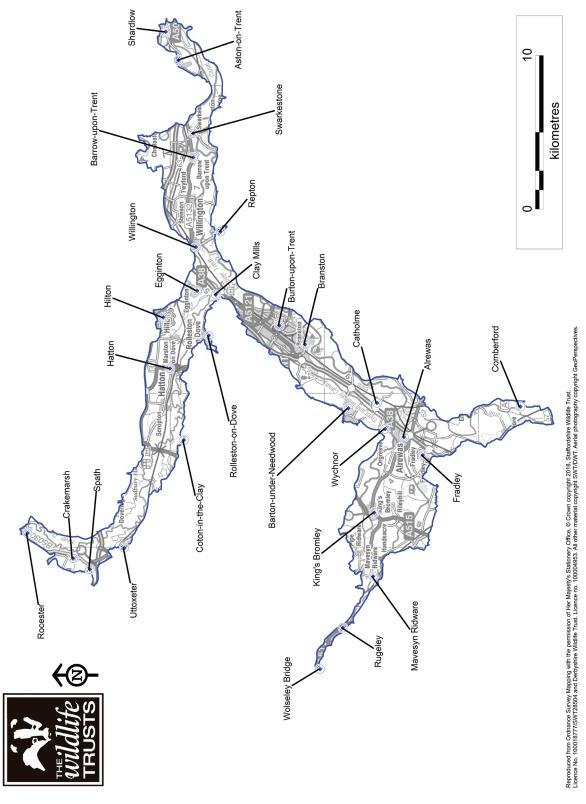


2.1 Defining our Landscape

The Transforming the Trent Valley project area at first glance may not appear to form a single, coherent landscape, characterised as it is by a mix of landscape character types and collection of communities with different needs

located at the heart of England. However, it is the corridors of the rivers Trent, Tame and Dove that forms the golden thread that ties these communities in a single, distinct landscape.

Map 3. Key settlements in the landscape.



This landscape is a floodplain corridor, distinctly narrow and linear, defined as a riverine environment with periodic inundation. It is clearly delineated at the edges by higher ground of gently sloping valley sides, in itself being a low-lying landscape. It is largely comprised of the flat flood plains and gravel terraces of the rivers Trent, Tame and lower Dove (Natural England, 2013).

Our landscape is largely a picturesque pastoral landscape with a beguiling, timeless quality (Natural England, 2013). The river represents a place for quiet contemplation, peaceful enjoyment, or for active recreation. It is a sanctuary for both people and wildlife, flowing through rural and urban locations alike.

However, the landscape has experienced significant forces for change over recent years, which will continue to shape the landscape for many years to come. A shift in agriculture, significant mineral extraction and the growth of industry,

particularly the 'big shed' developments, have all changed the character of the landscape (Natural England, 2013). Future pressures in the form of housing development and transport infrastructure like HS2 will add further stress.

Development undertaken without a clear strategy is at risk of undermining individual efforts and destroying that which we most wish to preserve. Whilst individually there are development plans within administrative boundaries, most notably Derbyshire County Council's Trent Valley Vision, there is not to date a vision for the Trent Valley based upon its natural and cultural boundaries.

Now is the time to acknowledge these changes, accept this rapidly evolving river valley and embrace the opportunity to work with businesses, local communities and other stakeholders to help deliver on the ground improvements to create a resilient and revitalised landscape for the future.



River Dove in Hatton, adjacent to Nestle (Aimee L. Booth)

2.2 Changing Hearts and Minds

We want to change the way that people, communities and business think and act in the Trent Valley. Within a generation we want the Trent Valley to become a "Living Landscape" where people, business, farming, leisure and transport needs all co-exist sustainably and in a joined-up way where wildlife thrives. The European Landscape Convention recognises landscapes as "an essential component of people's surroundings, an expression of the diversity of their shared cultural and natural heritage, and a foundation of their identity".

The RiverTrent in this landscape has suffered massively since the industrial revolution. Polluted, narrowed, bypassed, drained and built on, it is only the name

of settlements such as Burton-upon-Trent and Barrow-upon-Trent that hint at how important Britain's third longest river once was to the communities, economies and environment of central England.

But things are changing, fast. Over the last 25 years much of the river network has been cleaned up, with a notable increase in freshwater invertebrates found in the River Dove, brown trout have been found upstream of the RiverTrent within the city limits of Stoke, people have started to reexplore the leisure opportunities provided by the Washlands*, the economy has been boosted by the extraction of the area's rich mineral deposits and excellent transport links, and new nature reserves are being created to welcome wildlife. The Trent Valley is bouncing back.



Washlands Fields (Aimee L. Booth)

The European Landscape Convention recognises the need to "increase awareness among the civil society, private organisations, and public authorities of the value of landscapes, their role and changes to them". This scheme, delivered in this landscape, will build understanding and engender a sense of ownership and pride of the RiverTrent catchment based on what has been achieved and what can be achieved further to protect, preserve and enhance this fantastic asset.

Achieving landscape scale change will not happen overnight; a paradigm shift is needed that will take a generation to embed. The next five years are crucial in building momentum and directing change towards a common and sustainable vision.

This is a bold and ambitious scheme that builds on almost 20 years of partnership working, research, planning, delivery and visioning.

*What are Washlands?

Washlands are areas of land that are deliberately allowed to flood when rivers run high. Many rivers have lost their washlands due to changes in land use and development, but washlands are still very much part of our landscape.

The most significant area of washlands in our landscape are found in Burton upon Trent. Here the washlands were protected from development because of the brewing industry's need for a supply of clean water which was sourced from wells located on the Burton Washlands.

The Burton Washlands form a green oasis that runs right through the middle of the town. The washlands have always been a place for Burtonians to spend their leisure time and are also full of wildlife.

The washlands feature significantly in our projects as they are places where people and wildlife come together. Washlands are also rich in cultural heritage as a place where land and water meet.

RiverTrent flowing through the washlands (Aimee L. Booth)

Trent Valley Washlands

Natural England recognises the RiverTrent's catchment as an area with a distinct character and the region is defined within the National Character Area profile 69: Trent Valley Washlands. This scheme has closely aligned itself with the four statements of environmental opportunity that have been identified and over the coming 5 years will begin delivering a suite of projects that will help to preserve the character of the Trent Valley Washlands.

The environmental opportunities that have been identified (Natural England, 2013) are:

- **SEO 1:** Carefully plan and manage new development within the NCA to ensure that landscape character and ecosystem services are strengthened, that heritage features, wildlife habitats, woodland and the hedgerow network are enhanced, and that opportunities for creation of multifunctional green infrastructure are realised so that this landscape is resilient to the forces of change that it is experiencing.
- **SEO 2:** Manage and enhance the Trent Valley Washlands' river and flood plain landscape to combine its essential provision and regulation of water role with landscape enhancement, nature conservation, climate regulation, farming, recreation and a resource for understanding geodiversity.
- **SEO 3:** Protect, manage and enhance the pastoral landscape of the Trent Valley Washlands, seeking to join up and expand areas of pasture and associated attributes and habitats, to preserve heritage features, enhance biodiversity and geodiversity, protect farmland and provide additional recreational opportunities.
- **SEO 4**: Protect and enhance the historic environment of the Trent Valley Washlands and their characteristic historic landscape. Increase awareness of the richness of this resource, protect it from neglect and physical damage, and ensure that future development complements and enhances the sense of history of the NCA.

Amending the Boundary

Through the course of developing our scheme, we have identified a need to modify the boundary of our landscape to better reflect the character both physically and culturally.

A Landscape Character Assessment was commissioned through Ashmead Price (2018) and the boundary was refined by examining the physical and cultural factors that influence the Trent Valley and by unifying rationale to provide a consistent approach.

The refinement of the boundary has come latterly to the earlier audits and this approach has a number of pros and cons as illustrated in table 1 below.

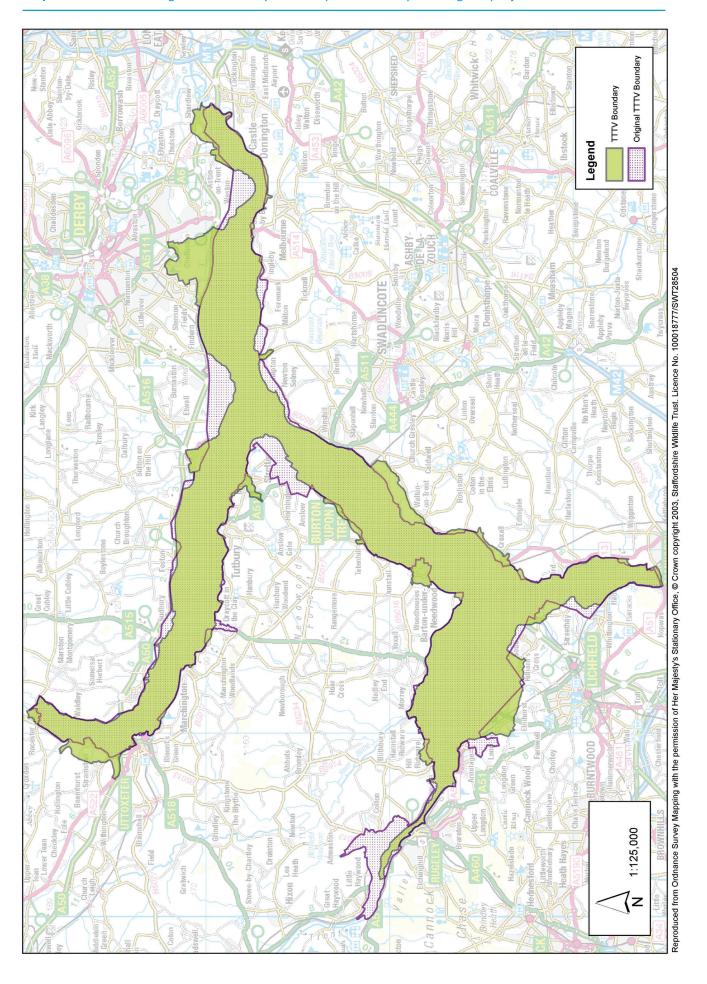
Table 1. Pros and cons of the boundary refinement for the Transforming the Trent Valley landscape

Pros	Cons
The boundary of the landscape has been influenced by the findings of the audits and the projects that have arisen from those audits. Decisions to add or omit sections of the landscape based on landscape character have been further justified by the results of the report.	The landscape audits refer to the old landscape area and so overlook areas that have been newly included. However, many of the assessments look outside the boundary as this is an artificial boundary and so there are many external influences that have been incorporated.
Key statistics cited in the original audits will be inaccurate where based on the landscape area and so caveats will need to be used.	Key statistics cited in the original audits will be inaccurate where based on the landscape area and so caveats will need to be used.

The new landscape covers 199.7km², of which 176km² were within the original boundary. Map 4 overleaf shows the new landscape overlain upon the former area. We can see by comparing the original landscape area to the new landscape area that:

- 88% remains unchanged.
- 12% (23.88km²) have been added.
- 12% (24km²) have been removed.
- 60% of the landscape lies in Staffordshire.
- 40% of the landscape lies in Derbyshire.

Map 4. The Transforming the Trent Valley Landscape overlain by the original projected area.



2.3 The Character of our Landscape

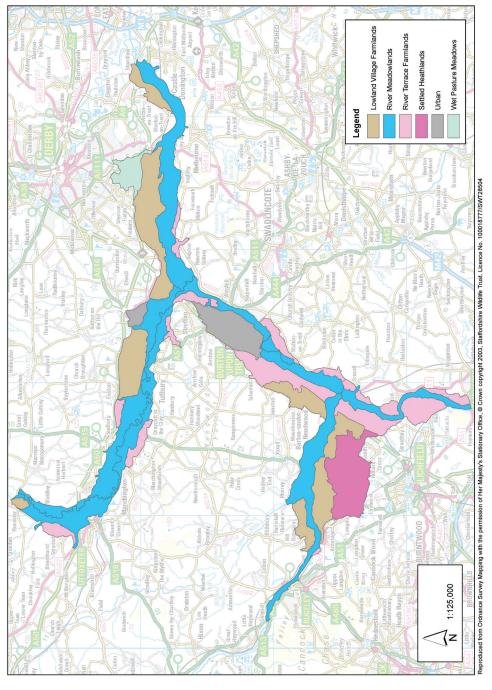
2.3.1 Assessing the Character

Our landscape is located in central England and covers the floodplains of the River Trent and its tributaries, the River Dove and the River Tame, in Staffordshire and Derbyshire.

Our landscape is characterised by five principal landscape types: main **River Meadowlands** and associated **River Terrace Farmlands**, along with the more settled **Lowland Village Farmlands** and

the **Settled Heathlands**. The latter is characterised by a planned, late enclosure pattern of square fields and straight roads, with a strong relic heathy character. A fifth landscape, **Wet Pasture Meadows**, is also associated with the low lying ground around the southern fringe of Derby and this has been incorporated into the landscape (Ashmead Price, 2018). Map 5 below shows the distribution of these landscape character types.

Map 5. Principal landscape character types that characterise the landscape.



River Meadowlands



River Meadowlands as taken from the Staffordshire Landscape Character Assessment (Countryscape, 2015)

A narrow, meandering river corridor landscape associated with a flat, generally well-defined alluvial floodplain. This riverine landscape type is characterised by its flat topography and trees associated with waterside planting. The wet grasslands and open water of the valleys are of particular value to breeding and over-wintering waders and wildfowl, and some of the more open arable farmland

supports the area's largest population of corn bunting. A significant feature of this landscape type is the occurrence of active and reclaimed sand and gravel extraction sites. This is a critical factor that currently limits the landscape character and quality. Other incongruous landscape features include large distribution warehouses, busy roads and modern buildings.

River Terrace Farmlands



River Terrace Farmlands as taken from the Staffordshire Landscape Character Assessment (Countryscape, 2015)

A flat, low-lying, predominantly arable landscape that is associated with the broad river terraces of major river valleys. This is a large scale, intensively farmed landscape defined by large rectilinear fields, although there are also pockets of older, semi-regular fields. This landscape type is characterised by

villages of traditional character, the canal, small broadleaved woodland, mixed pasture and arable farming, and lush improved pasture. A critical factor which limits the quality of this landscape type is the relatively poor representation of characteristic semi-natural vegetation. Other incongruous landscape features are similar to those above.

Lowland Village Farmlands



Lowland Village Farmlands as taken from the Derbyshire Trent Valley Washlands Landscape Character Descriptions (Derbyshire County Council)

A well-ordered agricultural landscape associated with productive Brown soils, characterised by nucleated villages, estate farms and small game coverts. This gently rolling landform enables views towards the rising ground and the woodland edges of adjoining landscape types. The overall character of this landscape is strongly related to the planned enclosure of open fields by Parliamentary Act. Discrete nucleated villages, which have

developed around a church and manor house, are a distinctive feature in this landscape. The area is also characterised by tree lined stream corridors, large country houses and narrow country lands bounded by wide grass verges. Incongruous features of this landscape mostly stem from post-war commercial development and modern housing development.

Settled Heathlands



Settled Heathlands (Steven Warnock)

A flat, low-lying landscape associated with impoverished, sandy soils derived from an old river terrace creating a relic heathy character. This is a planned, mixed farming landscape, where place names reflect the former extent of commons in the area. The woodland blocks of both ancient and secondary mixed woodland and visual coalescence of hedgerow trees create a strong sense of enclosure in the

Settled Heathlands. This landscape has been shaped by the planned enclosure of heathland in the early 19th century and is characterised by a regular pattern of small and large hedged fields. This area is also characterised by dispersed settlement pattern with scattered roadside dwellings. Incongruous features include large scale industrial development and busy road networks dominated by HGV traffic.

Wet Pasture Meadows



Wet Pasture Meadows as taken from the DerbyshireTrent Valley Washlands Landscape Character Descriptions (Derbyshire County Council)

This is a flat, low-lying landscape, defined by irregular shaped basins and fringed by low hills and slopes. The land-use is mixed farming with an increasing move towards arable. A key characteristic of this landscape is its enclosure pattern. Much of the agricultural land, having originated from former wasteland, was enclosed as part of the Parliamentary Enclosure Acts. Few roads cross this landscape, due to its generally uninhabited nature; however, this landscape immediately

abuts the urban fringes of Derby and urban expansion, especially residential, is having a major visual impact on this landscape type. This landscape type is particularly characterised by waterlogged soils where grazing is restricted during wet periods to prevent poaching. Incongruous features of this landscape include drainage improvements and intensification of arable farming which is impoverishing the ecological value.



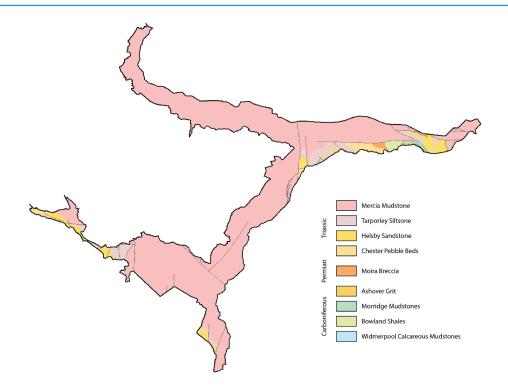
Alrewas lowland village (Aimee L. Booth)

2.3.2 Geology and its influence

The bedrock geology underlying our landscape varies from early Carboniferous (about 330 million years ago) to late Triassic (about 210 million years ago) and tells the story of a long evolving landscape. Nearly all the bedrock is covered by deposits from the last Ice Age

and younger (about the last one million years), including glacial tills, sands and muds, but mostly former river terrace deposits and modern river alluvium. It is these river deposits, both ancient and modern, that define the landscape and how it is used today.

Map 6. Bedrock geology of the area (simplified from BGS DiGMapGB)



Bedrock geology

The oldest rocks underneath our landscape belong to the Lower Carboniferous Widmerpool Formation (Dean et al. 2011). These calcareous mudstones were deposited marine conditions at a time when the area was slightly closer to the equator than we are today. Over time, the carbonate input ceased leading to the muddy marine Bowland Shale Formation. Muddy deltaic rocks entering this sea resulted in the Morridge Formation with occasional more coarse-grained deltaic sandstones such as the Ashover Grit.

The **Moira Formation** was formed as a fossil scree deposit and is most likely late Permian to early Triassic in age. By the Triassic the area had moved north toward desert latitudes and large rivers were

responsible for laying down the large rounded pebbles and sands of the **Chester Formation** (Ambrose *et al.* 2014).

This formation at depth is an important aquifer with many boreholes for both drinking water and the brewing industry at Burton-on-Trent. As the rivers became gentler and more meandering over time they laid down the medium to fine grained sands of the **Helsby Formation** (Ambrose *et al.* 2014). Where these sandstones are well-cemented, they produce good building stone used for many churches in the area.

The ancient river flow decline continued into the overlying **Tarporley Siltstone Formation**, with fine sands, silts and muds deposited. Eventually the landscape became very subdued with the area being covered in mudflats and shallow lakes.

These lakes accumulated windblown dust forming the **Mercia Mudstone** (Howard *et al.* 2008). It is this mudstone that underlies most of the area the low-lying and easy-to-erode rocks concentrating the flow of the major rivers away from the higher ground of more resistant, older rocks of the Peak District, Cannock Chase and the Melbourne Parklands.

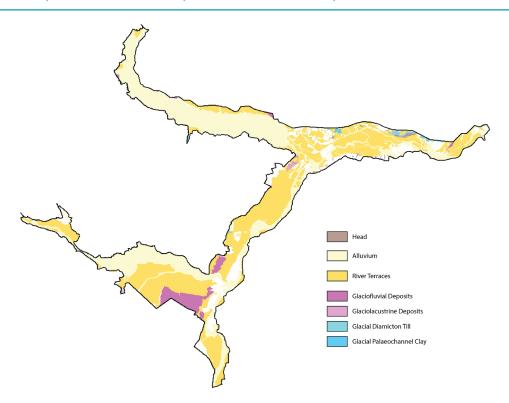
Superficial deposits

Other than towards the edges of the main river valleys, where it is closer to the surface, the bedrock geology is buried under significant deposits of clay, silt, sand and gravel, mainly deposited during "Ice Age" of the Late Quaternary, mostly in about the last million years

(the Palaeolithic in archaeological terms). During this time there were a number of cycles of cold (glacial) and warm (interglacial) climate.

There is no evidence for an ancient River Trent prior to the Anglian Glaciation (about 478,000 to 424,000 years ago). It is thought that the ancient River Dove continued southeast between Alrewas and Burton as the "Hinkley River" forming a tributary of the main "Bytham River" between Coventry and Leicester, eventually entering the North Sea near Lowestoft. This river system was wiped out by the advance of the Anglian ice sheet around 450,000 years ago (Bridgland *et al.* 2014).

Map 7. Superficial deposits of the area (simplified from BGS DiGMapGB)



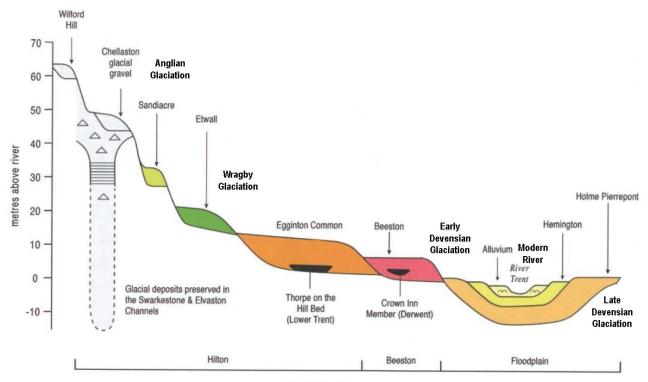
The birth of the River Trent

After the retreat of the Anglian ice sheet, the Trent river system starts to become established, but flowing east into the Wash, first via Ancaster and later via Lincoln as a consequence of the Wragby Glaciation (about 300,000 years ago), rather than north flowing into the Humber (Bridgland *et al.* 2014).

The landscape of the area is currently dominated by Quaternary river terrace deposits, which have been extensively quarried for sand and gravel. As the climate oscillated between cold and warm through the Quaternary so did the deposition of river sediments. During warm, interglacial periods river discharge levels would be low, the Trent and its major tributaries would have flowed

as meandering channels across the wide floodplains much like today and localised lacustrine sediments were also deposited. However, in the cold, glacial phases, meltwater from snow and ice, and the lack of vegetation, caused higher flow rates and braided channels to form across a wide channel area depositing coarse sands and gravels. With the continued uplift of the Midlands through the Quaternary, the rivers progressively cut down to a lower relative base level with time, leading to a "staircase" of river terraces, with the oldest at higher elevations and the youngest at lower levels close to the modern rivers. Evidence of early humans are often preserved in these deposits as well as fossils such as woolly rhinoceros and hippopotamus.

Figure 1. Schematic profile of the Trent terraces (modified from Bridgland et al., 2014)



'Classic' Trent Terrace sequence

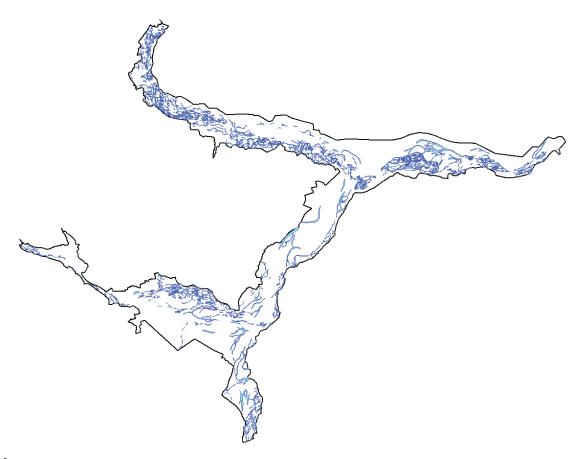
The extensive sands and gravels of the lowest, youngest terrace belong to the Devensian Glaciation around 20,000 years ago. The Devensian ice advanced down the Cheshire Plain to the west and the North Sea to the east. As the Cheshire ice started to melt it could not drain westwards into the Irish Sea because of the presence of the remaining ice sheet and large proglacial lakes formed against the margin of the high ground with Staffordshire. Eventually, the high ground was breached and massive quantities of meltwater spilled into the Trent system from the UpperTrent and Churnet Rivers. In the east, North Sea ice dammed the Humber forming another large proglacial

lake that spilled south into the Trent. This meltwater channel was then used by the Trent to flow northwards into the Humber once the ice finally retreated.

Since the Devensian, reworking of the Devensian sands and gravels has occurred and the modern Trent river system has been depositing alluvium as it meanders across the valleys widened and deepened by the Devensian meltwaters. The river terrace landforms were a major controlling factor on the pattern of settlement, with the early settlements occurring on elevated sand and gravel terraces that did not flood, and at shallow river crossing points.



Alrewas lowland village (Aimee L. Booth)



Quarrying

The pock-marked landscape of today is a legacy of the rich sands and gravels that were laid down during the Quaternary as the modern river systems were formed. The majority of aggregates currently quarried from the landscape are used for concrete and concrete products.



Whitemore Haye Quarry (Nick Mott)

Sand and gravel quarrying leads to the destruction of any archaeological remains within the footprint of the quarry, and can cause changes in the surrounding water table, impacting on the preservation of organic remains in buried deposits across a wider area. Whilst archaeological remains in upper subsoil deposits can be recorded prior to extraction, remains in deeper gravel deposits can be difficult to monitor or recover due to the mechanisation of modern quarrying methods.

Quarrying has, however, led to the discovery of some important finds in recent years. Gravels can contain the remains of stone hand axes made by earlier human ancestors. More recent deposits associated with the last ice age have revealed the remains of woolly rhinoceros, mammoths and reindeer, from a period when the landscape was covered by open tundra grassland, similar to present Arctic conditions (ArcHeritage, 2017).



Aerial view of the Trent Valley over Alrewas looking towards the National Memorial Arboretum, Croxall Lakes and Barton Quarry (Nick Mott)

2.3.3 Cultural Heritage

The mobility of the river has had a major impact on the landscape and the development and character of land use. Archaeology, history and geology underpin the formation of our landscapes, and help to create a sense of distinctiveness and identity for the places in which we live, and the ways that people understand and engage with them. 'Cultural heritage' includes historic buildings and structures, earthwork monuments, buried archaeology, artefacts and historic landscapes.

Evolution of Settlement

The first occupants of the valleys were mobile hunter-gatherer groups in the Palaeolithic and Mesolithic periods. So far, only one site in our landscape has definitive evidence for Palaeolithic human occupation. At Tucklesholme Quarry, a scatter of artefacts indicated a place where stone tools were manufactured around 10,000 years ago, on low-lying land

between river channels. Such sites are rare nationally.

The only clear evidence for Mesolithic occupation is at a ridge-top site at Swarkestone Lowes. The majority of Mesolithic sites within the wider Trent Valley have been found on ridge-top locations; the elevated ground may have offered longer-distance views and more convenient routes than densely-wooded valleys.

The Neolithic period marked the introduction of farming, though communities probably continued to move seasonally between resources. Evidence for post-built houses has been found at Willington; one of these sites was located on a gravel island between streams, although this settlement within the flood plain had been abandoned by the Bronze Age – this may have been due to increased flooding.

Bronze Age settlement is typified by small groups of unenclosed roundhouses, perhaps farmsteads, on gravel terraces above the flood plain. These unenclosed farmsteads were succeeded by a landscape of dispersed, enclosed farmsteads set within fields from the middle Iron Age. By the late Iron Age and Roman periods, evidence of permanent settlement is sparse, and it has been suggested that occupation moved away from the lower terraces, perhaps onto higher ground.

During the Anglo-Saxon period, small settlements of post-built houses

and sunken-floored buildings have been recorded, but by the time of the Norman conquest in 1066 the majority of settlement appears to have become focused in more nucleated villages.

In the late 18th to 19th centuries, the advent of factory-based industries and changes in agricultural practice led to increased migration to industrial centres. Burton-on-Trent increased substantially in size from the later 18th century onwards. Other settlements within our landscape have largely remained as villages, with limited modern development (ArcHeritage, 2017).

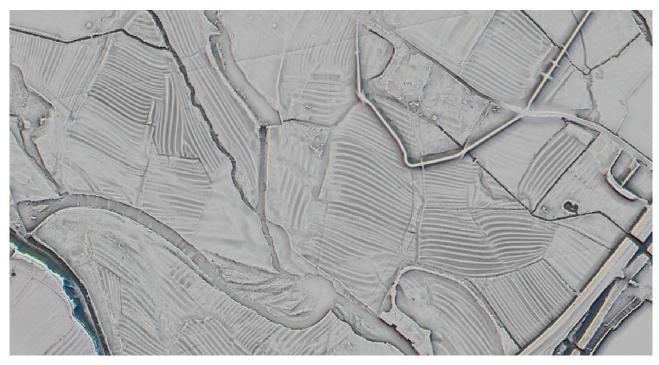


Post-medieval houses at Repton, Derbyshire (ArcHeritage, 2017)

Development of Agriculture

Farming was introduced into the area during the Neolithic period, with pastoral animal herding and arable cultivation

occurring in woodland clearings on the river terraces. Tree clearance increased over time, resulting in a largely open landscape by the Iron Age period.



Ridge and furrow earthworks at Egginton, Derbyshire, visible in Lidar data 2m DTM Lidar data (multi-angle hillshade) (Environment Agency)

From the later part of the Iron Age and into the Roman period, the pattern of fields suggests pastoral farming with evidence of droveways and a suggestion of temporary settlement associated with seasonal herding.

In the Anglo-Saxon period farmstead-type settlements returned to the valley with arable cultivation indicated through the widespread remains of ridge and furrow ploughing. These features have survived



Evidence of ridge and furrow ploughing on the landscape (*Nick Mott*)

in open areas where the land-use is largely pastoral.

Some of the ridge and furrow earthworks are likely to have been reused as water meadows in the post-medieval period. Water meadows comprised a system of drains, carriers and sluices used to flood fields in the winter period, keeping the ground warmer and allowing a rich growth of grass and hay for fodder in the spring. This process indicated a change from arable to pastoral farming at this time, which continued into the 19th century.

Agricultural improvements in the late 18th and early 19th centuries led to significant changes in the landscape layout. Surviving open fields and commons were enclosed and allotted to the major landowners, to enable the employment of more efficient agricultural methods. By the later 20th century, a mixed farming regime was present within the valley, and many earthwork remains of earlier agriculture have been lost to ploughing (ArcHeritage, 2017).

Ritual and Religion

The earliest evidence for ceremonial monuments in the Trent Valley date from the early Neolithic period, when substantial monuments of earth, stone and timber were constructed within woodland clearings. Causewayed enclosures, large oval spaces surrounded by two to three interrupted ditch circuits, are thought to have been used as meeting places for dispersed and mobile groups for a variety of social, economic and ceremonial purposes. These enclosures have been recorded at Alrewas and Mavesyn Ridware.

Later in the Neolithic period, new monument types evolved, including long linear enclosures known as cursus monuments, stone and timber circles, and circular enclosures with an outer ditch and bank known as henges. Three principal groups of these ceremonial monuments are known within the Trent Valley, at Catholme in Staffordshire, and Aston upon Trent and Twyford in Derbyshire. The complexes are all located close to river confluences, suggesting they may have been at boundaries or meeting points between territories.

By the early Bronze Age, the large monuments had largely fallen out of

use, though they are still visible in the landscape. A burial tradition involving the interment of bodies or cremations within and around circular mounds or barrows originated during this period, around 2400-1700 BC. It was associated with new pottery forms and the introduction of metalworking. Barrows have been recorded across the landscape, though only a few survive as earthwork mounds.

There is little evidence of ritual activity from the Iron Age and Roman periods, with the exception of a probable Roman shrine near the fort at Rocester. Evidence for pagan activity during the Anglo Saxon period has been found in grave goods associated with cemeteries, whilst probable Viking burials have been recovered from an overwintering camp at Repton.

A minster church and abbey were founded at Repton in the early medieval period, as well as a chapel at Burton, with churches at Kings Bromley and Alrewas also in existence at the time of the Norman Conquest. Burton Abbey was founded in 1002. Many of the churches within the landscape have medieval origins, though there have been major restorations and complete rebuilds in later periods (ArcHeritage, 2017).



All Saints, Alrewas, Staffordshire: a medieval church on a 9th-century foundation (*ArcHeritage*, 2017)

Transport Networks

The river valleys would have provided transport and communication routes throughout the prehistoric period. Three Bronze Age log boats that have been found in gravel pits at Burton upon Trent and Shardlow and are the earliest examples of river transport in the area.

Prehistoric tracks and droveways crossed the area, and more substantial military roads were laid out during and after the Roman invasion. Ryknield Street Roman road ran through the Trent Valley, roughly on the current route of the A38. Medieval stone bridges survive at several river crossings such as the Swarkestone Bridge in Derbyshire.



The medieval Swarkestone Bridge, Derbyshire (ArcHeritage, 2017)

In the later 18th century, demand for a method of transporting large cargoes led to the creation of the canal network. The Trent and Mersey Canal was the first of the major inland waterways, linking the ports of Hull and Liverpool. It opened between Shardlow and Shugborough in June 1770 and was fully completed by

1777.

The Coventry/Birmingham and Fazeley Canal was completed around 1789, linking the Trent and Mersey to the Oxford Canal. Its junction with the Trent and Mersey at Fradley is the focus of a wharf, warehouses, inns and canal workers' cottages (ArcHeritage, 2017).



Trent and Mersey Canal bridge and lock at Wychnor Bridges, Staffordshire (ArcHeritage, 2017)

Elite Landscapes

During the medieval period, manors were the basic unit of landholding, controlled by hereditary landowners. These estates would include the primary

residence and outbuildings such as barns, breweries and mills. Some were surrounded by moats, several of which have been recorded in the valley.



Wychnor moated manor site, Staffordshire (ArcHeritage, 2017)

From the Tudor period onwards, mansion houses began to supersede the medieval manor houses. Elaborate formal gardens also flourished in this period. Changing fashions in the 18th century led to the creation of extensive parks where the landscape itself was sculpted and arranged to portray 'romantic' natural ideals. On some occasions, this involved moving villages or houses that disturbed a desired view. Parks and gardens often included feature such as summerhouses, greenhouses and banqueting halls.

Anchor Chapel at Ingleby is an unusual example of an isolated banqueting hall, adapted from artificial caves in the 18th century and associated with Foremark Hall.

Most surviving mansion houses within the landscape are of post-medieval date, with six constructed or rebuilt in the late 18th- to 19th centuries. Most are now in private hands, some used as hotels or private schools; only Sudbury Hall is open to the public (ArcHeritage, 2017).



Sudbury Hall, Derbyshire, in National Trust ownership (ArcHeritage, 2017)

Twentieth-Century Military Sites

Only one First World War feature is recorded within our landscape: a machine gun factory in Branston. In addition to its wartime significance, the factory is also the former home of Branston Pickle, having converted to food production in the 1920s.

The majority of the 20th-century defence features across the Trent Valley

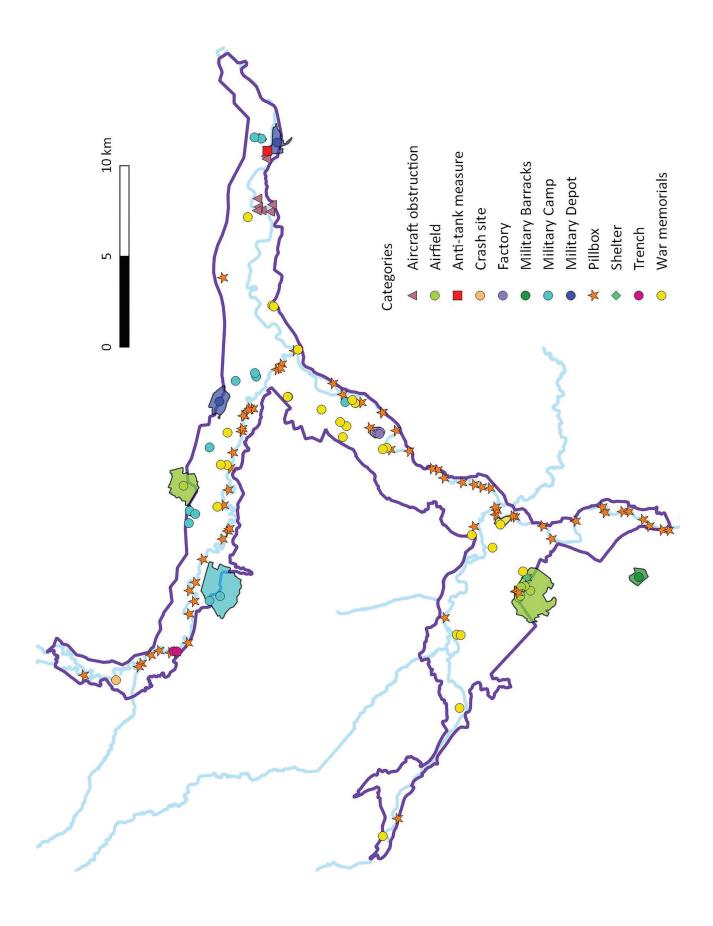
are associated with Second World War activity, including Stop Line no.5, a series of anti-tank pillboxes constructed along the rivers in 1940, to counter a feared German invasion of Britain. Although the stop line was a short-lived operation, many of the pillboxes survive along the river banks, often sited close to road, canal and railway bridges.



Stop Line no.5 pillbox on the Trent and Mersey Canal aqueduct at Clay Mills (ArcHeritage, 2017)

Identifying the features of the stop line and developing projects to preserve and protect those features, most notably the pillboxes, is an important part of the scheme. Map 9 below indicates the location of the 20th-century military and commemorative sites. To prevent neglect and decay, many of these features can be

put to alternative use through reversible conversion. Converting structures in the landscape into hibernacula, hides, walkers' refuges and other purposes will enable them to be more than simply relics of a previous era and provide them with new practical uses.



2.3.4 Our legends, our stories, our heritage

The landscape is located at the heart of the West Midlands in a region once known as Mercia, one of the kingdoms of the Anglo-Saxon Heptarchy. The capital of Mercia was Tamworth, but for many years the Royal capital was situated in Repton.

St Modwen

Christianity was introduced to the Kingdom of Mercia in 653 AD. Around this time, an Irish abbess called Modwenna passed through Burton as she made pilgrimage to Rome. Attracted by the smooth, sweet and clear spring water, she decided to stay (Whatton, undated). People soon began to believe the water had healing properties thanks to her efforts in curing the sick (Burton2000, 1999).

Modwenna founded a church dedicated to God and St Andrew on an island of the RiverTrent. The island was named Saint

Andrew's Isle, and is today known as Andressey Island. She stayed in Burton for seven years before continuing her pilgrimage to Rome.

Modwenna later returned to Burton where she built a second church, dedicated to St Peter, at the foot of Mount Calvus, later known as Scalpcliffe Hill, before continuing to Scotland where it is said that she died at the advanced age of 130. Her body was returned to Burton for burial and a shrine was built on Andressey Island.

Legend says that when she died her soul was carried to heaven by silver swans, which became her emblem. Saint Modwen is now the patron saint of Burton-upon-Trent (Gallagher, undated), and you can see the use of her emblem throughout the town.



'The Great Heathen Army'

The Vikings brought terror to Mercia in the 9th century as an invading force of shallow draught longships navigated up the River Trent. They were finally defeated by Alfred the Great following his exile in the fens of the lowlands.

Repton at this time was a major Mercian Kingdom with Royal burials recorded at

the Saxon crypt of St Wystan's Church (unique for a period in history that is otherwise poorly recorded). It is believed that Vikings captured the town of Repton around 873AD and overwintered there in a defended settlement. There is evidence of Viking fortifications and pre-Christian burials close to St Wystan's Church (Bivans, 2014).



Welcome to Hatton (Aimee L. Booth)

Place names

As a result of a stalemate between Anglo-Saxon and the Viking forces, a treaty was signed 886 dividing much of what we now know as England, into 'The Kingdom of the English' and the Danelaw. The boundary followed the River Dove, downstream to its confluence with the Trent and then continued along the Trent, downstream through Burton, so the eastern side and beyond was under Viking rule and the western side was the rule of the Angles or England.

There are many local clues to this old frontier, like the 'Holmes' old Scandinavian (OS) for island, for example, Catholme

near Alrewas, the Horseholme and Broadholme on the Washlands. To the East of the Trent, there is a preponderance of the suffix 'by', OS for farmstead or village, as seen in Derby, Bretby, Blackfordby, Ashby, or 'thorpe', OS for outlier, for example Donisthorpe, Oakthorpe. The old English (OE) 'ton' is comparable with the OS 'by' and is common to the west of the river and can be found in Burton, Hatton, Barton, or Stretton.

The above is not a hard and fast rule, as a genocide of local people, would mean no-one left to pay taxes, so Old English names would still continue in Danelaw (Oates, 2018).

Living on the Frontier

This is not the first or the last time the RiverTrent has been an important frontier, dividing as it did the pre-Roman local tribes, then becoming the boundary of the first phase of Roman conquest. More recently it represents one of the 'stop lines' during the post Dunkerque invasion scares of World War II. Recording and renovating the numerous pill box defences attesting to this is part of our heritage project (Oates, 2018).

Beer brewing

The monks who inhabited the monastery built by St Modwen are said to have used the clear, sweet spring waters to brew beer.

The beer has a unique flavour thanks to the minerals in the spring water that have dissolved as the water seeps through the surrounding hills. As well as giving it flavour, the mineral help to preserve the beer meaning it can be traded further afield.

The brewing industry has grown since the monk's early efforts and by the early 19th Century the town was exporting to Russia. It is said that Catherine the Great was fond of Burton Beer.

The monks weren't only famous for their delicious beers. The rich meadows



Pillbox on Trent & Mersey canal (Staffordshire Wildlife Trust)

surrounding the RiverTrent made excellent pasture for sheep and their fleeces gained a reputation for fine wool. This was traded as far south as the Florentine markets in Italy.

Today, brewing remains an important industry in the town and water is still collected from the wells on the Washlands. The rain that falls in Burton filters through a thick layer of gypsum, which gives the beers the depth of flavour and unique character for the area (Marston's, 2017). The meadows have benefited from the continued use of these wells as chemical herbicides and fertilizers are forbidden and the meadows have therefore retained much of their diversity of wetland flowers and wildlife (Burton2000, 1999).



An Industrial River

Trade in beer and other commodities grew in Burton following an Act of Parliament in 1698 making the River Trent navigable from the port of Hull all the way south to Burton (Burton2000, 1999). Improvements were made to the Trent navigation, through to Burton (the remains of the lock which by-passed the weir at Newton Mill are still visible), allowing continuous boat use. The Burton Boat Co. was set up and flourished until competition from the Trent and Mersey canal caused its closure, despite the digging of a new canal to link the two.

The river was a major economic factor in the town, providing fish and eels, power for mills, grazing on the common land as well as transport for goods. Burton at this time was a textile producer, sending woollen 'kerseys' to Hull and on to European and Baltic markets. Trade was on a barter basis so timber and iron return cargoes gave Burton diverse industries.

In 1780 Robert 'Parsley' Peel (Grandfather of Sir Robert Peel, Prime Minister and father of the modern police force) set up a cotton spinning mill at Newton Road and this was followed by a number of others along the river. These were all closed by the 1840's due to competition from Lancashire; however, by this time brewing had started to pick up due to the arrival of the railway in 1839. The mills continued to power a variety of machines, like forges, or grinding flints for the Potteries, as well as flour.

The coming of the railway reduced the importance of the river to Burton, though transport links like the A38 and the railway still follow the valley (Oates, 2018).

The Mosley Family

Rolleston Hall was the family seat of the Mosley Family. There is limited information about the estate prior to 1871 as estate papers were lost in a fire. Brook Hollows is part of that old estate and it is likely that the ornamental lakes were created in the 1780s.

The estate was extensively developed by Sir Oswald Mosley (2nd Baronet), where he encouraged wildlife in the ponds and installed the current waterfall. The lake was later modified by the 3rd and 4th Baronets to include a small island and land to the south was planted with trees to create Brook Hollows Spinney, reflecting the later Victorian hunting and shooting interests.

The estate was eventually sold in lots at auction in the 1920s. Brook Hollows remained in private hands until 1971, when it was obtained by compulsory purchase by Tutbury Rural District Council. This passed to East Staffordshire District Council in 1973 following local government reorganisation (Martin, 2011).



Waterfall at Brook Hollows (ESBC)