Stafford Borough Strategic Development Site Options

Reasonable Alternatives Study

Stafford Borough Council

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FINAL REPORT

Quality information

Prepared by	Checked by	Verified by	Approved by
David Carlisle Associate Director	David Carlisle, Associate Director	Ben Castell, Director	Ben Castell, Director
Shane Scollard Senior Planner			
Holly Turner Graduate Urban Designer			
Richard Hammond Associate Landscape Architect			
Mark Service Senior Consultant, Heritage			
Sean O'Connell Principal Engineer, Transport			
Sarah Littlewood, Senior Flood Risk Consultant			
Louise Coles Environmental Consultant			
Matthew Budd Consultant, Economics & Development			
Revision History			

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Stafford Borough Strategic Development Site Options

Prepared for:

Stafford Borough Council

Prepared by:

AECOM Limited Aldgate Tower 2 Leman Street London E1 8FA United Kingdom aecom.com

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1. Introduction

- 1.1 Stafford Borough Council (SBC) has commissioned town planning, infrastructure and environment consultants AECOM to prepare an assessment of options for delivering growth on strategic-scale sites.
- 1.2 The study forms part of the evidence base for the emerging Local Plan 2020-2040. It follows on from and consolidates a number of previous site assessment exercises undertaken by the Council, including the 2018 Strategic Housing and Employment Land Availability Assessment (SHELAA).
- 1.3 With the exception of the key urban centres of Stafford and Stone, the Borough of Stafford is largely rural with scattered villages. Key elements of national infrastructure run through the Borough from north to south, most notably the M6, which bypasses Stafford by two junctions on its way from the West Midlands to the North West. The A34 is a major trunk road running through Stafford and Stone, parallel to the M6. Stafford station is on the West Coast Main Line which continues north to Crewe via Cold Meece. A second arm of the West Coast Main Line runs through the Borough along the Trent Valley on its route from Manchester and Stoke, rejoining the main route in the Borough at Colwich after passing through Stone, Hixon and Weston. The two routes are linked in the Borough between Stone and Norton Bridge. A junction at Stafford provides services to Birmingham and the South West. In both road and rail terms, east-west connections are less significant- the only main transport axis in this direction being the A518, which links Telford to Uttoxeter via Stafford. There are no east-west rail connections.
- 1.4 The proposed new HS2 rail line will run through the Borough. The Council is seeking to maximise associated economic benefits, including through the development of Stafford Gateway alongside Stafford station, and is exploring the potential for further future development and making use of redundant public sector land and land promoted privately.
- 1.5 There are two areas of Green Belt in the Borough, North Staffordshire's Green Belt to the north and the West Midlands to the south. The Cannock Chase Area of Outstanding Natural Beauty (AONB) lies in the south-east of the Borough and forms a more extensive constraint.

Purpose of this Study

- 1.6 This study is an independent assessment of potential strategic growth location options for Stafford Borough in the context of the New Local Plan.
- 1.7 Its purpose is to provide a strategic review of opportunities and constraints at a number of locations in the Borough that emerged as options for growth through the recent Stafford Borough Strategic Housing and Employment Land Availability Assessment (SHELAA) exercise, and any others.
- 1.8 It is likely that a mix of major urban extensions and new settlements may be required to meet the Borough's housing needs, alongside land within existing urban areas and smaller sites adjacent to them. This study assesses alternative sites for strategic-scale urban extensions and new communities, with a minimum gross site area of 100 hectares.
- 1.9 The study is intended to inform the Council's decision-making, alongside a range of other studies, including a Sustainability Appraisal, the Habitat Regulations Assessment process and the Duty to Cooperate. As such, it is part of the evidence base to be used by Stafford Borough Council to produce robust and justified policy options, with a view to informing the preferred spatial distribution.

Methodology

- 1.10 The overall approach to this study has focused on synthesising the existing evidence base, with a detailed spatial analysis (including GIS model), site visits and consultation with statutory consultees.
- 1.11 A series of key work stages has fed into this report:
 - Analysis and review of existing policy and evidence: A detailed review of the local plan evidence base, as well as adopted and emerging County and Borough strategy documents.
 - Opportunities and constraints analysis (including GIS modelling): A WebGIS and GIS
 model was created to access spatial information efficiently. The WebGIS included all
 publicly available datasets and data held at the Borough and County level. The WebGIS
 space was utilised to facilitate the detailed assessment of site-specific opportunities and
 constraints across all sites, forming the heart of this study.
 - Identification of areas of search: The opportunities and constraints analysis described above was combined with the findings of the SHELAA to arrive at a number of areas of search. These were then subject to the detailed assessment by a team of technical specialists, and formed the basis of engagement with statutory stakeholders.
 - Suitability and capacity assessment: An important part of the overall analysis is an assessment of suitability and total capacity, having regard to the physical and planning constraints and opportunities on each of the sites being assessed. AECOM's specialist technical assessors carried out detailed desktop appraisals to develop topic-based analyses for each site, having appropriate regard to relevant policy and evidence, their own knowledge, experience and judgement, and liaison with key local stakeholders. The desktop appraisals were supplemented by site visits by specialists in land use planning and design, landscape appraisal and design, and transport. The assessment took place against a set of criteria, outlined in the assessment criteria section below. Site capacity has been determined by applying a gross density of 18 dwellings per hectare to the refined areas of search. This density assumes a net density of 35 dwellings per hectare for residential areas plus levels of open space, infrastructure, employment, retail and other land uses.
 - Viability, Delivery and Implementation Assessment: An analysis of anticipated rates of delivery and infrastructure requirements has been undertaken to establish what may be deliverable prior to 2040, and the reinforcements and mitigation that could be required. A site's proximity to existing settlements and infrastructure is considered in terms of potential adverse impacts and synergistic opportunities. A risk assessment related to the delivery aspects of the location including likely strategic infrastructure requirements/costs was based on the size of the new settlement/urban extension proposition. The analysis draws upon existing available evidence such as the most recent viability study (HDH Planning & Development, 2015); materials supplied by the site promoters; relevant SBC reports (e.g. Infrastructure Delivery Plan, SHELAA and recent development management appraisals); and secondary sources (e.g. the 'Letwin Review').
 - **Conclusions:** Based on the analysis outlined, each of the identified sites has been assigned to one of two categories, depending on its suitability: either 'potentially suitable for development' or 'not suitable for development at present'. 'Potentially suitable' sites are considered developable, subject to identified constraints being mitigated, as would be expected for sites of this scale. Further detail on the process of arriving at conclusions is provided in the key study principles section below.

Key Study Principles

- 1.12 Each site's suitability is determined in the light of its performance against standard criteria derived from and measured against national policy, having regard to the unique local characteristics of the borough. In this sense, the assessment of site suitability is absolute, rather than relative. In other words, it is possible that there could be a category with very few or even no sites within it.
- 1.13 It is important to recognise that there can be no such thing as an entirely quantitative site assessment. The study, like all other site assessments, needs to also make qualitative judgements of site suitability on some 'softer' criteria such as landscape and heritage.
- 1.14 Assessors have sought to maximise the defensibility of such assessment through having appropriate regard to relevant national and local policy and evidence, including, where applicable, relevant precedents and/or case law. The study thereby seeks to ensure that other appropriately qualified parties replicating the assessment exercise would come to the same, or substantially similar, conclusions.
- 1.15 Although the focus of this assessment exercise is on land outside existing built up areas and/or settlement boundaries in Stafford Borough, it is only one part of the Local Plan evidence base on suitable, available and achievable land for development. Urban sites, whether infill or redevelopment opportunities, still have an important role to play and the fact that this exercise focusses only on land outside existing urban areas should not be considered to supersede the important role of brownfield regeneration in sustainable development.
- 1.16 As a final point, it is important to remember at all times that any site assessment exercise, no matter how comprehensive, can only ever be a snapshot in time. The assessment is a technical document that informs the local plan. The inclusion of sites within the deliverable or developable supply of this study should not be taken to imply that the council will allocate them for housing development, nor that they would be approved if submitted as a planning application. Conversely, the exclusion of a site from this supply does not mean that it could not come forward, providing that the constraints identified could be satisfactorily overcome.

Assessment Criteria

1.17 Sites were assessed against the criteria below. There was no weighting of criteria. As such, the final decision on suitability for each site took into account its performance across all assessment criteria, as set out below.

Environmental constraints

- 1.18 Assessing environmental considerations, including impact on internationally protected ecological sites¹, national local wildlife sites² and other local wildlife or ecological designations³ and nearby factors that could have an environmental impact on site development that could need appropriate mitigation (e.g. nearby roads or railways that could impact on the site in terms of noise, vibration and/or air quality such as the West Coast Main Line and the M6).
- 1.19 Reviewing flood risk issues in line with the sequential and exception test-based approach set out in NPPF paragraphs 157-159, and considering how these might be mitigated⁴, taking into account flood zone, the extent to which the site is affected by surface water, ground water or reservoir flooding, and the emerging Strategic Flood Risk Assessment (SFRA) Level 1.

¹ The following habitat sites are protected under the Birds Directive, Habitats Directive and Ramsar Convention respectively: Special Protection Areas (SPAs), Special Areas of Conservation (SACs) and Ramsar sites. The NPPF affords the same protection as habitat sites to potential Special Protection Areas and possible Special Areas of Conservation, listed or proposed Ramsar sites, and sites identified, or required, as compensatory measures for adverse effects on all the above. ² Sites of Special Scientific Interest and National Nature Reserves

³ consistent with NPPF paragraph 171, which states that plans should distinguish between the hierarchy of international, national and locally designated sites

⁴ see NPPF paragraphs 155-158

- 1.20 Considering whether the site includes areas of the best and most versatile agricultural land⁵.
- 1.21 Assessing geological and environmental constraints to new development⁶ including made ground, radon, potential sources of contamination, landfilling records, and hydrogeological sensitivity⁷.

Physical constraints, including transport and access

- 1.22 Topography in so much as it would render development difficult.
- 1.23 Ensuring safe and satisfactory access can be secured for pedestrians, cyclists, public transport and private vehicles⁸.
- 1.24 Where the site cannot be accessed other than via third party land, that is not being currently promoted for development, this has been stated in the detailed assessment, and unless evidence exists to the contrary, it is assumed that the site is inaccessible and therefore unsuitable for development.
- 1.25 Reviewing site accessibility to key local facilities, taking into account opportunities and constraints for improving the walking, cycling and public transport network⁹.
- 1.26 Reviewing the existence of other physical constraints, including significant trees, utilities infrastructure, hazardous installations and facilities of social, amenity or community value.

Accessibility to social and green infrastructure

1.27 Examining proximity to a range of existing community facilities and publicly accessible open space. Using GIS mapping the project team has analysed the location of existing facilities that may be available (and have capacity) to serve an urban extension and/or co-dependent new settlement.

Landscape and visual constraints

1.28 Assessing the sensitivity of the local landscape to development, with reference to the landscape component of the Local Plan evidence base and the findings from AECOM site visits¹⁰, with particular attention to the Cannock Chase Area of Outstanding Natural Beauty and its setting.

Heritage constraints

1.29 Assessing the site's potential for impact on designated heritage assets and their settings¹¹, including listed buildings, conservation areas, scheduled monuments, registered parks and gardens and registered battlefields, and on areas of archaeological potential;

Planning policy constraints

1.30 Assessing against key strategic policies and the characteristics of adjacent land, to ensure that the scale and location of proposed development is sympathetic to local character and history¹², to establish or maintain a strong sense of place¹³ through, for example, avoiding actual or perceived coalescence between settlements; and taking into account the potential for existing

⁵ In line with NPPF paragraph 170 and Footnote 53

⁶ see NPPF paragraph 178 and mitigation measures as per Building Regulations

⁷ i.e. potential for groundwater contamination as assessed through Environment Agency-designated Source Protection Zones ⁸ In line with NPPF paragraph 102

⁹ as per NPPF paragraph 84

¹⁰ see NPPF paragraph 170

¹¹ See NPPF paragraph 193

¹² NPPF para. 127 c

¹³ NPPF para 127 d

or new defensible boundaries to act as a clear 'edge' for development¹⁴. However, with regards to Green Belt the study adopts a 'policy off approach'.

Viability and economy

- 1.31 Assessing whether developing the site would involve any known significant abnormal costs from the outset that would have the potential to affect the economic viability of the sites. Abnormal costs are those which are above the standard costs attributed to the development of a standard site, and can include those associated with remediation for contaminated sites or flood mitigation works.
- 1.32 Assessing the site in terms of its existing or potential attractiveness to employers, having regard to Census 2011 workplace data on employment, the proximity of existing major employment locations, the Council evidence base on economic development, including future employment projections and sites, sustainability considerations, including the principle that homes should be built close to places of work in order to reduce commuting distances and hence reduce the need to travel¹⁵, and existing and planned transport infrastructure.
- 1.33 Examining the area's level of deprivation, in line with the indices of multiple deprivation¹⁶, including income deprivation, employment deprivation, health deprivation and disability, education, skills and training deprivation, barriers to housing and services, living environment deprivation, and crime (assuming greater potential for positive effects of development on employment, health, education and other well-being indicators in areas of higher deprivation levels).

Typology Classification

- 1.34 The function and character of potential new settlements will be influenced by many factors, such as: size, density, location, economic rationale, jobs/homes balance, accessibility, proximity to existing large settlements/public transport, impact on the existing settlement hierarchy etc. For the purposes of this report, typologies (and the degree of self-containment) are used to classify the growth options subject to testing.
- 1.35 For the purposes of this study we classify growth options as one of the following: Autonomous; Co-Dependent; and Urban Extension. To place these typologies into context, a number of theoretical illustrations are provided in the following pages alongside definitions to show how each would relate, spatially, with a nearby existing settlement/'centre of gravity' e.g. Stafford. Please note: the illustrations are not representative of any location within the study area and are for illustrative purposes only.

¹⁴ NPPF paragraph 127

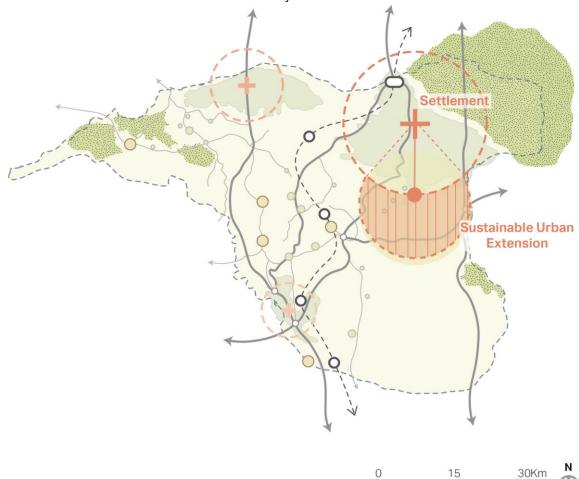
¹⁵ in line with NPPF paragraph 103

¹⁶ The Indices of Multiple Deprivation 2015 map is available at <u>http://dclgapps.communities.gov.uk/imd/idmap.html</u>

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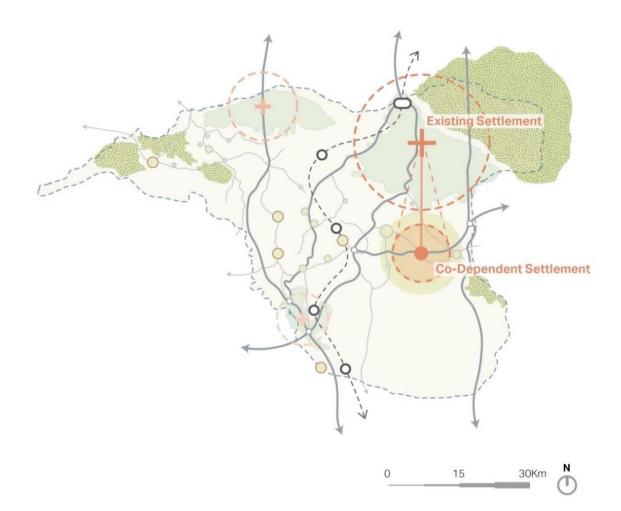
Urban Extension

1.36 An urban extension largely provides new housing on the edge of an existing settlement, where new residents can share with existing services and facilities within the existing settlement (with some additional local provision catering for urban extension growth). This typology reduces the need to travel, as the urban extension will be integrated into the established network through direct transport links, however there is often a need to reinforce those connections with new transport investment depending on the capacity of and distance to existing transport infrastructure. Urban extensions are particularly relevant to smaller scale growth (<5,000 dwellings), in the event that this scale of development is considered unable, by itself, to sustain core infrastructure elements such as a secondary school.



Co-dependent

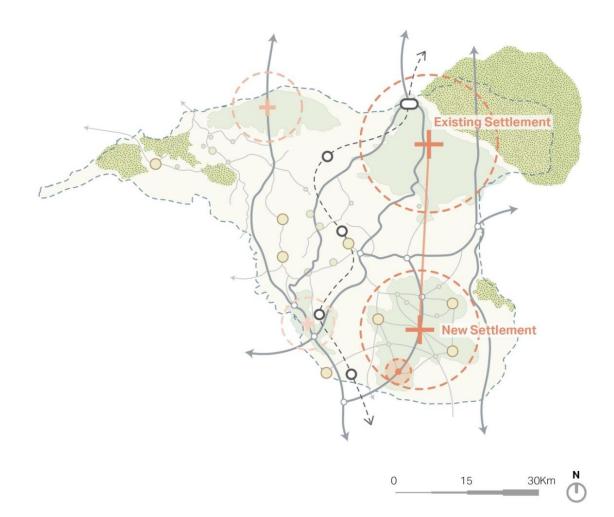
1.37 A new co-dependent settlement is spatially distinct but directly communicates and connects with existing settlement(s), and could deliver and sustain its own generated infrastructure needs. This typology assumes some "2-way traffic" between existing population of other settlements to the new services and facilities provided in the new settlement. This growth option is potentially unsuitable for >10,000 dwelling new settlement in the context of Stafford, where a settlement of such size could conceivably become one of the largest settlements in the Borough hierarchy, but could potentially apply to one or more c. 5,000 dwelling new settlement in close proximity to Stafford.



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Autonomous

1.38 An autonomous new settlement could be positioned intentionally distant from existing settlements, allowing it to foster its own independence and distinctiveness. This new settlement would likely need to be of a scale and composition that is overtly self-sufficient in terms of key services (e.g. >10,000 dwellings). It could possibly result in an insular form clustered around a definitive centre and/or strategic transport node, but would still need good linkages for other elements of core infrastructure that are unlikely to be self-sustained, e.g. primary healthcare / Accident + Emergency. This growth option would likely be reliant on excellent sub-regional / regional strategic transport links, either existing or newly created.



1.39 Classification of growth options using these typologies provides an indication of the likely function of the options being considered. The below assumptions have fed into the identification and assessment of potential growth locations and combined spatial choices thematic option testing. The application of typologies helps inform the likely impacts, opportunities and infrastructure requirements/mitigation that may be required or desirable in each location.

Typology	Urban Extension	Co-Dependent	Autonomous
Hectares	100 – 300	300 – 1,000	1,000 – 2,500
Net to	60:40 (<100ha)	40:60	40:60
Gross Ratio	40:60 (>150ha)	40.80	40.00
Dwellings	2,500 - 5,000	5,000 - 10,000	>10,000
Population ¹⁷	5,875 – 11,750	11,750 – 23,500	>23,500
Jobs (estimates based on population/ dwellings) ¹⁸	1,000 – 5,000	4,500 - 15,000	9,000 - >15,000
Primary centre	Neighbourhood/Village Centre (Primary School & Local Facilities)	District Centre (Secondary School, District Facilities incl. employment)	Town Centre with retail and other employment areas
Secondary	Local Centre/shopping parade (primarily convenience/local services)	Neighbourhood/Village Centres	District Centres
centres	-	Local Centre/shopping parade (primarily convenience/local services)	Neighbourhood/Village Centres
Transport facilities	Public transport stop(s) (e.g. Bus rapid transit (BRT))	Public Transport hub (e.g. rail station/separated hard infrastructure BRT)	Main public transport interchange (e.g. rail/BRT)
Example	Manydown, Basingstoke	Welborne, Hampshire ¹⁹	Gilston Park Estate, Harlow

Table 1 Typology Assumptions (AECOM, 2019)

evidence/NE48 employment density guide 3rd edition.pdf; and Working Paper 71

'More residents, more jobs? 2015 update' (Lara Togni/GLA Economics, 2015). Accessed at: https://www.london.gov.uk/sites/default/files/working-naper-71.pdf

https://www.london.gov.uk/sites/default/files/working-paper-71.pdf ¹⁹ Welborne Garden Village will have a close functional relationship with Fareham initially; it will become more selfautonomous/Co-Dependent as it reaches completion. For more information:

http://welbornegardenvillage.co.uk/garden_village/intro.aspx#live

¹⁷ Based on a notional occupancy figure of 2.35 persons per dwelling

¹⁸ Ranges reflect residential-led and mixed use new settlement precedents with job ratios of between 0.9 - 1.25. Informed by an AECOM analysis of district-scale Built Up Areas and secondary sources – including: 'Employment Densities Guide: 2nd edition' (Homes and Communities Agency/OffPAT, 2010). Accessed at: <u>https://www.gov.uk/government/publications/employment-densities-guide</u>; 'Employment Density Guide: 3rd edition (Homes and Communities Agency/GVA Grimley Ltd, November 2015). Accessed at: <u>https://www.kirklees.gov.uk/beta/planning-policy/pdf/examination/national-</u>

2. Context

National

2.1 Building on the tradition of strategic planning the Government has increasingly encouraged planning at a strategic scale since the publication of the consolidated National Planning Policy Framework (NPPF) in 2012. Since March 2016, the MHCLG has supported locally-led garden villages, towns and cities with funding and technical support (delivered through Homes England). More recently, The Neighbourhood Planning Act (2017) and The New Towns Act 1981 (Local Authority Oversight) Regulations 2018 introduced the legislative and regulatory backing to allow locally led new towns to be designated and for development corporations to be set up to deliver them. Related to these efforts Government has agreed to a number of devolution deals and housing and growth deals that encourage strategic solutions alongside new planning and funding powers. The below section summarises other national policy and strategies pertinent to new settlement planning that this study addresses.

Housing White Paper

- 2.2 The Housing White Paper "Fixing our Broken Housing Market", issued in February 2017, sets out the government's plans to reform the housing market and boost the supply of new homes in England. The White Paper is supported by a series of technical reports. The White Paper reinforces the Government's commitment to deliver growth through new settlements, which are said to provide an opportunity for well-planned and designed communities and to capture land value uplift.
- 2.3 The White Paper also proposed a number of funding streams to enable infrastructure delivery, in line with housing provision. This included the Housing and Infrastructure Fund (HIF) which is a Government capital grant programme of up to £2.3 billion, which will help to deliver up to 100,000 new homes in England.

National Planning Policy Framework (2019)

- 2.4 The latest National Planning Policy Framework (NPPF) document was issued in February 2019. This introduces minor updates and replaces the previous NPPF document issued in July 2018. This update was introduced together with the Government's response to the October 2018 technical consultations on updates to national planning policy and guidance and Housing Delivery Test results.
- 2.5 The NPPF sets out the Government's economic, environmental and social planning policies as well as their requirements for the Planning System. Paragraph 72 supports the creation of *new* settlements or significant extensions to existing villages and towns to plan for larger scale development and provide new homes. These initiatives should be brought forward with the support of local communities and include clear expectations for quality (Garden City principles). Development should consider existing or planned infrastructure investment opportunities, an area's economic potential and scope of environmental net gain.
- 2.6 Furthermore, Paragraph 72 b) adds that a development should create self-sufficient and sustainable communities that include services and employment opportunities within the development itself. Paragraph 72 d) adds that a realistic assessment of likely rates of delivery should be made and opportunities for rapid implementations identified, such as joint ventures or development corporations.
- 2.7 Footnote 35, attached to paragraph 72, specifies that: "the delivery of large scale developments may need to extend beyond an individual plan period, and the associated infrastructure requirements may not be capable of being identified fully at the outset. Anticipated rates of delivery and infrastructure requirements should, therefore, be kept under review and reflected as policies are updated."
- 2.8 Paragraph 127 promotes the need to maintain a strong sense of place, optimising site's potential by delivering appropriate density and mix of development, supporting local facilities and transport networks. New settlements will need to be identified and allocated through the

Local Plan process and so they must be in conformity with the above mentioned policies as well as being capable of passing the soundness test (e.g. effective/justified/positively prepared) and the legal Duty to Cooperate20. This study should be utilised for the purposes of drafting future Statements of Common Ground (required under paragraph 27 of the NPPF). This study is evidence of effective and on-going joint working and can be used to help document the cross-boundary matters being addressed and progressed.

Homes England Garden Communities Toolkit (2019)

2.9 Homes England published a garden communities toolkit in September 2019, it provides information about how to plan, design and develop a new garden community. Under the site feasibility section there are a number of relevant considerations pertinent to the scope of this study. Homes England recommend the following considerations²¹ for testing whether a location is suitable, available and deliverable for a garden community:

Suitability

- opportunities to accommodate the scale of development required
- role and function in the context of the local settlement hierarchy
- the opportunities for development with existing or planned infrastructure like rail stations and other major transport links
- the physical and environmental limitations of the site and its context like access, contamination, flood, location of infrastructure and utilities, environmental constraints, and how feasible is it to address these.
- potential impacts of development, like effects on landscape, ecology and biodiversity and the scope for mitigating these and making net environmental gains
- planning constraints such as green belt designations
- proximity and nature of neighbouring uses

Availability

- what the landownership and promoter's position is
- the level of interest the landowner(s) has in developing a garden community on their land
- the delivery record of developers or landowners involved in respect of large scale complex developments

Deliverability

- identify any factors that can prevent the development coming forward
- check for any physical, legal, planning or other barriers which can prevent or delay development of the site
- confirm your viability testing supports delivery of the quality expectations of the garden community and the infrastructure and services it needs to deliver
- make sure your timescales for delivery align with the need for local housing delivery

²¹ Accessed at: <u>https://www.gov.uk/guidance/garden-communities</u>

²⁰ The duty to cooperate was introduced by the Localism Act 2011 and is set out in the Planning and Compulsory Purchase Act 2004. Local Planning Authorities are bound by the statutory duty to cooperate.

Regional

HS2 and Constellation Partnership

2.10 The Council is one of the authorities across North Staffordshire and Cheshire in the Constellation Partnership seeking to maximise economic benefits from the new HS2 Phase 2a rail link from Lichfield (Fradley) to Crewe.

Stoke and West Midlands Green Belt

2.11 There are two areas of Green Belt within Stafford Borough, to the south-east associated with the Cannock Chase Area of Outstanding Natural Beauty, and north of Stone around the North Staffordshire conurbation. There are also a number of Special Areas of Conservation within Stafford Borough together with national and local nature conservation designations within a high quality natural and historic environment.

Local

- 2.12 Stafford Borough covers an area of over 230 square miles and is a predominantly rural district with Stafford and Stone as its key urban centres. The Borough's location ensures it benefits from excellent north-south transport links facilitated by two M6 motorway junctions serving Stafford town as well as a West Coast mainline railway station providing links nation-wide. Recent years has seen sustainable growth in the Borough with a generally skilled and well educated economically active population living and working within the area, although commuting into and out of the Borough also occurs. The North Staffordshire conurbation exerts a key economic influence on the northern area of the Borough whilst to the south the Birmingham / Black Country city region zone of influence extends to Stafford town and its locality.
- 2.13 The adopted Plan (June 2014) currently demonstrates a need for 8 hectares of new employment land per year alongside 500 new homes per year, of which 210 should be affordable. Applying Government's standard methodology for calculating Local Housing Need has identified a starting point figure of 408 new homes per year for Stafford Borough, to be progressed as a minimum through the New Local Plan 2020-2040.
- 2.14 The Council has made significant progress in delivering the required employment growth, including new development in the Redhill area of Stafford, together with market interest at the Recognised Industrial Estates across the rural areas of the Borough. New homes (including affordable housing) has been delivered through Strategic Development Locations at Stafford and Stone. This has provided a varied employment and housing land portfolio in attractive locations for inward investment by local and national businesses. This means that there is now an important requirement to provide new employment and housing sites for the period 2020 2040 for the strong property markets within the Borough area. It will be important to ensure that growth scenarios to enable the scale of new development, particularly through a New Settlement / Major Urban Extensions are adequately tested through the New Local Plan.
- 2.15 The following evidence base documents were being developed for the New Local Plan 2020-2040 at the time of this study:
 - Sustainability Appraisal (SA) to carry out the Sustainability Appraisal process, based on the Sustainability Appraisal Scoping Report published in July 2017;
 - Habitats Regulation Assessment;
 - Economic and Housing Development Needs Assessment (EHDNA) which acknowledges the growth potential need for a New Settlement / Major Urban Extensions;
 - Strategic Flood Risk Assessment (SFRA) the Council is currently carrying out a joint Level 1 SFRA with a number of authorities across Southern Staffordshire.

- 2.16 It is the Borough Council's intention that the strategic review of location options for a New Settlement / Major Urban Extensions will be published alongside the New Local Plan: issues & options stage in Spring 2020.
- 2.17 In respect of the location for a new Garden Community / Major Urban Extensions the Council have initially identified four potential "reasonable alternatives" through the Strategic Housing & Employment Land Availability Assessment (SHELAA) published in December 2018. These sites have been independently tested through this study, alongside other locations identified by the project team. In March 2019 the Government announced initial funding to progress feasibility studies, programme co-ordination / management and specialist work for the New Settlement in Stafford Borough, known as Meecebrook. Nevertheless, the Government is clear that including a project in the Garden Communities programme does not prejudice or presuppose the planning system.

Housing

2.18 The extant Development Plan (The Plan for Stafford Borough Part 1 and Part 2) sets the policy framework for growth up to 2031. They cumulatively provide for approximately 10,000 homes between 2011 and 2031 which represent a provision of approximately 500 homes per annum. Table 2 (below) shows the housing delivery within the Borough between April 2011 - March 2019:

Year	Completions	Target	Shortfall ²³
2011/12	425	500	75
2012/13	306	500	194
2013/14	411	500	89
2014/15 ²⁴	428	500	72
2015/16 ²⁵	688	500	-188
2016/17 ²⁶	1010	500	-510
2017/18 ²⁷	863	500	-363
2018/19 ²⁸	699	500	-199
Total	4,899	4,000	-899

Table 2 Housing Completions (Source: Stafford Borough Council Statement of Five Year Housing Land Supply (at 31 March 2019))22

Table 2 demonstrates that since 2011 the Borough has delivered on average 612 homes per 2.19 annum. Delivery has accelerated since 2015, delivering in excess of 600 units for the past four vears.

The housing allocations and Strategic Development Locations (SDLs) shown overleaf (Figure 2.20 1) align with Spatial Principle 4 (SP4) which sets the housing growth distribution, supported by necessary infrastructure, as follows: Stafford 70%; Stone 10%; Key Service Villages 12%; and in the Rest of Borough Area 8%. Table 3 shows that this spatial distribution has been broadly delivered.

Table 3 Distribution of completions and commitments (Source: Authority Monitoring Report 2018 – Table 4.4 Settlement Hierarchy Housing Targets and Delivery as at 31st March)

	Target (%)	Completions 2011- 2018 (%)	Completions and Commitments* (%)
Stafford	70	49	71
Stone	10	12	10

22 Accessed at:

https://www.staffordbc.gov.uk/sites/default/files/cme/DocMan1/planning/5%20year%20land%20supply%20statement%2031%2 OMarch%202019.pdf ²³ Where a negative number is shown this denotes an over-provision above the target

²⁴ This includes C2 and C3 completions for the monitoring year 2014/15

²⁵ This includes C2 and C3 completions for the monitoring year 2015/16

²⁶ This includes C2 and C3 completions for the monitoring year 2016/17

²⁷ This includes C2 and C3 completions for the monitoring year 2017/18

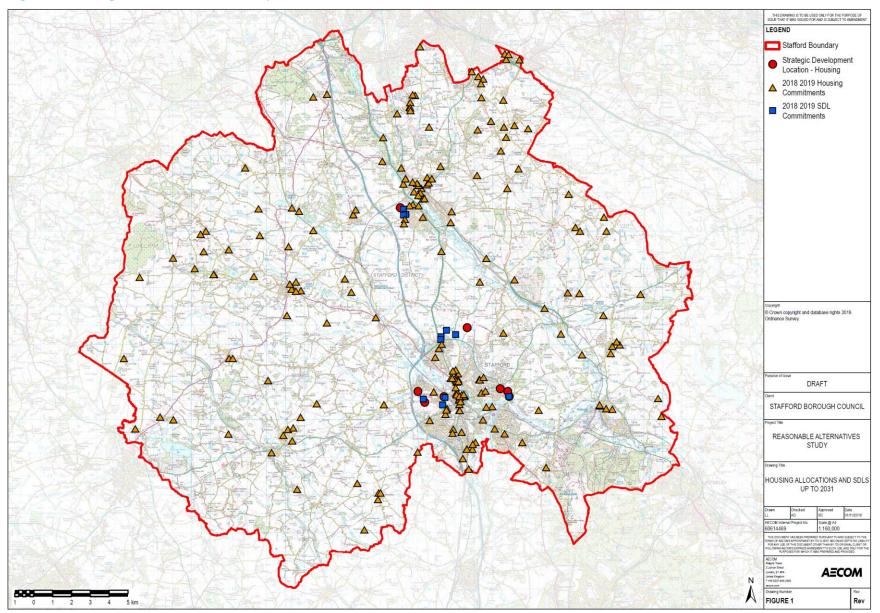
²⁸ This includes C2 and C3 completions for the monitoring year 2018/19

KSV	12	25	12
Rural Areas	8	14	7

*Includes completions 2011-2018, sites with planning permission and Plan allocations.

2.21 There has been an under-delivery in Stafford and an over delivery in Stone, the Key Service Villages and rural areas. However, when both housing completions and commitments are considered together (i.e. those that have been built and those with either planning permission or sites allocated in the Plan) the percentages are generally in line with the Plan's target. Figure 1 (overleaf) demonstrates those housing sites that are committed or already building out and so to a large degree these areas fall outside the parameters of search for this study.

Figure 1 Housing allocations and SDLs up to 2031



Economy

2.22 Policy SP2 of the Development Plan sets out that approximately 8 hectares of employment land shall be delivered per year 'to provide for the future needs and prosperity of residents', providing a total of approximately 160 hectares prior to 2031. Table 4 (below) shows that over the past 7 years an average of 5 hectares have been delivered.

Table 4 Employment Completions (Source: Authority Monitoring Report 2018 – Table 4.2Employment Land Delivery 2011-2018 (hectares) as at 31st March 2018)²⁹

2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	Average
1.6	3.4	1.2	4.7	2.8	9.4	12	5

2.23 Table 5 (below) confirms that there are 98 hectares of committed employment land for the current plan period.

 Table 5 Employment commitments (Source: Authority Monitoring Report 2018 – Table 4.3

 Employment Land Commitments as at 31st March 2018 (hectares))

With planning permission (ha)	Local plan allocation* (ha)	Total commitments (ha)
53	45	98

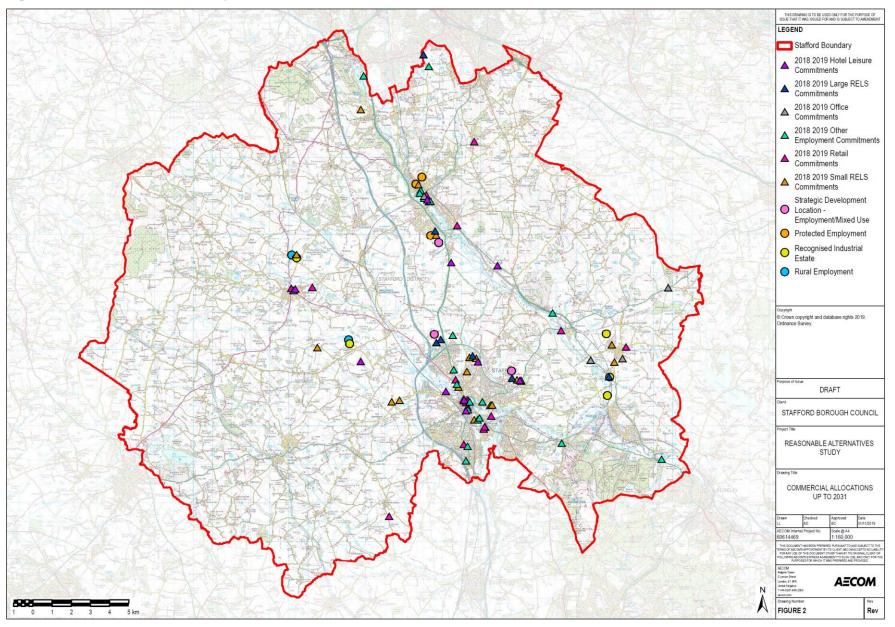
*Local plan allocation without planning permission

2.24 Figure 2 (overleaf) shows that these extant allocations are spatially concentrated in Stafford, Stone and in close proximity to the larger settlements and the Strategic Road Network. The broad majority of the employment land allocations are centred on Strategic Development Locations. Figure 2 (overleaf) shows those employment areas that are committed or already building out and so to a large degree these areas fall outside the parameters of search for this study.

²⁹ Accessed at:

https://www.staffordbc.gov.uk/sites/default/files/cme/DocMan1/Planning%20Policy/Monitoring/Authority%20Monitoring%20Rep_ort%202018.pdf

Figure 2 Commercial allocations up to 2031



Economic Performance

- 2.25 According to the Annual Population Survey³⁰ the level of educational attainment is relatively high across Stafford Borough. Stafford has a high percentage of working-age people who have attained a NVQ4 or higher qualification (47.9%), considerably above the West Midlands average (33.1%) and the average for England and Wales (39.0%). Additionally, only 5.9% of working-age residents do not have any form of qualification. This proportion is noticeably below the averages for West Midlands (10.3%) and England and Wales (7.6%).
- 2.26 According to resident and workplace analysis undertaken from data sources from the ONS and Census 2011³¹, around 60.3% of residents in Stafford who are in employment also work within the borough. This retention rate is slightly above average for boroughs in England and Wales, ranking 101st out of 346 local authorities in terms of retention of workers. The main boroughs for residents in Stafford to out-commute into are Stoke-on-Trent (8.8%), South Staffordshire (3.8%), Cannock Chase (3.3%) and Newcastle-under-Lyme (3.1%).
- 2.27 Residents within these four boroughs, particularly Stoke-on-Trent and Cannock Chase, also commute into Stafford for work. Residents in Stoke-on-Trent account for 9.2% of workers in Stafford while residents in Cannock Chase represent for 6.1% of workers in Stafford. According to the 2011 Census, the workplace population in Stafford has a similar level of education as the resident population, suggesting that the residents commuting out of Stafford for work are similarly qualified as those commuting in.
- 2.28 Residents in Stafford are economically active and have low rates of unemployment. In 2018, 80.8% of working-age residents in Stafford were economically active, compared to 77.0% in West Midlands and 78.6% in England and Wales³². The rate of unemployment was 2.3% in Strafford in 2018, compared to 4.8% in West Midlands and 4.3% in England Wales. The unemployment in Stafford has fallen from 6.1% in 2016 whilst the economic activity rate remained similar (79.5%), indicating unemployed residents are finding employment.
- 2.29 There has been a strong employment growth in Stafford over the past couple of years. Stafford had an employment base of around 63,000 workers in 2018, increasing from 60,500 in 2015³³. This change represents a percentage increase of 4.1%, which was greater than the growth experienced across West Midlands (3.7%) and England and Wales (3.5%).
- 2.30 The health and manufacturing sectors are the most dominant in terms of employment in Stafford, accounting for 15.1% and 11.9% of total employment respectively in 2018. By comparison, the manufacturing sector accounts for 11.6% of employment in West Midlands and 8.0% of employment in England and Wales. The public administration and defence sectors are more prominent in Strafford (7.9% of employment) than across West Midlands (3.5%) and the country (4.0%).
- 2.31 However, the borough does appear to have a productivity issue with low Gross Value Added (GVA) generation. In 2016, Stafford's GVA per head was £18,647³⁴. This figure is considerably below the average for West Midlands (£20,826) and England and Wales (£25,722).

Economic Drivers and Assets

2.32 The Strategic Economic Plan (SEP)³⁵ for the Stoke-on-Trent and Staffordshire Local Enterprise Partnership (LEP) identifies the economic growth ambitions and key drivers for the area. The ambition is "to grow the economy by 50% and generate 50,000 new jobs in the next 10 years". The SEP recognises the following priority sectors to achieve this growth potential: advanced manufacturing (energy, auto-aero, medical technologies, agri-tech, applied materials), digital economy, visitor economy, business/professional services and construction.

³⁰ ONS, (2019); Annual Population Survey (January 2018 to December 2018).

³¹ ONS, (2015); Census 2011

³² ONS, (2019); Annual Population Survey (January 2018 to December 2018).

³³ ONS, (2019); Business Register and Survey 2018

³⁴ ONS, (2016); Gross Value Added (Income Approach)

³⁵ Stoke-on-Trent and Straffordshire LEP, (2018); Strategic Economic Plan.

- 2.33 As part of the overall advanced manufacturing priority, the advanced manufacturing and engineering hub has been delivered including the science and technology centre at Strafford College. In addition, the Manufacturing Growth Programme is a mechanism and funding scheme available to the borough's small and medium enterprise (SMEs) looking to maximise opportunities to develop and expand in the sector.
- 2.34 The following assets and locations within Stafford are also identified in the SEP and the Economic and Housing Development Needs Assessment (EHDNA)³⁶:
 - Advanced manufacturing, Energy the LEP aims to build on the long-standing presence of major international energy companies such as General Electric and ABB which are located around Stafford town centre and to the north of the borough towards Stone. Lichfield, South Staffordshire and Stafford have high levels in the manufacturing of power, power creation and distribution industries. The sector employs over 3,000 people in the LEP, accounting for 4% of national employment.
 - Advanced manufacturing, Auto-Aero the LEP looks to grow this sector by capitalising on the supply-chain opportunities that arise from the presence of global businesses such as Jaguar Land Rover, Toyota and JCB. Jaguar Land Rover invested in a new site at Stone Business Park in 2018 creating new employment, whilst JCB has multiple facilities across the LEP including manufacturing sites at the Airfield Industrial Estate in Hixon. The sector has experienced strong growth (13%) across the LEP over the five years prior to 2018.
 - Advanced manufacturing, Applied materials the LEP aims to build on its heritage across the area in metals and ceramics to exploit opportunities in applied uses for polymers, ceramics, glasses and composites. Stafford has a strong presence of these manufacturers including business clusters in Tollgate Industrial Estate (north of the town centre), Airfields Industrial Estate and Pasturefields (both surrounding Hixon), Stone Business Park, and Raleigh Industrial Estate by Sturbridge.
 - Digital economy the LEP believes this sector is crucial to ensure the growth within the rest
 of the priority sectors is maximised, particularly within advanced manufacturing. There has
 been a strong growth across the LEP in this sector in recent years particularly around key
 employment sites including Stafford Technology Park, Beacon Business Park and Stone
 Business Park. Additionally, BT Openreach expanded its digital engineering site at Yarnfield
 in 2018 creating an estimated 200 new jobs. Continued growth within this sector will
 generate additional high-value, high-wage jobs but will also have spin-off effects by allowing
 existing companies to take full advance of digital technologies.
 - Construction both housing delivery and infrastructure investment, including HS2, are vital to the economic prosperity of the LEP. The LEP aims to ensure the workforce can take advantage of the opportunities presented by HS2. This includes HS2 sensitive sectors (such as accommodation, real estate, architectural and engineering) which are predicted to grow as the investment in the new line occurs.

Constraints Analysis

- 2.35 The SEP for the Stoke-on-Trent and Staffordshire LEP also identifies constraints on economic growth which reflect common national challenges such as skills, transport connectivity, housing delivery and productivity issues. Additional threats are recognised that are specific to the area such as low level of business start-ups and a lack of innovation. The main themes within the constraints identified are as follows:
 - Transport internal connectivity constraints impact upon the quality and vibrancy of the urban and rural/market town areas. This constraint could also be compounded by the potential loss of existing rail services in certain areas, which may cause them to slip behind places with better connectivity.
 - Productivity and employment issues productivity is underperforming in the area, reflecting the dominance of lower value activities, lack of innovation-led growth and lack of business start-ups. There is a relatively high level of insecure employment (including zero-hour

³⁶ Lichfields, (2019); Stafford Borough Council Economic and Housing Development Needs Assessment

contracts, underemployment and temporary contract work) which is likely to inhibit productivity growth. Some of the urban environments in the borough affect perceptions of quality of life which constrain the ability to attract and retain high skilled workers.

• Employment land – the barriers to the delivery of new employment land have the potential to constrain inward investment and business expansion. Namely, there are accessibility challenges at strategic employment and housing sites which can constrain delivery and growth. Additionally, Strafford town centre appears to be experiencing the nationwide decline of the High Street whereby vacant properties in the prime locations can create a negative perception of the borough as a place to do business, and hence deter investment.

Opportunities Analysis

- 2.36 The review of the SEP and EHDNA identified the main opportunities within the borough, which are partly linked to the drivers and assets identified above. The following opportunities are also crucial to the area's growth:
 - Strong jobs growth over the last few years with an opportunity to build on this success by creating a greater number of high-value, high-wage employment opportunities.
 - Maximising the economic and connectivity potential of HS2, including securing classcompatible HS2 services for Stoke-on-Trent and Strafford and taking advantage of opportunities related to released capacity on the existing network. However, it is also crucial that the borough retains its workforce to avoid becoming a commuter settlement.
 - The borough's central location and excellent connectivity to the Strategic Road Network, particularly the M6, provides opportunities for future growth. Area also benefits from connectivity via rail including the West Coast Mainline. The EHDNA suggests that the successful development of future employment land associated with new garden communities would depend on the sites being connected to the M6.
 - Stafford is well-positioned for businesses due to these connections and as such, there is an opportunity for future sites to be provided in and around Stafford town centre in areas with existing access to the strategic road links, for instance proximity to Junction 14 of the M6.
 - EHDNA identifies that logistic operators are moving further north west towards Stafford for opportunities, as it is difficult to find employment land in the 'Golden Triangle' of logistics to the south east. The borough has many sites in rural areas which have been successful, and the development of such sites should be encouraged. Key employment sites in the industrial and logistics sector include Redhill Business Park and Beacon Business Park.
 - Opportunities to create a unique local energy offer based upon existing and new assets as well as investment in emerging technologies and energy supply chain development.
- 2.37 Figures 1 and 2 show areas that are allocated, committed or already building out and so to a large degree these areas fall outside the parameters of search for this study.

3. Identification of Strategic Growth Options

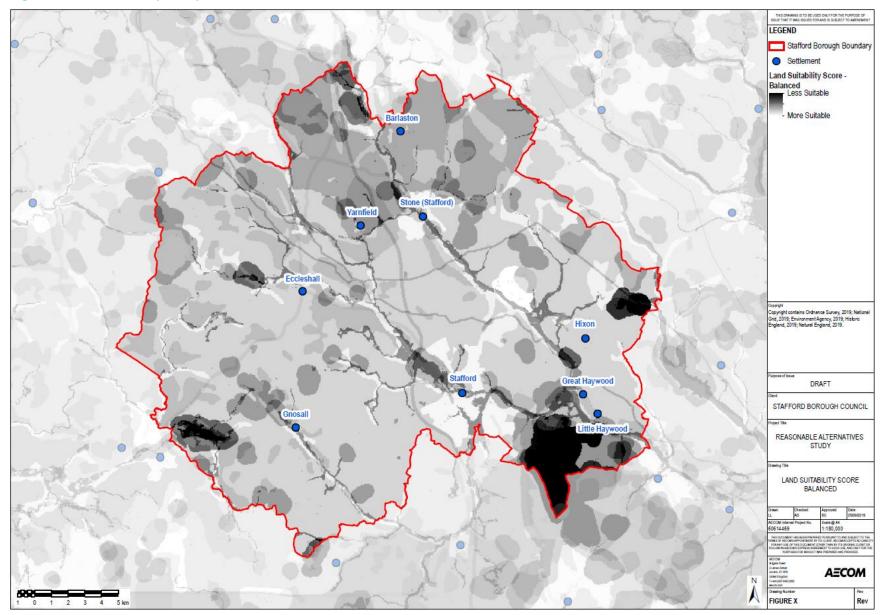
- 3.1 A key requirement of the study is the identification of new settlement and urban extension locations, this chapter presents a high-level land suitability and proximity analysis (relative to services and transport infrastructure).
- 3.2 The outputs of this chapter are used to identify broad areas of search which shall then be subject to more detailed analysis, alongside the four sites provided by the Council, to ascertain whether the locations are suitable in planning terms and capable of delivering the necessary critical mass (circa 100 hectares) for meeting the requirements of a self-contained new settlement or sustainable urban extension (based on the natural capacity of the study area).
- 3.3 This chapter is supported by a detailed thematic analysis of the constraints and opportunities conducted by project team's technical specialists.

Spatial Analysis

Land suitability

- 3.4 A synthesis of the constraints highlights relative land suitability at the study area level. The following spatial datasets have fed into the suitability modelling and mapping presented overleaf:
 - Roads
 - Lakes
 - Agricultural Land Classification
 - Ancient Woodland
 - Area of Outstanding Natural Beauty (AONB)
 - Country Parks
 - Landfill Sites
 - Local Nature Reserve (LNR)
 - National Nature Reserve (NNR)
 - Overhead Power Lines (OHL) and Gas Pipe Utilities
 - Parks and Gardens
 - Special Area of Conservation (SAC)
 - Site of Special Scientific Interest (SSSI)
 - Special Protection Area (SPA)
 - Scheduled Monuments
 - Flood Zone 2 and 3
 - Green Belt
- 3.5 The weightings applied in the Land Suitability map convey different degrees of relevance when assessing opportunities for development. For example, European designated sites will have a darker shading than a Local Nature Reserve.

Figure 3 Land Suitability Analysis



3.6 Areas that are considered to be less suitable for development are represented as a darker shade of black. Overall, this map identifies that areas in and around Stafford and the key north-south transport routes are the least constrained in terms of Environment, Topography and Flood Risk, although there are areas heavily constrained in the south east of the Borough related to the Cannock Chase SAC and AONB.

Proximity to Services and Transport

3.7 Table 6 below indicates the elements that have gone into the combined proximity analysis map.

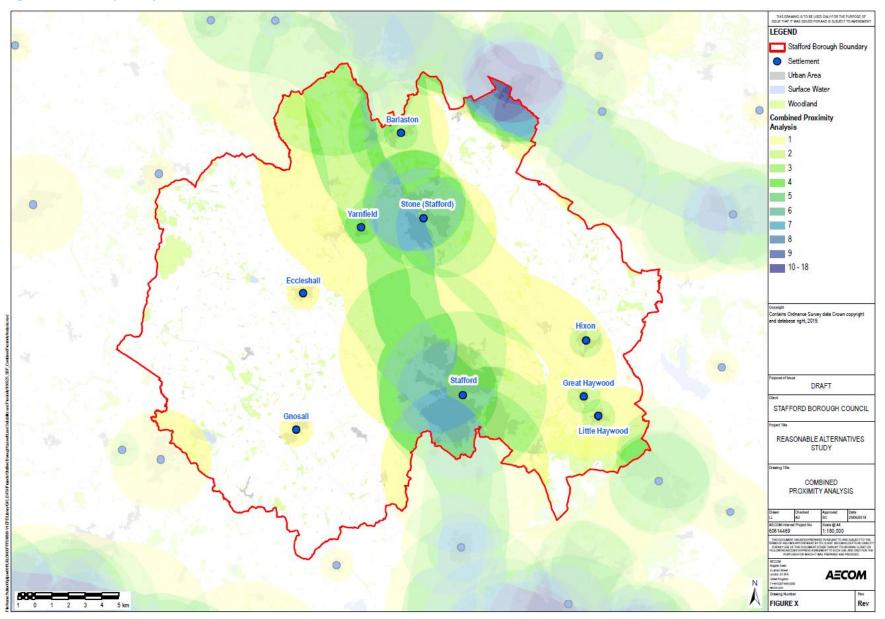
Table 6 Proximity model inputs and assumptions

	Buffer Assumption					
Existing Transport						
Rail Line	2 km	Ensure local resident accessibility to public transport network to limit travel times				
Rail Station	3 km					
Motorway + Strategic Road Network	2 km	Ensure local resident accessibility to road				
Motorway Junctions	5 km	network to limit travel times				
Access to services						
City	5 km	Catchment to access services				
Large Town	4 km	Catchment to access services				
Town	3 km	Catchment to access services				
Large Village	2 km	Catchment to access services				
Proposed Strategic Transport Projects						
Rail Line	2km	Ensure local resident accessibility to public transport network to limit travel times				
Rail Station	3 km					
Motorway/Strategic Road	2 km	Ensure local resident accessibility to road network to limit travel times				

- 3.8 Proximity to settlements (and their social infrastructure) is also a determinant of the likely settlement typology (as described in Chapter 1). For example, a smaller urban extension is highly likely to utilise the services and facilities available in a nearby Town (e.g. Stone) where it is within easy commuting distance. Whereas a large autonomous settlement will need to provide their own services and facilities, especially if located a large distance from a nearby Town.
- 3.9 Differing buffers sizes have been applied to existing settlements to demonstrate the distances that residents would likely be willing to travel to access services and reflecting the higher order level of social infrastructure present within those larger existing settlements.
- 3.10 Proximity to existing transport nodes identifies existing transport infrastructure including rail lines and stations and motorways and motorway junctions. A buffer has been applied to identify areas affected by a particular transport link. In particular, the map reflects the strong north-south link from the 'Haywoods' in the south to Barlaston in the north. There are however pockets that appear to include mostly A/B roads and no railway links e.g. Gnosall, Hixon and areas in close proximity to Stone and Stafford.

- 3.11 Proximity to proposed transport infrastructure improvements includes rail lines and stations and motorways and motorway junctions where committed improvements are emerging. A buffer has been applied to identify areas affected by a particular transport link e.g. HS2.
- 3.12 The mapping (Figure 4) shows that residents in smaller villages and hamlets in the west (with the exception of Gnosall and Eccleshall) are more remote and will have to travel further to access services that you would expect to find in larger settlements. Residents in more rural areas, will be more likely to use the private car as their primary mode of transportation. In comparison Stone, Stafford and the 'Haywoods' show good accessibility to services and transport nodes. The proximity and access to transport hubs and existing social infrastructure built into the model reinforces the relative suitability of existing settlements.

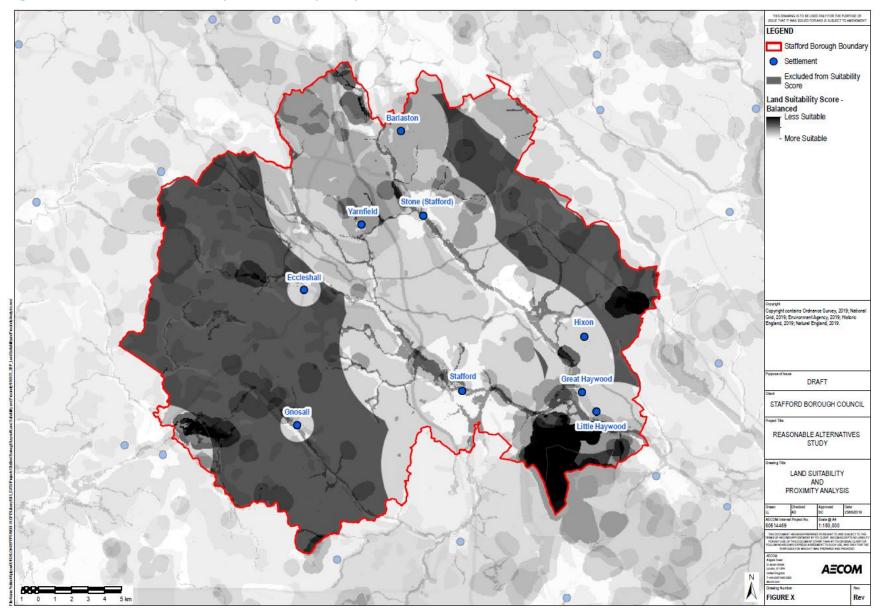
Figure 4 Proximity Analysis



Combined Land Suitability and Proximity Analysis

- 3.13 The combined Land Suitability and Proximity Analysis map shown in Figure 5 combines all the layers of proximity analysis identified into one map and constitutes an initial step towards defining broad areas of search and sub-areas based on the data and criteria inputted for the land suitability and proximity maps.
- 3.14 This map identifies the more (lighter) to less (darker) suitable areas for development combining opportunities and constraints identified. Lighter coloured areas are generally: well connected to transport/services; and in theory highlight those areas with the most capacity for growth.
- 3.15 Figure 5 (overleaf) reflects the density of settlements found in the north-south corridor between the 'Haywoods' and Barlaston, in particular lighter areas are found in and around Stafford (south), Stone (north) and Hixon (east). It also illustrates the strong imbalance between east and west of the study area. With the western rural area less well located and with a higher incidence of protections and designations.
- 3.16 Based on these inputs alone, this map identifies that:
 - The west of the Borough is generally less suitable for development with large black areas, however some pockets around existing settlements constitute potential opportunities for development (e.g. Gnosall and Eccleshall).
 - A large part of the strong north-south axis identified in previous maps is mostly suitable for development following existing rail lines and A34 and M6.
 - Of particular note are the areas in and around Stafford showing large tracts of lighter colours and potentially more suitable for development.
 - Other lighter areas are nearby to Weston, Hixon, the 'Haywoods' and Yarnfield.

Figure 5 Combined Land Suitability and Proximity Analysis



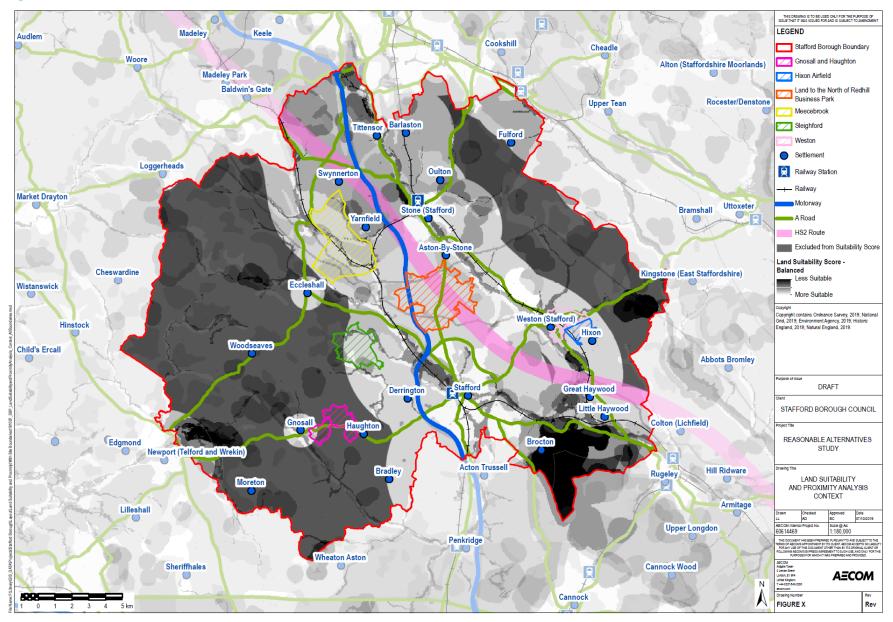
Broad Areas of Search

- 3.17 The project team used the preceding constraints and opportunities analysis to identify Broad Areas of Search and preliminary options potentially suitable for the location of new settlements. Appendix C includes thematic mapping to supplement the mapping provided in this section. This has informed the spatial analysis also and helped the technical specialists to filter out areas that are deemed unsuitable or unfeasible for new strategic-scale growth.
- 3.18 A number of exclusions were made in arriving at the Broad Areas of Search (see Figure 6), including:
 - extant and emerging allocations;
 - existing settlement footprints/major roads/rail lines/utilities;
 - strategic open space (e.g. SSSIs, Ancient Woodland etc.);
 - locations that would risk coalescence of existing large settlements; and
 - areas poorly located for planned and potential new strategic transport upgrades (e.g. areas within the path of the planned HS2 route).
- 3.19 This allowed the multidisciplinary project team to identify the broad areas of search and longlist of options. The analysis that follows this chapter has been used to refine the longlist of options (see Table 7) to verify whether the locations were capable of aligning with local objectives/principles and have sufficient land capacity to deliver, as a minimum, the smallest new settlement typology (100 hectares and circa 2,000 homes).

Broad Area of Search	Preliminary Strategic Growth Options		
South – This area has a close functional relationship with Stafford and could benefit from easy access to the north-south Strategic Road Network (M6).	Gnosall and Haughton – Land in the vicinity of the A518 between Stafford and Newport. Partly in the ownership of Staffordshire County Council and a large number of other residential and agricultural holdings.		
	Land North of Redhill - west of the A34 near to M6 Jn14 Stafford North. Partly in the ownership of Staffordshire County Council and a large number of other residential and agricultural holdings.		
	Seighford – area encompassing the Ladfordfields Industrial Area and former airfield (now a gliding club) to the west of Seighford village.		
North – This area offers good accessibility to Stone and Stoke-on-Trent and is well positioned to link into existing fast rail connections and future improvements via HS2.	Meecebrook - focussed around Cold Meece south of Swynnerton.		
East – The area is well located to the Hixon strategic employment area and routes to the east and south (A518 and A51).	Hixon - An ex-WW2 airfield. Much of the site is unused but part is developed as an Industrial Area.		
	Weston – land to the east of Weston (and west of Hixon).		

Table 7 Broad Areas of Search and Strategic Growth Options

Figure 6 Broad Areas of Search



4. Options

Deliverability

- 4.1 Paragraph 67 of the National Planning Policy Framework (NPPF), states that planning policies should identify a sufficient supply and mix of sites, taking account of their 'likely economic viability'. Further, paragraph 72 of the NPPF requires local authorities to make a realistic assessment of likely rates of delivery, given the lead-in times for large scale sites, and identify opportunities for supporting rapid implementation (such as through joint ventures or locally-led development corporations). Footnote 35 recognises that the delivery of large scale developments may need to extend beyond an individual plan period, and the associated infrastructure requirements may not be capable of being identified fully at the outset. As such, anticipated rates of delivery and infrastructure requirements should, therefore, be kept under review and reflected as policies are updated.
- 4.2 Our analysis addresses these matters as they relate to the new settlement/urban extension options under consideration and provide an evidenced 'first step' in the viability assessment process. The strategic viability issues affecting each of the options is identified and provides an initial assessment of site viability. This has drawn upon existing available evidence such as: the most recent viability study (HDH Planning & Development, 2015); materials supplied by the site promoters; relevant SBC reports (e.g. Infrastructure Delivery Plan, HELAA and recent development management appraisals); and secondary sources (e.g. the 'Letwin Review').
- 4.3 This report is not seeking a single preferred option for meeting Stafford's economic and housing needs up to 2040. The report also does not provide specific delineated areas, or defined red line boundaries of potential new settlement/urban extension locations. This is because there is a limit to how far a study of this nature can go in the absence of more detailed on-site investigations and assessment.
- 4.4 It is crucial that the delivery assumptions are realistic. High-level assumptions have been built into this process drawing upon the detailed assessments (Appendix A), including their theoretical capacity. In our assumptions no new settlement can deliver more than 12,000 units prior to 2040. To understand how long it may take to deliver new settlements there a number of recent research reports³⁷. Table 8 (below) summarises the build out rate average assumptions applied.

Independent review of build out: final report (Rt Hon Sir Oliver Letwin MP, October 2018) Accessed at: <u>https://www.gov.uk/government/publications/independent-review-of-build-out-final-report</u> Start to Finish - How Quickly do Large-Scale Housing Sites Deliver? (Lichfields, November 2016) Accessed at: https://lichfields.uk/media/1728/start-to-finish.pdf

³⁷ Planning and housing delivery (Savills, 2019) Accessed at: <u>http://pdf.euro.savills.co.uk/uk/spotlight-on/planning-and-housing-delivery---2019.pdf</u>

Table 8 Build out rate assumptions

Typology	Approx. Quanta	Dwellings per annum	Build out period	Delivery 2020 - 2040
Autonomous/ Co- Dependent	>10,000 - <20,000	600dpa	15 – 30 years	12,000
Co-Dependent	>5,000 - <10,000	400dpa	10 – 25 years	8,000
Co-Dependent/ Urban Extension	>2,500 - <5,000	300dpa	10 – 20 years	Complete

- 4.5 Whilst the assumptions are simplified for these purposes, a key assumption is that new settlements will benefit from the public sector playing a central role as either a Development Corporation/master developer and through direct delivery and the provision of policy compliant affordable housing and specialist housing. This is likely to involve actors such as Homes England, public-private Joint Ventures and non-traditional delivery models (e.g. community land trusts) in order to reach the high build out rates stated.
- 4.6 The Strategic Growth Options range from 'at least' 2,000 to 12,000 new homes. Based upon an initial delivery period from 2020 to 2040, the larger new settlements will continue to build out post-2040. In addition, developments greater than 100 hectares, a minimum of 2,000 new homes and with supporting employment land will require significant new strategic infrastructure. The likely infrastructure needs are considered in terms of potential adverse impacts and synergistic opportunities. The potential costs have been informed by benchmarks drawn from other AECOM projects (including new communities and new settlements ranging from 1,000 10,000 homes), including the likely social infrastructure requirements (see below).

Social Infrastructure

4.7 To provide an indication of the likely social infrastructure requirements (including land take) for each typology we have set out the typical level of facilities and provision that would be required for settlements at the following scales/typologies: 2,500 units (urban extension); 10,000 units (Co-Dependent); and 30,000 (Autonomous)³⁸.

³⁸ Based on the following assumptions:

Primary School provision - Child Yield Average of South East County Council Standards / 210 pupils per FE / Land Area based on Burgess Hill Precedent (Homes England Scheme) 3ha

Secondary school provision - Child Yield Average of South East County Council Standards / 150 pupils per FE / Land Area based on Burgess Hill Precedent (Homes England Scheme) 12ha

FE College provision - AECOM planning Benchmarks - Assuming FE College of 1 hectares

University provision - AECOM planning Benchmarks - Assuming university facility of 16 hectares (based upon Oxford Brookes Headington Campus)

[•] Primary Care provision - Standard NHS multiplier / 200 sq m per GP (Primary care centre) (AECOM Cost Consultant Benchmark data)

Hospital provision - Existing ratio of Hospital Beds to population across England (based on NHS England Data) / 160
sq m per bed (AECOM Cost Consultant Benchmark data)

Combined Community & Civic Space - AECOM benchmark planning data (70sq.m community space, 30sq.m library, 50 sq.m Culture)

Sport Facility (Swimming & Sport Halls) - Analysis of Sport England UK data

[•] Major Civic Buildings - AECOM planning Benchmarks - Assuming 1 ha per facility

[•] Major Cultural Buildings - AECOM planning Benchmarks - Assuming 1 ha per facility

[•] Police Hub - MHCLG Analysis and AECOM benchmark planning data (200 sq.m per Police Hub)

[•] Fire Station - MHCLG Analysis and AECOM benchmark planning data (1000 sq.m per Fire Station)

Ambulance Station - MHCLG Analysis and AECOM benchmark planning data (500 sq.m per Ambulance Station)

Table 9 Urban Extension smaller settlement infrastructure needs

Total Additional homes				2,500
Additional Population				5,900
	Pro	vision	Floorspace m ²	Land Area (Ha)
Education				
Primary Schools (3FE)	625 pupils	1 school	18,000	3.0
Secondary Schools (10FE)	450 pupils	0 schools	0	0.0
FE College		0	0	0.0
University		0	0	0.0
Healthcare				
Primary Care	3.3 GPs	1 facility	200	0.0
Hospitals	11.5 beds	0 hospitals	0	0.0
Community / Civic / Leisure				
Combined Community & Civic Space		nunity/civic baces	882	0.1
Sport Facility (Swimming & Sport Halls)		0	147	0.0
Major Civic Buildings		0	0	0.0
Major Cultural Buildings	0		0	0.0
Emergency Services				
Police Hub	0		0	0.0
Fire Station	0		0	0.0
Ambulance Station	0		0	0.0

Table 10 Co-dependent/Autonomous larger settlement infrastructure needs

Total Additional homes				10,000
Additional Population				23,500
	Provi	sion	Floorspace m ²	Land Area (Ha)
Education				
Primary Schools (3FE)	2,500 pupils	4 schools	72,000	12.0
Secondary Schools (10FE)	1,800 pupils	1 school	72,000	12.0
FE College	0		0	0.0
University	0		0	0.0
Healthcare				
Primary Care	13.1 GPs	3 facilities	600	0.1
Hospitals	46.1 beds	0 hospitals	0	0.0
Community / Civic / Leisure				
Combined Community & Civic Space	4 commu space	•	3,530	0.6
Sport Facility (Swimming & Sport Halls)	1 sports facility		588	0.1
Major Civic Buildings	0		0	0.0
Major Cultural Buildings	0		0	0.0
Emergency Services				
Police Hub	1 police station		200	0.0
Fire Station	0		0	0.0
Ambulance Station	0		0	0.0

Cost Estimates

- 4.8 Alongside the social infrastructure requirements necessary to support new settlements, Table 11 presents a summary of the high-level cost estimates associated with a smaller and larger settlements in Stafford alongside an estimated delivery cost per home.
- 4.9 This analysis shows an estimated cost variation between approximately £45,000 per home at the smaller settlement/urban extension scale and up to £55,000 per home at the larger new settlement scale. Settlements larger than 10,000 are generally more expensive.

	Current AECOM 2,500 Unit Scheme (South East Prices)	2,500 Unit Scheme rebased to Staffordshire Prices	Current AECOM 10,000 Unit Scheme (South East Prices)	10,000 Unit Scheme rebased to Staffordshire Prices
Scheme Description	2,500 dwellings / 40k+ employment floorspace (rounded)	2,500 unit urban extension scheme	10,000 dwellings / 90k+ employment floorspace (rounded)	10,000 unit new settlement scheme
	£ million	£ million	£ million	£ million
Site Preparation Work	£11,692,177	£10,727,572	£23,000,000	£21,102,500
Social Infrastructure	£22,127,660	£20,302,128	£135,000,000	£123,862,500
Green Infrastructure	£9,574,468	£8,784,574	£62,000,000	£56,885,000
Transport Infrastructure	£32,446,809	£29,769,947	£117,000,000	£107,347,500
Utility Infrastructure	£25,531,915	£23,425,532	£89,000,000	£81,657,500
Phasing & Temporary Work	£2,659,574	£2,440,160	£12,000,000	£11,010,000
Professional fees	£9,042,553	£8,296,543	£39,000,000	£35,782,500
Survey Costs	£500,000	£458,750	£2,000,000	£1,835,000
Contingency	£11,702,128	£10,736,702	£73,000,000	£66,977,500
Estimated Delivery Cost	£125,277,283	£114,941,907	£552,000,000	£506,460,000
Estimated Cost Per Home	£50,111	£45,977	£55,200	£50,370

 Table 11 Summary of Estimated Delivery Costs for each Settlement Typology

4.10 The following assumptions apply to the cost assumptions:

- Costs cover Master Developer site preparation and infrastructure works to provide a series of serviced parcels for construction by others.
- The costs are as at Summer 2019 prices and exclude VAT, inflation, land acquisition and all on plot development.
- South East prices were reduced by 8.25%
- The costs assumed greenfield sites with flat topography, reasonable ground conditions and minimal demolition costs
- A cost distinction between urban extensions and new settlements has not been taken into consideration through this exercise
- Costs towards funding strategic offsite infrastructure provision are not incorporated into the settlement cost estimates and would vary according to the location of the settlement in the study area

- 4.11 The following conclusions can be drawn from this costing analysis:
 - As settlements increase in size the costs per unit will increase based upon the works required within the sites.
 - Associated off site works will also increase as schemes increase in size. This reflects the nature of the interventions and for example on transport items these will change from relatively low cost works such as road widening and local road junction's improvements to Motorway / A Road Junction works.
 - There could be opportunities to mitigate the impact of the more significant infrastructure interventions by sharing these across a number of settlements or expansion sites. However, this is dependent on the timing of these works which invariably is not ideal and can require the first sites being brought forward to take a disproportionate share of the costs.
- 4.12 These conclusions highlight the need for intervention on major infrastructure works to allow the development of larger settlements to progress, as these schemes and individual master developers are very unlikely to be able to shoulder the burden or manage the coordination of these costs across multiple ownerships. This is also a reflection on issues such as sales values, which are unlikely to change irrespective of the size of the new settlement.
- 4.13 Site specific infrastructure is discussed in more detail as part of the detailed assessment of growth option locations.

Options Assessment Summary

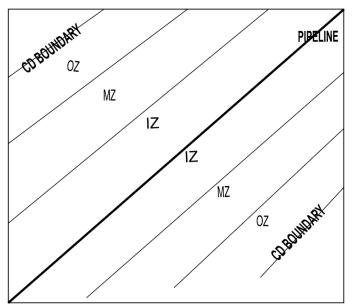
- 4.14 A detailed assessment of the Strategic Growth Options has been undertaken by the multidisciplinary project team on the basis of the assessment criteria identified in the methodology section (see detailed assessments for each site in Appendix A). A summary of these findings is provided within this chapter, alongside an appraisal of likely quanta of growth that may be achievable and the project team's view on potential options that should be considered further in the plan making and Sustainability Appraisal process.
- 4.15 For Gnosall and Haughton, two options are put forward following the sites visits whereby it was determined that the location lent itself to both an urban extension and garden village option. In all other cases the detailed assessment has been used to provide an independent view on the potential capacity, based upon the site condition, location within the Borough and typology deemed most appropriate.
- 4.16 The potential infrastructure requirements are outlined to provide an indication of the likely reinforcements that may be required or that would be desirable alongside the new settlement/urban extension growth options.

Gas pipeline consultation distances/zones and abnormal costs

- 4.17 The assessments identify where high pressure gas pipelines are in close proximity to a number of the indicative sites. This information has been drawn from the Health and Safety Executive's (HSE) Planning Advice Web App. The HSE has prepared guidance (land use planning methodology)³⁹ that sits alongside the app and describes when the HSE will advise against development based upon the consultation zones and level of sensitivity. Extracts of this advice and rules pertinent to major development are summarised (overleaf).
- 4.18 The consultation zones are normally determined by a detailed assessment of the risks and/or hazards of the installation or pipeline which takes into account the following factors; the quantity of hazardous substances for which the site has hazardous substances consent and details of the storage and/or processing; the hazard ranges and consequences of major accidents involving the toxic and/or flammable and/or other hazardous substances that could be present. The risks and hazards from the major hazard are greatest in the Inner Zone and hence the restrictions on development are strictest within that zone. The consultation distances comprise the land enclosed by all the zones and the installation/pipeline itself.

³⁹ Accessed at: <u>http://www.hse.gov.uk/landuseplanning/methodology.pdf</u>

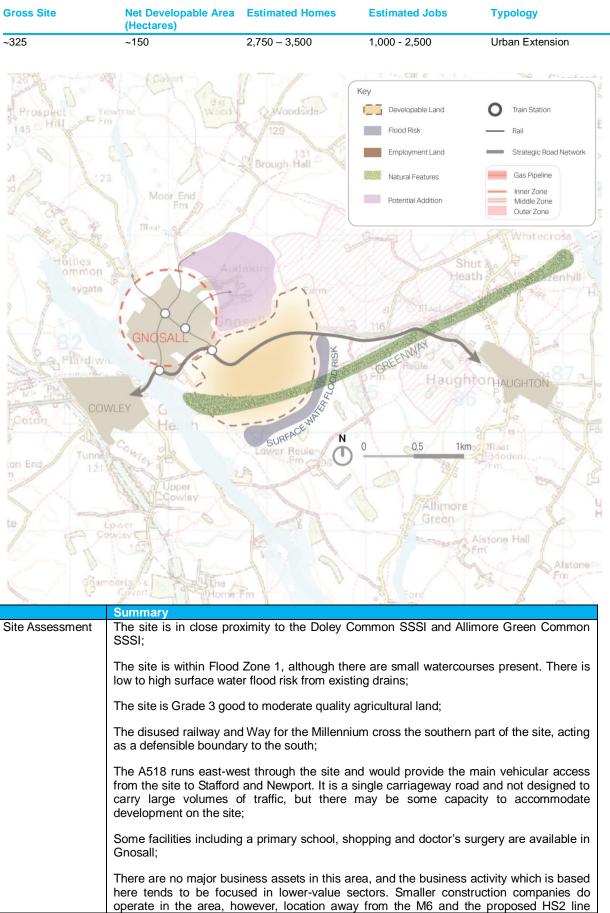




4.19 The Sensitivity Level of a proposed development will be determined by the Development Type(s) involved and the size and scale of each Development Type. However, based on the scale of development it is likely all development considered in this study would be classified as mainly Level 4, albeit employment, green infrastructure and parking would be permitted in some limited instances within the outer zone.

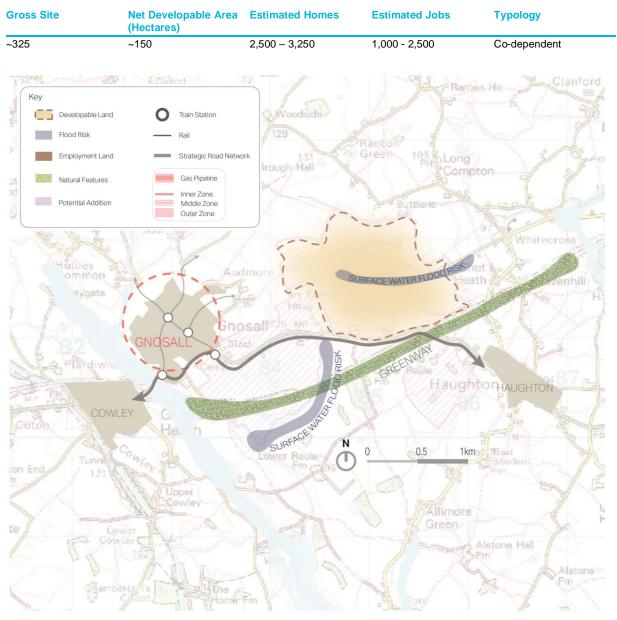
Level of Sensitivity	Development in Inner Zone (IZ)	Development in Middle Zone (MZ)	Development in Outer Zone (OZ)
1 – Workplaces and parking areas	DAA	DAA	DAA
2 – Developments for use by the general public e.g. housing, transport links, indoor/outdoor public uses (retail, hotels, leisure)	AA	DAA	DAA
3 – Developments for use by vulnerable people e.g. schools, hospitals.	AA	АА	DAA
4 – Very large and sensitive developments e.g. nurseries, old people's homes	AA	АА	AA
DAA = Don't Advise Agains AA = Advise Against develo			

A1 Gnosall North/East



	offers limited links to growth opportunities. The implication is that future residents may need to commute out to access employment opportunities, placing more pressure on the road network via the A518;		
	The landscape value of the site and its susceptibility to development is assessed as medium sensitivity. The visual value of the landscape and its susceptibility to development is assessed as low sensitivity;		
	Severn Trent have indicated that there is limited environmental capacity in the area (up to 3,000 properties) utilising maximum capacity at Haughton Wastewater Treatment Works (WwTW) and Wood Eaton WwTW;		
	The site is in close proximity to the Lower Reule Bioenergy facility (Anaerobic Digester);		
	Historic England have indicated that development has the potential to affect the significance, including the setting of multiple heritage assets directly or indirectly, including listed buildings, scheduled monuments, Gnosall Conservation Area, Canal Conservation Area, undesignated assets etc.		
Option	Having reviewed Gnosall and Haughton's constraints and opportunities there are two possible options worth exploring in greater detail. The above option (A1) is an expanded urban extension option to Gnosall. This would avoid coalescence with Haughton and focus investment into one area.		
Potential Infrastructure Requirements	 New junction (roundabout) on A518 to serve the site Public transport improvements (increased frequency on Stafford-Telford route) Junction capacity improvements (A518/High Street/Brookhouse Road; A518/Kingsway) WwTW: Limited environmental capacity in the area (up to 3,000 properties) utilising maximum capacity at Haughton WwTW and Wood Eaton WwTW. Approximately 40MVA required. 20km new 33kV circuit, uprate 15km of 33kV circuit. New 132/33kV transformer and 132kV works. Costs approx. £10-12million 		

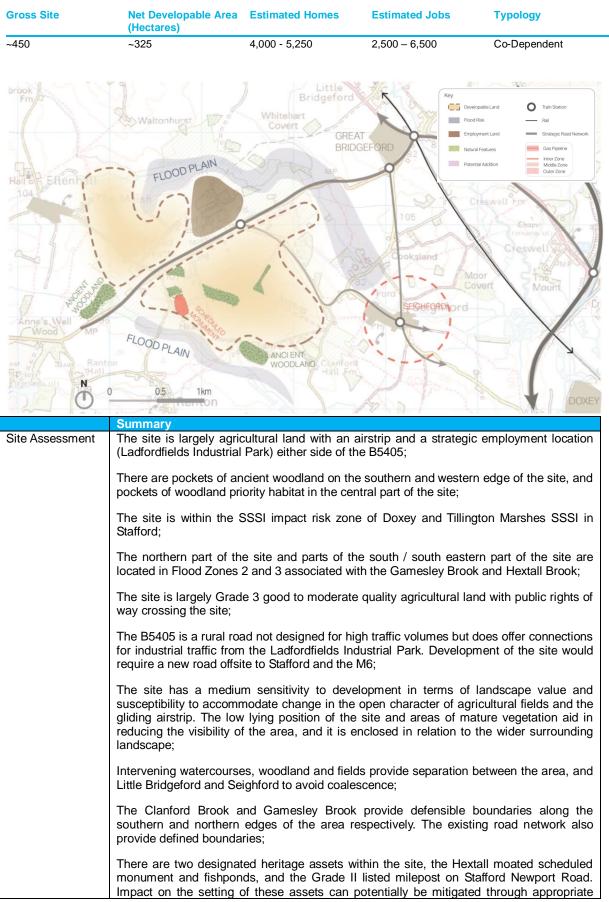
A2 Land between Gnosall and Haughton



	Summary
Site Assessment	The site is in close proximity to the Doley Common SSSI and Allimore Green Common SSSI;
	The site is within Flood Zone 1, although there are small watercourses present. There is low to high surface water flood risk from existing drains;
	The site is Grade 3 good to moderate quality agricultural land;
	The disused railway and Way for the Millennium act as a defensible boundary to the south;
	The A518 runs east-west adjacent to the site and would provide the main vehicular access from the site to Stafford and Newport. It is a single carriageway road and not designed to carry large volumes of traffic, but there may be some capacity to accommodate development on the site;
	Some facilities including a primary school, shopping and doctor's surgery are available in Gnosall, with a primary school at Haughton;
	There are no major business assets in this area, and the business activity which is based

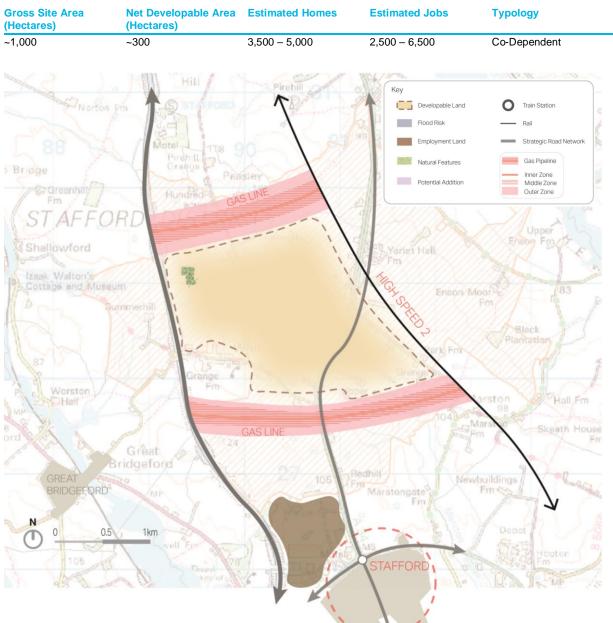
	here tends to be focused in lower-value sectors. Smaller construction companies do operate in the area, however, location away from the M6 and the proposed HS2 line offers limited links to growth opportunities. The implication is that future residents may need to commute out to access employment opportunities, placing more pressure on the road network via the A518;
	The landscape value of the site and its susceptibility to development is assessed as medium sensitivity. The visual value of the landscape and its susceptibility to development is assessed as low sensitivity;
	There is one designated heritage asset that falls within the boundary of the site, the Grade II Woodhouse Farmhouse. Development of the site may have an adverse impact on the rural setting of the farmhouse, however appropriate design could mitigate some of that harm. Historic England have indicated that development has the potential to affect the significance, including the setting of multiple heritage assets directly or indirectly, including listed buildings, scheduled monuments, Gnosall Conservation Area, Canal Conservation Area, undesignated assets etc.;
	Severn Trent have indicated that there is limited environmental capacity in the area (up to 3,000 properties) utilising maximum capacity at Haughton WwTW and Wood Eaton WwTW;
	The site is in close proximity to the Lower Reule Bioenergy facility (Anaerobic Digester).
Option	Having reviewed Gnosall and Haughton's constraints and opportunities there are two possible options worth exploring in greater detail: the above option (A2) is a distinct garden village located between the two existing villages this seeks to avoid coalescence and provides a string of villages (closely linked to Stafford along the A518). This option would likely require more landscaping and planting, in comparison to A1, to contain the development and help to plan for the higher surface water flood risk on-site.
Potential Infrastructure Requirements	 New junction (roundabout) on A518 to serve the site Public transport improvements (increased frequency on Stafford-Telford route) Junction capacity improvements (A518/High Street/Brookhouse Road; A518/Kingsway) WwTW: Limited environmental capacity in the area (up to 3,000 properties) utilising maximum capacity at Haughton WwTW and Wood Eaton WwTW. Approximately 40MVA required. 20km new 33kV circuit, uprate 15km of 33kV circuit. New 132/33kV transformer and 132kV works. Costs approx. £10-12million

B Seighford



	design;
	The surrounding area has a strong concentration of employment, containing a number of businesses (including international companies) in high-value sectors. The nearby Ladfordfields Industrial Park accommodates manufacturing companies including multiples that specialise in the automotive sector. The site's location outside of Stafford town centre and close to the M6 Junction 14 is a combination which presents opportunities for future employment sites due to close proximity to the Strategic Road Network;
	Severn Trent have indicated that there is highly limited waste water capacity in the area (up to 500 properties) utilising Ladfordfields WwTW, which would not meet proposed growth of 5,000 homes. Any significant development would have to be transferred to Brancote WwTW;
	The site is located on either side of the B5405 between Great Bridgeford and Woodseaves. This is a rural road not designed for high traffic volumes but does offer connections for industrial traffic from the Ladfordfields Industrial Park. Development of the site would require significant improvements to the A5013 into Stafford, although this is constrained by residential developments at Great Bridgeford and to the west of Junction 14 of the M6. Alternatively, the site could be served by a new link to Junction 14, although this would require land outside the site boundary.
Option	Having reviewed Seighford's constraints and opportunities, the flood risk present across the site and strong defensible boundaries provided by the various brooks and woodland blocks present the opportunity for a co-dependent new garden village closely related with the existing village and Stafford to the south east (via the B5405 and A5013).
Potential Infrastructure Requirements	 Upgrade of A5013 or new link road to M6 Junction 14 Capacity improvements at M6 J14 New public transport service to Stafford Pedestrian/cycle connections to Stafford WwTW: Highly limited capacity in the area (up to 500 properties) utilising Ladfordfields WwTW. Any significant development would have to be transferred to Brancote WwTW Approximately 50MVA required. 2 x 15km new 33kV circuit, uprate 15km of 33kV circuit. New 132/33kV transformer and 132kV works. Costs approx. £17-20million

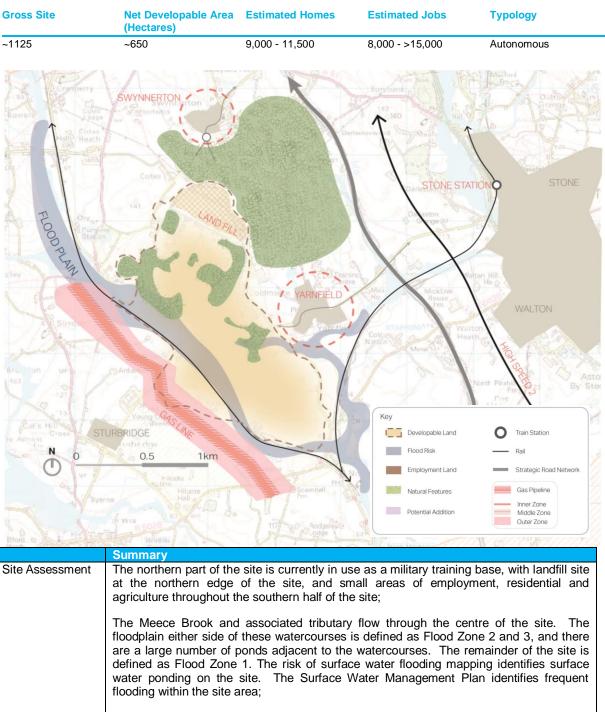
C Land North of Redhill



	Summary
Site Assessment	The site is largely in agricultural use and located on the A34 and M6 between Stafford and Stone;
	The site is located approx. 2km from the Doxey and Tillington Marshes SSSI;
	The site is within flood zone 1 and has low risk of surface water flooding;
	The site is mostly Grade 3 good to moderate quality agricultural land with some areas of Grade 2 very good quality agricultural land;
	The site contains small areas of Deciduous Woodland priority habitat;
	There are a number of small historic landfills across the site;
	There are multiple public rights of way across the site;
	The site is bisected by the A34, a dual carriageway that connects Stone and Stafford. This provides opportunities to create new junctions on the A34 to serve development on the site. The additional traffic generated is likely to require upgrades to existing junctions

	along the A34, and within Stone and Stafford. Design of the development would have to take into consideration severance caused by the A34 to pedestrian and cycle movements between the eastern and western parts of the site. Highways England indicate that development here is likely to have traffic impacts on the M6 strategic road network;
	The site abuts the North of Stafford Strategic Development Location (SDL). This provides opportunities to integrate pedestrian, cycle and public transport provision between the site and Stafford town centre. The SDL also includes employment development to the north of the Redhill Business Park, providing potential employment opportunities for residents;
	HS2 is planned to run through the centre of the site from north to southeast. Mitigation/design of the development would be needed to facilitate and reduce potential adverse impacts created by severance of the site;
	The centre of the site is approximately 6km from Stafford railway station and 6.5km from Stone railway station. Large parts of the site would therefore lie within reasonable cycling distance of a station and, with the provision of suitable infrastructure, would promote sustainable travel;
	Although no facilities (schools, shopping, medical, entertainment) are within walking distance, the scale of the development would be sufficient to support these within the site, reducing the need to travel;
	The National Grid high-pressure gas transmission pipeline FM21- Audley to Alrewas and the FM04 - Alrewas to Audley crosses the southern and northern part of the site respectively from west to east. The pipeline imposes a constraint on the siting of buildings, and fixed plant and machinery within a 15 metre buffer zone on each side of the pipe where built development cannot be permitted;
	Severn Trent indicate that the site is remote from a sewerage network, therefore infrastructure would need to be provided. There may be an option to transfer to Brancote WwTW although this is east of Stafford and may require significant infrastructure;
	The Landscape value of the site and its susceptibility to development is assessed as medium sensitivity;
	There is risk of ribbon development adjacent to the main roads and perception of sprawl from Stafford, northwards towards Stone;
	The area contains very high levels of employment with some main businesses positioned in the Business Park. Wholesale and retail companies are also attracted to the area, representing the greatest proportion of employment. The location of the site brings further opportunities such as accessibility to the M6 Junction 14 and the proximity to Stafford town centre. Future employment development in this location can be complementary to growth in key industries.
Option	Having reviewed land North of Redhill's constraints and opportunities, there are notable constraints presented by the future HS2 route and two gas pipelines. There would be an opportunity for a new village to act co-dependently with Stafford (via the A34) but it would need to be provided with a sufficient buffer so as not to risk coalescence and ribbon development with Stafford.
Potential Infrastructure Requirements	 New junctions on the A34 (roundabouts) to serve the site Junction capacity improvements along the A34 between Stafford and Stone Public transport improvements (increased frequency between Stafford and Stone) Pedestrian/cycle connections to Stafford and Stone WwTW: Development remote from sewerage network. Any significant development would have to be transferred to Brancote WwTW. Approximately 60MVA required. New 60MVA BSP at a suitable location between Stafford and Eccleshall. Extend Rugeley – Stafford 132kV circuit approx. 8km; 2 x 60MVA 132/33kV Tx's +33kV switchboard at BSP. Extend 33kV infrastructure to site. Costs approx. £20million

D Meecebrook



The site includes Grade 2 and 3 best and most versatile agricultural land;

Large pockets of the northern half of the site contain deciduous woodland priority habitat;

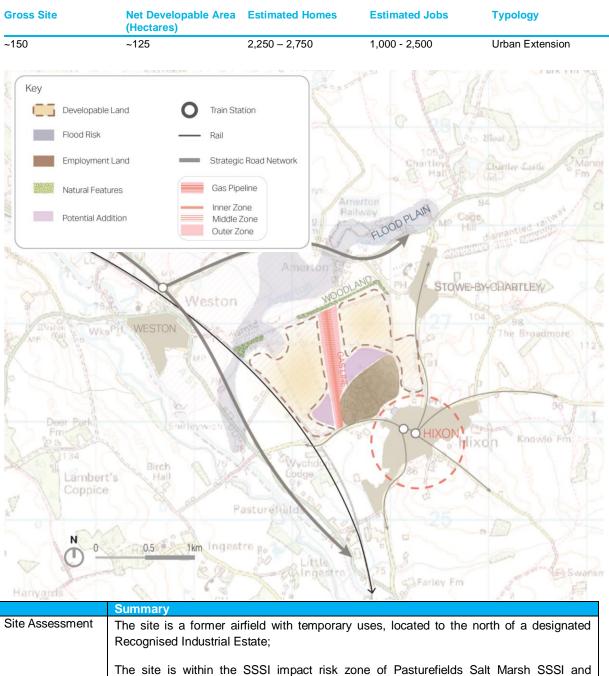
Roads surrounding and within the site have potential, with upgrades, to provide suitable access to the wider site, along with a potential new junction on the M6. The railway runs through the middle of the site, which could provide a new station and create more sustainable transport links;

Highways England indicate that the Meecebrook site will have traffic impacts on the M6 strategic road network. Highways England indicate that the site could benefit from HS2, in

terms of access to a new railway station, and there is potential to include an additional junction on the M6 motorway;

	Two high pressure gas pipeline, the FM04 - Alrewas to Audley and the FM21 - Audley to Alrewas National Grid Gas Pipeline, cross the southern part of the site in northwest-southeast direction. The pipeline imposes a constraint on the siting of buildings and fixed plant and machinery with a 15 metre buffer zone on each side of the pipe where built development cannot be permitted;
	The site has a medium landscape sensitivity in terms of landscape value and susceptibility to development, and can potentially accommodate some change with appropriate mitigation;
	Development of the site potentially risks coalescence with Yarnfield, Coldmeece and Sturbridge;
	The site contains seven Grade II listed buildings. The design of any proposed development should consider the setting of these assets and incorporate them into the new development, preserving, and where possible, enhancing their significance. Swynnerton Park to the north forms part of the setting of the Grade I Listed Swynnerton Hall;
	The area where the site is located has a strong concentration of employment despite no major clusters apparent in the area. The employment is in a variety of sectors, with manufacturing the most dominant broad industry group for employment. There is some potential for future development to build on the existing activities by supporting growth of existing industries through the provision of employment and housing sites. However, there is a risk that the scale of housing and jobs proposed may exceed what the area is able to accommodate. The proposed scale of intervention may require further investment in infrastructure to increase attractiveness of the site for high value businesses. The proximity to the railway line and M6 does provide the opportunity to upgrade connectivity;
	The Environment Agency indicates that the site has 'limited or no headroom but relaxed permit limits to accommodate additional growth' or 'tight limits but headroom available'. The Meecebrook site can drain to the Eccleshall Sewage Treatment Works (STW), which has relaxed permit limits and headroom;
	Severn Trent have indicated that the site has a highly limited environmental capacity in the area (up to 3,000 properties) utilising Eccleshall and Sturbridge WwTW. Any significant development would have to be transferred to Pirehill WwTW or Strongford WwTW;
	The Meece Landfill and processing facility is located adjacent to the site.
Option	Having reviewed Meecebrook's constraints and opportunities, there are challenges presented by the topography, flood plain, gas pipeline and remediation of landfill. However, this is a significant area of land and there would be potential to provide an autonomous new settlement with the requisite transport infrastructure upgrades.
Potential Infrastructure Requirements	 New junction on M6 with link to site New railway station New public transport links to Stafford Pedestrian/cycle links to Stone WwTW: Highly limited environmental capacity in the area (up to 3,000 properties) utilising Eccleshall and Sturbridge WwTW. Any significant development would have to be transferred to Pirehill WwTW or Strongford WwTW. Approximately 80MVA required New 90MVA BSP at a suitable location between Stafford and Eccleshall. Extend
	Rugeley – Stafford 132kV circuit approx. 10km; 2 x 90MVA 132/33kV Tx's +33kV switchboard at BSP. Extend 33kV infrastructure to site. Costs approx. £23million. Alternative is to feed from the north from Barlaston, with similar costs also for this scheme.

E Hixon



The Amerton Brook flows through the north west corner of the site. This area of the site is within Flood Zones 2 and 3. Development should be set back from this area, which is also deciduous woodland priority habitat. The Amerton Brook flows towards the A51; options for accessing the site from the A51 may be constrained by the Amerton Brook;

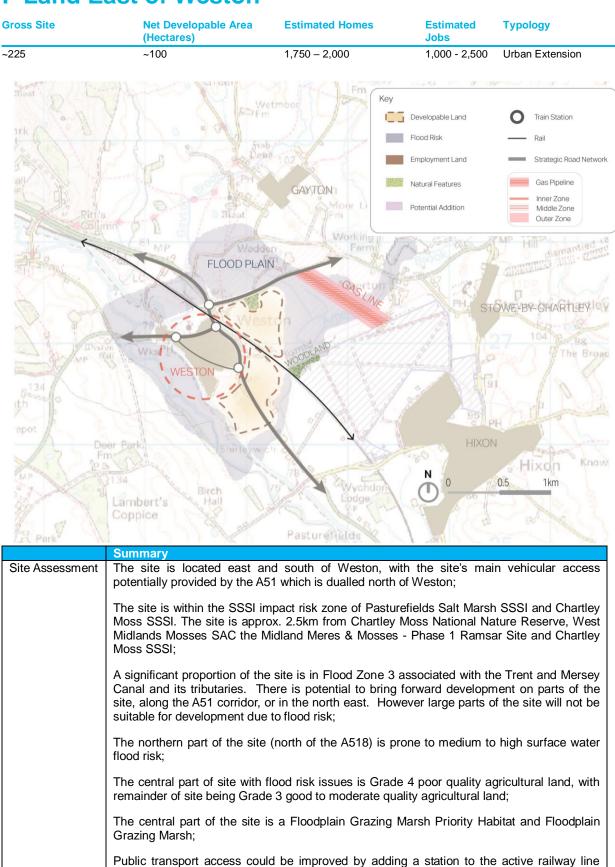
The site is Grade 3 good to moderate quality agricultural land, with approximately 60-70% of the site is within a Mineral Safeguarding Area (MSA) for Sand and Gravel;

The site contains multiple public rights of way;

Chartley Mosses SSSI;

There is good vehicular access from the south. However roads would need upgrading with provision of pavements. Two new access roads could be constructed onsite from the east (Stowe Lane) and the north east (Bridge Lane). Some of the rural roads near the site are not designed to cope with high traffic volumes so may require widening and

	straightoning Ideally a new road could be constructed to the AFA articlastic day in the
	straightening. Ideally a new road could be constructed to the A51 arterial road to improve access to the wider network, however, this would require the purchase of land offsite to the west. In addition, a station on the active railway line would dramatically improve public transport access;
	A high pressure gas pipeline, the Sandon/Drayton Bassett National Grid Gas Pipeline, crosses the site in north-south direction. The pipeline imposes a constraint on the siting of buildings and fixed plant and machinery with a 15 metre buffer zone on each side of the pipe where built development cannot be permitted;
	The site is poorly located in terms of proximity to services and facilities, but is located adjacent to an employment site;
	The site has low landscape value and low sensitivity to development. The dismantled railway to the north, railway to the west, Stowe Lane to the east and the Airfield Industrial Estate to the south provide defensible boundaries and a high level of potential containment;
	The area where the site is located appears to attract major businesses with good concentration of employment. There is a cluster of industrial and manufacturing companies currently located to the south of the Airfield and consequently, manufacturing is the most prominent broad industrial group for the area, including a good portion in high-tech manufacturing. Overall, the site appears to be suitable for economic development;
	The Environment Agency indicates that the Hixon Airfield site partially drains to sewage treatment works that have relaxed permit limits and headroom, however the receiving watercourses have a poor Water Framework Directive (WFD) ecological status which poses a big constraint to additional large scale growth in the catchment.
	Severn Trent have indicated that there is a limited capacity in the Hixon and Weston area (up to 5,000 properties) utilising Hixon WwTW. Any significant development above 5,000 homes would have to be transferred to Brancote WwTW.
Option	Having reviewed Hixon's constraints and opportunities, there are few constraints beyond the gas pipeline and flooding to the north of the site. The site's location relative to Hixon makes it a suitable urban extension that would have a close functional relationship with Stafford also. There could be merit in testing this option alongside growth at Weston. The critical mass could potentially justify a new railway station.
Potential Infrastructure Requirements	 Upgraded/new connections to A51 Junction capacity improvements on A51 and A518 Public transport improvements (increased frequency between Stafford and Uttoxeter) New railway station potential WwTW: Limited capacity in the area (up to 5,000 properties) utilising Hixon WwTW. Any significant development would have to be transferred to Brancote WwTW Approximately 40MVA required. Establish new 132/11kV primary off Rugeley – Stafford. Approx. 4km of 132kV dual circuit cable; new primary with 2 x 132/11kV Tx's and 11kV switchboard. Costs approx. £12million



High pressure gas pipeline, the Sandon/Drayton Bassett National Grid Gas Pipeline, crosses the site in northwest-southeast direction. The pipeline imposes a constraint on the siting of buildings and fixed plant and machinery with a 15 metre buffer zone on each side

F Land East of Weston

running through the site;

r	
	of the pipe where built development cannot be permitted;
	The site has a medium landscape value and medium susceptibility to development resulting in a medium landscape sensitivity. The low lying position of the site and areas of mature vegetation aid in reducing the visibility of part of the site, although proximity to Weston and views from the valley sides on the opposite side of the River Trent result in a high visibility of the western part of the Site;
	The Trent and Mersey Canal, dismantled railway and road networks provide defensible boundaries and potential containment;
	There are two designated heritage assets within the site, a Grade II listed building in the south-east corner of the site, and the Trent and Mersey Canal Conservation Area in the south-west part of the site. Development of the site has the potential to impact on these assets. Any design proposals should preserve and enhance the significance of these assets including their setting;
	The area where the site is located does appear to attract some main employers, with a cluster of industrial and manufacturing companies to the south of the site. Consequently, manufacturing is the most prominent broad industrial group for the area, including a good portion in high-tech manufacturing. Workers do not tend to live close to their place of work, and typically travel by car. Future employment development could benefit from the proximity to existing sectors and assets, helping to advance employment growth in these areas. The housing, as well as the housing allocations in the vicinity, could bring in the necessary workforce to support the future development and lessen commuting needs. This scale of proposed activity would likely be supported in the area.
	The Environment Agency indicates that the Hixon Airfield site partially drains to sewage treatment works that have relaxed permit limits and headroom, however the receiving watercourses have a poor WFD ecological status which poses a big constraint to additional large scale growth in the catchment.
	Severn Trent have indicated that there is a limited capacity in the Hixon and Weston area (up to 5,000 properties) utilising Hixon WwTW. Any significant development above 5,000 homes would have to be transferred to Brancote WwTW.
Option	Having reviewed land east of Weston's constraints and opportunities, there is little scope for any development to the far east of the search area as it is functional flood plain. However, areas outside of Flood Zone 3 and 2 would still constitute a sizeable urban extension that would be well related to nearby Hixon and Stafford. There could be merit in testing this option alongside growth at Hixon. The critical mass could potentially justify a new railway station.
Potential Infrastructure Requirements	 Upgraded/new connections to A51 Junction capacity improvements on A51 and A518 Public transport improvements (increased frequency between Stafford and Uttoxeter) New railway station potential WwTW: Limited capacity in the area (up to 5,000 properties) utilising Hixon WwTW. Any significant development would have to be transferred to Brancote WwTW Approximately 35MVA required. Establish new 132/11kV primary off Rugeley – Stafford. Approx. 4km of 132kV dual circuit cable; new primary with 2 x 132/11kV Tx's and 11kV switchboard. Costs approx. £12million

5. Conclusions

5.1 Having assessed a wide range of opportunities and constraints, this report has identified and verified that there are six main strategic scale growth options capable of delivering sufficient levels of growth to meet the requirements to deliver at least 2,000 homes and associated employment land and infrastructure (within urban extensions and/or new settlements). Table 12 summarises potential capacities based on the possible net developable areas and typology (as informed by the preceding analysis and detailed site assessments found in Appendix A):

Table 12 Conclusions summary

Strategic Growth Option	Gross Site (Hectares)	Net Developable Area (Hectares)	Estimated Homes	Estimated Jobs	Typology
A1 Gnosall North/East	~325	~150	2,750 – 3,500	1,000 - 2,500	Urban Extension
A2 Land between Gnosall and Haughton	~325	~150	2,500 - 3,250	1,000 - 2,500	Co-Dependent
B Seighford	~450	~325	4,000 - 5,250	2,500 - 6,500	Co-Dependent
C Land North of Redhill	~1,000	~300	3,500 - 5,000	2,500 - 6,500	Co-Dependent
D Meecebrook	~1,125	~650	9,000 - 11,500	8,000 -> 15,000	Autonomous
E Hixon	~150	~125	2,250 - 2,750	1,000 - 2,500	Urban Extension
F Land East of Weston	~225	~100	1,750 - 2,000	1,000 - 2,500	Urban Extension

5.2 These options remain indicative at the stage and will form the basis of further testing and refinement, including the confirmation of detailed site boundaries and infrastructure requirements.

Prioritisation

- 5.3 We have concluded above that there are several options for meeting that element of Stafford's housing need that will be on strategic scale sites. Cumulatively, these could ultimately yield up to 50,000 homes in the long term, although it is not anticipated that all will or should be developed.
- 5.4 The sustainability appraisal will assess these options to inform the policy decisions. However, this study can further inform that process by indicating which of the sites have the highest potential to be most suitable for development in the next plan period.
- 5.5 Sitting above the criteria used in the broader assessment, Stafford Borough Council's New Local Plan Settlement Assessment (July 2018) proposes the four most relevant aspects of the NPPF in relation to settlement strategy and hierarchy. These four can be applied as high level criteria for understanding which of the options may have the potential to be 'most suitable'.
- 5.6 As described in the Settlement Assessment report, the NPPF criteria are:
 - The Core Principle that planning should actively manage patterns of growth to make the fullest possible use of public transport, walking and cycling, and focus significant development in locations which are or can be made sustainable (NPPF para 17);
 - Where practical, particularly within large-scale developments, key facilities such as primary schools and local shops should be located within walking distance of most properties (para 38);
 - To promote sustainable development in rural areas, housing should be located where it will enhance or maintain the vitality of rural communities. For example, where there are groups of smaller settlements, development in one village may support services in a village nearby (para 55); and
 - Planning policies should ensure an integrated approach to considering the location of housing, economic uses and community facilities and services (para 70).
- 5.7 Table 13 uses an annotated traffic light rating to assess the options against the NPPF criteria and to indicate which may have the potential to be most suitable. Letters indicating red, amber and green are included for the benefit of black and white prints.
- 5.8 The analysis concludes that all of the options are potentially suitable but that D Meecebrook and E Hixon are potentially most suitable. These two particularly benefit from high potential for sustainable access, although it should be noted that in both cases the 'potentially most suitable' rating is dependent on the provision of significant public transport infrastructure.

Table 13 High level assessment against NPPF criteria to indicate options with the potential to be most suitable

Strategic Growth Option	Potential for sustainable access	Potential for walkable neighbourhoods	Potential to enhance or maintain vitality of rural communities	Potential to integrate housing, economic and community uses	Other notable factors	Overall potential
A1 Gnosall North/East	Proximity to some services in Gnosall but car use likely to access existing employment areas. (A)	All development at this scale offers potential to design facilities within walking distance of properties. (G)	Potential positive impact on supporting services in Gnosall. (G)	Scale limits potential to mix uses, although some existing to integrate with. (A)	n/a	Potentially suitable.
A2 Land between Gnosall and Haughton	Proximity to some services in Gnosall and Haughton but car use likely to access existing employment areas. (A)	All development at this scale offers potential to design facilities within walking distance of properties. (G)	Potential positive impact on supporting services in Gnosall. (G)	Scale limits potential to mix uses, although some existing to integrate with. (A)	n/a	Potentially suitable. Careful consideration required if Gnosall North/East is allocated and proximity to Haughton, due to the coalescence risk.
B Seighford	Limited potential for sustainable modes, but helped by proximity to Stafford and Ladfordfields Industrial Park. (A)	All development at this scale offers potential to design facilities within walking distance of properties. (G)	Seighford has limited services with potential for being supported. (A)	Scale provides potential to mix uses, and good proximity to existing economic uses. (G)	Limited waste water capacity (~500 homes).	Potentially suitable.
C Land North of Redhill	Some potential for sustainable travel, related to the adjacent North of Stafford Strategic Development Location and links back into Stafford. (A)	All development at this scale offers potential to design facilities within walking distance of properties. (G)	No facilities of note within walking distance at present. (R)	Scale provides potential to mix uses, and potential to align with future facilities at North of Stafford.	Currently remote from some of the utility network. Site is encircled by gas pipelines, M6 and A51.	Potentially suitable.
D Meecebrook	Potential for new railway station is the key to the possibility of sustainable access. (G) Close proximity of employment at Cold Meece.	All development at this scale offers potential to design facilities within walking distance of properties. (G)	Yarnfield has limited services with potential for being supported. (A)	Scale provides potential to mix use, including integration of existing employment areas. (G)	Much of site is previously developed land, currently being used by MoD. Limited wastewater capacity (~3000 homes).	Potentially most suitable depending on provision of new railway station and M6 junction, and confirmation of site availability within plan period.
E Hixon	Potential for new railway station is aligned with proximity of Airfield Industrial Estate. (G)	All development at this scale offers potential to design facilities within walking distance of properties. (G)	Hixon has limited services with potential for being supported, although the other side of the industrial estate. (A)	Scale limits potential to mix uses, although the exiting industrial area facilitates integration. (A)	Former airfield with temporary uses.	Potentially most suitable depending on provision of suitable public transport solution/new railway station. Careful consideration required if Land East of Weston is allocated due to coalescence risk.
F Land East of Weston	Potential for new railway station. Relatively close to employment at Airfield Industrial Estate. (G)	All development at this scale offers potential to design facilities within walking distance of properties. (G)	Weston has limited services with potential for being supported. (A)	Scale limits potential to mix uses, and limited existing to integrate with. (R)	High flood risk to the east of the site.	Potentially suitable. Careful consideration required if Hixon is allocated due to coalescence risk.

Area for Further Research

- 5.9 In addition to the above, there would be added value in commissioning further evidence studies to help inform future plan making and the delivery of new settlements in Stafford Borough:
 - Updates to the Infrastructure Delivery Plan based on detailed cost plans prepared for emerging strategic allocations
 - Water Resources There is an identified water supply deficit from 2025 therefore the proposed growth could not be met without investment. To understand this further a Water Cycle Study should be prepared.
 - Waste Water Severn Trent Water identify its waste water treatment works do not have the capacity to meet the proposed growth. It is not unusual for upgrades to be required to support growth over a plan period and a Water Cycle Study would enable this to be better understood. This should also consider water quality and improvements to WFD watercourse statuses.
 - Further detailed updates to the Level 2 Strategic Flood Risk Assessment may also be required for new areas not previously assessed
 - Green Infrastructure Strategy (incorporating proposals for ecosystem services enhancements and environmental net gains)
 - Further consultation with the British Pipeline Agency and Health and Safety Executive (where required) regarding the gas pipelines found in close proximity to the indicative site boundaries
 - New settlement cost plan and viability study updates for preferred new settlement options
 - Visioning and design guide preparation (see Harlow and Gilston as a recent example⁴⁰)

⁴⁰ Accessed at: <u>https://www.eastherts.gov.uk/about-east-herts-0/harlow-gilston-garden-town</u>

Appendix A - Assessment Proformas

A: Land Between Gnosall and Haughton

Site Details

Site Details	Details
Торіс	
Site Reference / Name	Gnosall and Haughton (West); Gnosall and Haughton (Central); Gnosall and Haughton (East).
Program of the second of the s	
Site Address / Location	Gnosall and Haughton (West): Land to the east of Gnosall Gnosall and Haughton (Central): Land between Gnosall and Haughton, and north of the A518 Gnosall and Haughton (East): Land west of Haughton
Settlement(s) (adjacent/nearby)	Gnosall and Haughton
Gross Site Area (Hectares)	Gnosall and Haughton (West): 97 Gnosall and Haughton (Central): 150 Gnosall and Haughton (East): 49.1
Stafford Borough Council SHELAA 2018 Reference	Gnosall and Haughton (West): Site ID GNO09 Gnosall and Haughton (Central): Site ID HAU04 Gnosall and Haughton (East): Site ID HAU03

Stafford Borough Council SHELAA 2018	Site ID GNO09	
Conclusions	Available:	The site is available
	Suitable:	Part of the site is adjacent to a currently recognised Local Plan settlement.
	Achievable:	The site is achievable.
	Status:	Part of the site is potentially developable based on the compliance with Policy C5 of the Local Plan and Paragraph 71 of the NPPF.
	Site ID HAU04	
	Available:	The site is available
	Suitable:	No; the site is not within or adjacent to a currently recognised Local Plan settlement.
	Achievable:	The site is achievable.
	Status:	Not currently developable. A review of the adopted Sustainable Settlement Hierarchy would be required to remove the constraint.
	Site ID HAU03	
	Available:	The site is available
	Suitable:	No; the site is not within or adjacent to a currently recognised Local Plan settlement.
	Achievable:	The site is achievable.
	Status:	Not currently developable. A review of the adopted Sustainable Settlement Hierarchy would be required to remove the constraint.
Existing land use	Agricultural	
Residential Development Capacity (Proposed by Landowner or SHLAA/HELAA)	SHELAA Potential Yield: Gnosall and Haughton (V Gnosall and Haughton (C Gnosall and Haughton (E	Central): 2,706 East): 884
Site identification method / source (e.g. SHELAA, Call for Sites consultation etc.))	SHELAA 2018 and Cons constraints research	ultant sites mapping
Planning history (Live or previous applications)	None recent or relevant	
Neighbouring uses	Settlement of Gnosall an agricultural uses	d Haughton, and

Assessment of Suitability

Environmental Constraints

Indicator of Suitability	Assessment
Site is predominantly, or wholly, within or adjacent to the following statutory environmental designations: Yes / No / partly or adjacent • Ancient Woodland	Gnosall and Haughton (West) is 1.3km to Doley Common SSSI and 1.7km to Allimore Green Common SSSI, and within the SSSI Impact Risk Zone for both SSSI sites. Gnosall and Haughton (West) is 4.4km from the Aqualate Mere National Nature Reserve and Midland Meres & Mosses Phase 2 Ramsar Site.
 Area of Outstanding Natural Beauty (AONB) Biosphere Reserve Local Nature Reserve (LNR) National Nature Reserve (NNR) National Park Ramsar Site Site of Special Scientific Interest (SSSI)* Special Area of Conservation (SAC) 	Gnosall and Haughton (Central) is 2.1km to Doley Common SSSI and 1.7km to Allimore Green Common SSSI, and within the SSSI Impact Risk Zone for both SSSI sites. Gnosall and Haughton (Central) is 5.4km from the Aqualate Mere National Nature Reserve and Midland Meres & Mosses Phase 2 Ramsar Site.
• Special Protection Area (SPA) Does the site fall within a SSSI Impact Risk Zone and would the proposed use/development trigger the requirement to consult Natural England?	Gnosall and Haughton (West) is 650m to Allimore Green Common, and within the SSSI Impact Risk Zone for Allimore Green Common. Gnosall and Haughton (West) is 6.5km from the Aqualate Mere National Nature Reserve and Midland Meres & Mosses Phase 2 Ramsar Site.
Site is predominantly, or wholly, within or adjacent to the following non statutory environmental designations: Yes / No / partly or adjacent / Unknown Green Infrastructure Corridor Local Wildlife Site (LWS) Public Open Space Site of Importance for Nature Conservation (SINC) Nature Improvement Area Regionally Important Geological Site Other	Unknown
Site is predominantly, or wholly, within Flood Zones 2 or 3? Flood Zone 1: Low Risk Flood Zone 2: Medium Risk Flood Zone 3 (less or more vulnerable site use): Medium Risk Flood Zone 3 (highly vulnerable site use): High Risk	Defined as Flood Zone 1. However, there are small watercourses present on each of the sites, the risk from which will need to be assessed to determine constraints to the sites. Gnosall West; watercourses flow to join the Shropshire Union Canal Main Line; Gnosall and Haughton Central; tributaries of the Butterbank Brook; Gnosall and Haughton East; tributaries of the Butterbank Brook (north) and the Allimore Brook (south). Development will need to avoid the floodplains of these watercourses. The risk of flooding from these watercourses will need to be modelled to inform further site planning.

 Site is at risk of surface water flooding? Less than 15% of the site is affected by medium or high risk of surface water flooding – Low Risk >15% of the site is affected by medium or high risk of surface water flooding – Medium Risk 	The SFRA (2019) has identified Gnosall as being in the "top 10 rural areas at risk of surface water in the County"; development upstream of Gnosall will need to reduce flood risk downstream. Gnosall and Haughton (West) – Low to high surface water flood risk along the southern boundary of the site due to existing drains Gnosall and Haughton (Central) – Low to high surface water flood risk along a drain north of Woodhouse Lane Gnosall and Haughton (East) – Low to high surface water flood risk along the north-eastern boundary of the site
Is the land classified as the best and most versatile agricultural land (Grades 1, 2 or 3a)	Grade 3 good to moderate quality agricultural land.
 Site contains habitats with the potential to support priority species? Does the site contain local wildlife-rich habitats? Is the site part of: UK BAP Priority Habitat; a wider ecological network (including the hierarchy of international, national and locally designated sites of importance for biodiversity); wildlife corridors (and stepping stones that connect them); and/or an area identified by national and local partnerships for habitat management, enhancement, restoration or creation? Yes / No / Unknown 	Unknown. The sites have potential to support priority species. Gnosall and Haughton (Central) contains a pocket of Priority Habitat Inventory - Good quality semi-improved grassland (Non Priority) (England) east of Woodhouse Lane. Gnosall and Haughton (East) contains pockets of Priority Habitat Inventory - Deciduous Woodland (England).
Geology	 <u>Superficial:</u> Eastern and western area underlain by till South-western area potentially underlain by glaciofluvial sheet deposits and alluvium <u>Bedrock;</u> Mercia Mudstone (mudstone and halite stone) Helsby Sandstone Formation subcrops ~50m west of site
Made Ground	No Made Ground is mapped at the site, although it is expected based on current/former site use
Radon	Majority of site – less than 1% homes above the action level South-western area – maximum radon potential is 1 – 3%

Yes <u>Current mapping:</u> - Current farms and farmland <u>Historical mapping:</u> - Former Shropshire and Union Railway Lin across the site until ~1970 (currently a	
 Current farms and farmland <u>Historical mapping</u>: Former Shropshire and Union Railway Lin 	
Historical mapping: - Former Shropshire and Union Railway Lin	
- Former Shropshire and Union Railway Lin	
across the site until ~1970 (currently a	Э
footpath)	
 Former brick works near Woodhouse Farmer 	۱
(until 1902)	
Landfill;	
- Historical landfill - Long Lane Tip	
<i>Contamination</i> approximately 50m to the north-east of th	Э
site (first input 1956, last input 1960)	
The Environment Agency consultation has	
indicated that the Gnosall and Haughton site	nay
have smaller areas of contamination down to	-
individual farm or industrial unit scale.	
Development of these sites provides the	
opportunity however to address these	
contamination issues and provide sites that a	e
cleaner and healthier for the water environme	
Superficial;	
- Till – Secondary (Undifferentiated) aquife	
- Glaciofluvial sheet deposits and alluvium	
Secondary A aquifers	_
Bedrock:	
- Mercia Mudstone – Secondary B aquifer	- 4
- Helsby Sandstone Formation, ~50m west	OT
site – Principal aquirer	
Source Protection Zones (SPZ);	
- South eastern area of the site is within an	
SPZ 3, associated with an SPZ 1 ~100m	east
of the site	
- Adjacent to the south-west of the site is an	
SPZ 3	
South western extent of the site is within a	_
Minerals Minerals Safeguarding Area (MSA) for Sand a	Ind
Gravel	
Severn Trent have indicated that there is limit	
environmental capacity in the area (up to 3,00	0
properties) utilising maximum capacity at	
Haughton WwTW and Wood Eaton WwTW.	
The Doley Brook to the west of the site current	tly
has 'bad' WFD classification status. The pond	S
Water Quality and Waste and ordinary watercourses should be retained	
witin the site. Incorporating these into the surf	ace
water drainage for the site may support the	
improvement of the WFD status.	
The site is in close proximity to the Lower Rea	ıle
Bioenergy facility (Anaerobic Digester).	

Physical Constraints

Physical Constraints	Assessment
Indicator of Suitability	Assessment
Is the site: Flat or relatively flat Gently sloping or uneven Steeply sloping	Flat or relatively flat
Is there existing vehicle access to the site, or potential to create suitable access? Yes / No / Unknown	Yes
Is there existing pedestrian/cycle access to the site, or potential to create suitable access? Pedestrian? Yes / No / Unknown Cycle? Yes / No / Unknown	Yes – a combined footway/cycleway (The Way for the Millennium) runs through the site on the disused railway line
Are there any Public Rights of Way (PRoW) crossing the site? Yes / No / Unknown	The Way for the Millennium path (disused railway) crosses the southern part of the Gnosall and Haughton (West) site.
Transport commentary – including consideration of future upgrades/mitigation required etc.	The A518 runs east-west through the site and would provide the main vehicular access from the site to Stafford and Newport. It is a single carriageway road and not designed to carry large volumes of traffic, but there may be some capacity to accommodate development on the site. There is a half hourly bus service between Telford and Stafford that runs along the A518, and so the area is reasonably well served by public transport. However, parts of all three parcels of land lie beyond 400m of the bus route and therefore re-routing of the bus would be required to ensure travel by bus was convenient for all residents. Some facilities including a primary school, shopping and doctor's surgery are available in Gnosall. There is also a primary school in Houghton. These local facilities would help to reduce the need to travel. Stafford town centre is approximately 10km from the western end of the site and 6.5km from the eastern end. Journeys of up to 5km are generally considered to be suitable for cycling, and therefore the site is too far for cycling to be a feasible alternative for most residents.

Indicator of Suitability	Assessment
Are there veteran/ancient or other significant trees within or adjacent to the site? Are they owned by third parties? Significant trees? Yes, within / Yes, adjacent / No / Unknown Potentially veteran or ancient trees present? Yes, within / Yes, adjacent / No / Unknown Owned by third parties? Yes / No / Unknown	There are pockets of trees present on field boundaries
Is there any utilities infrastructure crossing the site i.e. power lines/pipe lines, or is the site in close proximity to hazardous installations? Yes / No / Unknown	Νο
Utilities requirement	Western Power Distribution report the following requirements: Approximately 40MVA required; 20km new 33kV circuit; Uprate 15km of 33kV circuit; New 132/33kV transformer and 132kV works; Costs approx. £10-12million.
Would development of the site result in a loss of social, amenity or community value? Yes / No / Unknown	Νο

Accessibility to Social/Green Infrastructure

Factor		Guidance		
Distances to community facilities and services should be measured using walking routes from the centre of each site to each facility. Additional facilities can be added to the list. The distances are based on the assumption that 400m is equal to approximately 5 minutes' walk. Distances taken from the centre of Gnosall and Haughton (Central) site				
What is the distance to the following facilities (measured from the edge of the site)	Distance (metres)		Comments	
Town / local centre / shop	400-1	00m 1200m 200m	>1200m >2km to Gnosall and Haughton local centres	
Bus /Tram Stop	400-	00m 800m 00m	>800m 1,000m to service to Telford Centre and Stafford Town Centre	
Train station	400-1	00m 1200m 200m	>1200m Stafford Train Station	
Primary School	400-1	00m 1200m 200m	>1200m >2,500m to Haughton St Giles CEC Primary Academy and Gnosall St. Lawrence Church of England (C) Primary School	
Secondary School	1600-	600m 3900m 900m	«Distance_to_secondary_school_m»>3900m Stafford	

Factor	Guidance	
Open Space / recreation facilities	<400m 400-800m >800m	>800m
Cycle Route	<400m 400-800m >800m	<400m Way for the Millennium

Landscape and Visual Constraints

Indicator of Suitability	Assessment
Is the site low, <mark>medium</mark> or <mark>high</mark> sensitivity in terms of landscape?	With reference to the Planning for Landscape Change SPD (2001), Gnosall and Haughton are covered by the ancient clay farmlands type (Local Character Type) and characterised by " <i>an irregular</i> <i>pattern of hedged fields with ancient hedgerows and oaks, by subtle</i> <i>evidence of former heathland, and by a dispersed settlement pattern</i> <i>with small rural towns.</i> " The hedgerows, rivers and streams are noted as features of "very high" value.
Low sensitivity: the site has few or no valued features, and/or valued features that are less susceptible to development and can accommodate change. Medium sensitivity: the site has many valued features, and/or valued features that are susceptible to development but could potentially accommodate some change with	Landscape Value The area is not covered by any statutory landscape designations. The condition of fields and woodland blocks appears good. The scenic quality is fair, consisting of common features of fields, settlements and road networks such that it is representative of the LCT. There are no features which are rare in landscape terms. The recreational value is via The Way of the Millennium and public rights of way. There are historical features in the eastern part of the area. There is no association in relation to the natural beauty of the area. The value is assessed as medium.
some change with appropriate mitigation. High sensitivity: the site has highly valued features, and/or valued features that are highly susceptible to development. The site can accommodate minimal change.	Landscape Susceptibility The area consists of sloping landform, rising from Gnosall and across the A518, to a ridgeline, before falling across the northern part of the area. Land to the south of Haughton is generally flat. Localised woodland groups and individual trees, but overall an open field pattern. Susceptibility is medium.
	Landscape Sensitivity The combination of the medium value and medium susceptibility results in a medium sensitivity.

Is the site low, medium or high sensitivity in terms of visual amenity? Low sensitivity: the site is visually enclosed and has low intervisibility with the surrounding landscape, and/or it would not adversely impact any identified views. Medium sensitivity: the site is somewhat enclosed and has some intervisibility with the surrounding landscape, and/or it may adversely impact any identified views. High sensitivity: the site is visually open and has high intervisibility with the surrounding landscape, and/or it would adversely impact any recognised views.	<u>Visual Value</u> The area is not part of a landscape which is recognised for its views in relation to planning designations or heritage assets, nor representations in art or literature; however, views of Gnosall church will have local value. Overall the value is low. <u>Visual Susceptibility</u> The landform results in varied visibility, with land to the east of Gnosall more visible locally in comparison to the land to the west of Haughton. Overall the susceptibility is low. <u>Visual Sensitivity</u> The combination of the low value and low susceptibility results in a low sensitivity.
Coalescence and/or ribbon development/sprawl risk	Potential risk of coalescence of Gnosall and Haughton and ribbon development adjacent to the A518. Development west of Haughton risks sprawl.
Defensible boundaries and level of potential containment	The Way for the Millennium and A518 provide defensible boundaries.

Heritage Constraints

Indicator of Suitability	Assessment
	Development of the site will result in merging the villages of Gnosall and Haughton. It might be considered appropriate to retain some undeveloped land at the edges of the site so as to retain the separation of the settlements. Further assessment is considered necessary in order to fully understand the history of the villages and their relationship with the surrounding countryside, including the site.
Would the development of the site cause harm to a designated heritage asset or its setting?	There is one designated asset that falls within the boundary of the site; Woodhouse Farmhouse (Grade II, NHLE 1259864). Heysham Cottage (Grade II, NHLE 1242814) is located just outside the boundary of the site, to the east. Development of the site may have an adverse impact on these assets as their rural setting will change. Appropriate design could mitigate some of that harm.
Some impact, and/or mitigation possible	There are a number of designated heritage assets around the site, most of them located within the settlements of Gnosall, Gnosall Heath and Haughton. Gnosall Conservation Area lies just north-west of the site while the Shropshire Union Canal Conservation Area runs north to south, approximately 1km west of the site.
	Gnosall Conservation Area includes within its boundary four listed buildings, including the 12th century Grade I listed Church of St. Lawrence (NHLE 1242645), approx. 200m north-west of the site. There is some screening between the conservation area and the site with key views concentrated within the conservation area. It is expected that there will be limited or no impact to the conservation

	area however further assessment of this asset will need to be undertaken if the site is going to be developed.
	The setting of the Shropshire Union Canal Conservation Area and associated listed buildings will need to be considered in the preparation of the design for the development of the site. While it is not expected that there will be a significant impact, views towards the site will need to be considered.
	The Church of Editha (Grade II*, NHLE 1319807) in the village of Church Eaton, approx. 2.5 km to the south of the site, dates to the 12th century. The spire of the church is visible in views from the site and in the surrounding landscape, as it was built in order to be seen from long distances. Some impact on this asset is expected that can possibly be mitigated to some extent by appropriate design.
	Limited or no impact is expected on the listed buildings in the village of Haughton, due to their setting within the existing settlement and screening from the site.
	A number of listed buildings have a rural setting which will be changed by development, including the Walnut Tree Farmhouse (Grade II, NHLE 1242646) ; Lower Reule Farmhouse (Grade II, NHLE 1242779) and Booden Farmhouse (Grade II, NHLE 1031584) , to the south of the site as well as the Thatched cottage (Grade II, NHLE 1258549) and Vicarage Farmhouse (Grade II, NHLE 1258041) . This impact is not expected to be significant however, they should be considered during the design and assessment process.
	There are a number of scheduled monuments more than 2km from the site. These include the Alley's Lane moated site, located approx. 2.3km south-east of the site. The distance of the monument to the site and development of the landscape in between, including a sewage works at Reulemill Pools and a trainline running south of Gnosall means the monument will unlikely be significantly impacted.
	A scheduled Berry Ring Hillfort is located approx. 2.7m north-east of the site. The distance of the monument to the site and presence of Haughton village in between means the monument is unlikely to be significantly impacted.
Would the development of the site cause harm to a non- designated heritage asset or its setting? Directly impact and/or mitigation not possible	Earthwork remains of the medieval Beverley Hall Moated Site (HER MST843) are recorded within the north-eastern boundary of the Gnosall & Haughton (West) site, just south of Gnosall. A further possible medieval moated farm, Upper Reule Farm moated site (HER MST 846) is recorded approx. 330m south-east of the Gnosall & Haughton (West) site.
	The medieval Moated Site, Woodhouse Farm (HER MST805) with surviving earthworks and 16th century Woodhouse Farmhouse (HER MST7542) replacing the earlier medieval farmstead at Woodhouse Farm (HER MST14006) are recorded within the southern edge of the Gnosall & Haughton (Central) site.
	The Gnosall & Haughton (East) site is primarily located within the boundary of the 14th century Haughton Park (MST 804) deer park established by Thomas de Haughton c. 1340-1343. Areas of medieval Ridge and Furrow (HER MST5652; MST19004) are recorded within the site boundary and immediately abutting the east and south-east edges (HER MST5652; MST19005)

Historic England consultation	Development has the potential to affect the significance, including the setting of multiple heritage assets directly or indirectly, including listed buildings, scheduled monuments, Gnosall Conservation Area, Canal Conservation Area, undesignated assets etc.
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Planning policy constraints

Indicator of Suitability	Assessment
<i>Is the site in the Green Belt?</i> Yes / No / Unknown	No
Is the site allocated for a particular use (e.g. housing / employment) or designated as open space in the adopted and / or emerging Local Plan?	No
Yes / No / Unknown	
Are there any other relevant planning policies relating to the site?	The sites are within the Cannock Chase SAC 15km buffer; Gnosall and Haughton (East) is within a designated Staffordshire Historic Environment Record area
Is the site: Greenfield A mix of greenfield and previously developed land Previously developed land?	Greenfield
Is the site within, adjacent to or outside the existing built up area or settlement boundary (if one exists)? Adjacent to and connected to the existing built up area? Outside and not connected to the existing built up area?	Gnosall and Haughton (West): Adjacent to and connected to the existing built up area and settlement boundary of Gnosall Gnosall and Haughton (Central): Outside and not connected to the existing built up area Gnosall and Haughton (East): Outside and not connected to the existing built up area of Haughton
Regeneration potential- indices of Multiple Deprivation score	 The majority of the site falls in the Stafford 015A Local Super Output Area (LSOA), whist around a third lies in the Stafford 015B LSOA. The 2019 Index of Multiple of Deprivation (IMD) ranks the site's LSOAs as follows (1st decile is most deprived): The Stafford 015A LSOA is in the 8th deprivation decile, meaning it is amongst the 30% least deprived parts of the country; and The Stafford 015B LSOA is in the 8th deprivation decile, meaning it is amongst the 30% least deprived parts of the country. These scores show that the area does not tend to suffer from deprivation therefore, there is a fairly low potential for regeneration as new developments would be unlikely to affect local deprivation rankings.

Indicator of Suitability	Assessment
Regeneration potential- Indices of Multiple Deprivation (surroundings)	 The surrounding area of the site contains the Stafford 012E, Stafford 015D and Stafford 015E LSOAs. The 2019 IMD ranks these surrounding LSOAs to the Site as follows: The Stafford 012E LSOA is in the 8th deprivation decile, meaning it is amongst the 30% least deprived parts of the country; The Stafford 015D LSOA is in the 6th deprivation decile, meaning it is amongst the 50% least deprived parts of the country; and The Stafford 015E LSOA is in the 10th deprivation decile, meaning it is amongst the 50% least deprived parts of the country; and The Stafford 015E LSOA is in the 10th deprivation decile, meaning it is amongst the 10% least deprived parts of the country. These scores show that the surrounding areas do not suffer from high levels of deprivation however, the LSOA to the north-west of the site has medium potential for regeneration.
Economic development potential- assessment conclusion	There are no major business assets in this area, and the business activity which is based here tends to be focused in lower-value sectors. Smaller construction companies do operate in the area, however, location away from the M6 and the proposed HS2 line offers limited links to growth opportunities. No future employment sites or allocations have been identified. Residents tend to out-commute to access employment opportunities, relying on the road network due to the lack of rail services. Attracting businesses to the area may pose a challenge due to the limited scale of employment activity (existing or planned) and transport constraints. The implication is that future residents may need to commute out to access employment opportunities, placing more pressure on the road network via the A518.

Conclusions

Conclusions	Assessment
The site is potentially suitable The site is not suitable	Gnosall and Haughton (West): Potentially suitable Gnosall and Haughton (Central): Potentially suitable Gnosall and Haughton (East): Not suitable Gnosall and Haughton (West) is suitable for development, with a reduced developable area north of the former railway and the Way for the Millennium (path). An approximate developable area of 95.1 ha can potentially yield 1,700 homes. There is scope to further extend the site to the east of Gnosall. Gnosall and Haughton (East) is not directly adjacent to the built up area of Haughton and would increase sprawl to the west that is incongruous to the urban form of the village. The site is not currently suitable.

Conclusions	Assessment
Summary of justification for rating	 Development of the whole site is not suitable as would result in ribbon development along the A518 and coalescence of Gnosall and Haughton, whereby retention of some undeveloped land is important to maintain the separation of the settlements. Development west of Haughton risks sprawl; The sites are in close proximity to the Doley Common SSSI and Allimore Green Common SSSI; The sites are within Flood Zone 1, however there are small watercourses present on each of the sites. There is low to high surface water flood risk from existing drains; The sites are Grade 3 good to moderate quality agricultural land; The disused railway and Way for the Millennium cross the southwestern part of the site, acting as a defensible boundary to the southwest; The A518 runs east-west through the site and would provide the main vehicular access from the site to Stafford and Newport. It is a single carriageway road and not designed to carry large volumes of traffic, but there may be some capacity to accommodate development on the site; Some facilities including a primary school, shopping and doctor's surgery are available in Gnosall. The area where the site is located does not contain major businesses that are attracted to the area do not tend to be in high-tech sectors with the agricultural sector contributing the greatest proportion of workers. Workers do not tend to live close to their place of work due to its rural location; The Iandscape and its susceptibility to development is assessed as medium sensitivity. The visual value of the landscape and its susceptibility to development as the potential to affect the significance, including the setting of multiple heritage assets directly or indirectly, including listed buridage, scheduled monuments, Gnosall Conservation Area, Canal Conservation Area, undesignated assets etc.; Severn Trent have the potential to affect the significance, including the setting of multiple h

B: Seighford

Site Details

Site Details	Details	
Торіс		
Site Reference / Name	Seighford	
Grige Wetcome Hender		
Site Address / Location	Land surrounding Ladlordfiel Seighford, ST18 9QL, Staffo	
Settlement(s) (adjacent/nearby)	Coton Clanford, Ranton, Elle Little Bridgeford, Ranton, and	enhall, Great Bridgeford,
Gross Site Area (Hectares)	455.93 Ha	
SHLAA/SHELAA Reference (if applicable)	Site ID SEI02 is a 6.5 Ha part	rt of the middle of the site
SHLAA/SHELAA Conclusions (if	Site ID SEI02 Identified for	industrial use
applicable)	Available: The site will next 5-10 ye	become available in the ars.
		site is adjacent to a Industrial Estate
	Achievable: The site is a	chievable
	the adopted	v developable. A review of Local Plan would be emove the constraint.
Existing land use	Agricultural, airstrip and indu	ıstrial
Land use being considered, if known (e.g. housing, community use, commercial, mixed use)	Housing and town centre use	es
Residential Development Capacity (Proposed by Landowner or SHLAA/HELAA)		
Commercial Development Capacity (Employment Floorspace estimates Hectares or sq. m)	Unknown	
Site identification method / source (e.g. SHELAA, Call for Sites consultation etc.))	Consultant constraints mapp	ing research
Planning history (Live or previous applications)	 16/24443/FUL – Permission granted for erection of steel framed building 09/12351/FUL – Permission granted to convert barn to one dwelling 08/10086/FUL – Permission granted for proposed drive experience centre involving construction of hub reception building, light aircraft/vehicle storage and maintenance unit 	
Neighbouring uses	Agricultural with village settle	ements

6. Assessment of Suitability Environmental Constraints

Indicator of Suitability	Assessment
 Site is predominantly, or wholly, within or adjacent to the following statutory environmental designations: Yes / No / partly or adjacent Ancient Woodland Area of Outstanding Natural Beauty (AONB) Biosphere Reserve Local Nature Reserve (LNR) National Nature Reserve (NNR) National Park Ramsar Site Site of Special Scientific Interest (SSSI)* Special Area of Conservation (SAC) Special Protection Area (SPA) Does the site fall within a SSSI Impact Risk Zone and would the proposed use/development trigger the requirement to consult Natural England? 	There are pockets of ancient woodland on the southern and western edge of the site. The site is within the impact risk zone of Doxey and Tillington Marshes SSSI in Stafford. Seighford Moor local wildlife site is in close proximity.
Site is predominantly, or wholly, within or adjacent to the following non statutory environmental designations: Yes / No / partly or adjacent / Unknown Green Infrastructure Corridor Local Wildlife Site (LWS) Public Open Space Site of Importance for Nature Conservation (SINC) Nature Improvement Area Regionally Important Geological Site Other	Unknown
Site is predominantly, or wholly, within Flood Zones 2 or 3? Flood Zone 1: Low Risk Flood Zone 2: Medium Risk Flood Zone 3 (less or more vulnerable site use): Medium Risk Flood Zone 3 (highly vulnerable site use): High Risk	Site is partially in Flood Zone 2 and 3 The northern part of the of site and parts of the south / south eastern part of the are located in Flood Zones 2 and 3 associated with the Gamesley Brook and Hextall Brook. There are several small streams and watercourses draining to both watercourses within the site boundary. The main access to the site on the B4505 is at risk of fluvial flooding. Development will need to avoid these areas and the risk of flooding from these watercourses will need to be modelled to inform further site planning.
 Site is at risk of surface water flooding? Less than 15% of the site is affected by medium or high risk of surface water flooding – Low Risk >15% of the site is affected by medium or high risk of surface water flooding – Medium Risk 	Low Risk
Is the land classified as the best and most versatile agricultural land (Grades 1, 2 or 3a) Yes / No / Unknown	The northern tip of the site is Grade 2 very good quality agricultural land; The remainder of the site is largely Grade 3 good to moderate quality agricultural land.

Indicator of Suitability	Assessment
 Site contains habitats with the potential to support priority species? Does the site contain local wildlife-rich habitats? Is the site part of: UK BAP Priority Habitat; a wider ecological network (including the hierarchy of international, national and locally designated sites of importance for biodiversity); wildlife corridors (and stepping stones that connect them); and/or an area identified by national and local partnerships for habitat management, enhancement, restoration or creation? Yes / No / Unknown 	The site contains pockets of mixed woodland, with part of the southern edge of the site being good quality semi-improved grassland Priority Habitat.
Geology	Superficials: The following are present in some areas across the site; - Glaciofluvial sheet deposits in the central and eastern areas of the site - Alluvium in the north of the site Bedrock; - Mercia Mudstone (mudstone and halite stone) across the western and eastern areas of the site - Stafford Halite Member across the central area of the site
Made Ground	No Made Ground is mapped at the site, although it is expected based on current/ former site use
Radon	Less than 1% homes above the action level

Indicator of Suitability	Assessment
Contamination	Current mapping;
	- Current farm and farmland
	- Current Ladfordfields Industrial Estate,
	including manufacturers, vehicle repair
	garage, timber merchants and truck dealers
	 Possibly former airstrip
	Historical mapping;
	 Former farms and farmland
	 Former brick field and brick works
	 Former marl pits (potential for infilled land)
	- Former sewage works
	Landfills;
	Small landfills including;
	 Historical landfill – Ladford Pool Farm (first insut 1000, last insut 1000, in art (in dustrial)
	input 1992, last input 1993, inert/ industrial
	waste) - Historical landfill – Broad Heath Farm (first
	input 1983, last input 1985, inert/ commercial/
	industrial waste)
	The Environment Agency indicates that the site
	may have smaller areas of contamination down to
	individual farm or industrial unit scale.
	Development of the site however provides the
	opportunity to address these contamination
	issues and provide sites that are cleaner and
	healthier for the water environment.
Aquifer status	Superficials;
	 Glaciofluvial sheet deposits and alluvium –
	Secondary A aquifers
	Bedrock; Mercia Mudstone and Stafford Halite Member
	 Mercia Mudstolle and Stanord Halite Meriber Secondary B aquifers
	Source Protection Zones (SPZ):
	- None within 1km from the site
Minerals	The majority of the site is within an MSA for Sand
	and Gravel
Water Quality and Waste	The Seighford site has 'limited or no headroom
	but relaxed permit limits to accommodate
	additional growth' or 'tight limits but headroom
	available'.
	Severn Trent have indicated that there is highly
	limited capacity in the area (up to 500 properties)
	utilising Ladfordfields WwTW, which would not
	meet proposed growth of 5,000 homes. Any
	significant development would have to be transferred to Brancote WwTW.

7. Physical Constraints

Indicator of Suitability	Assessment
Is the site: Flat or relatively flat Gently sloping or uneven Steeply sloping	Flat or relatively flat
Is there existing vehicle access to the site, or potential to create suitable access? Yes / No / Unknown	Yes There is potential to access the site from the B5045.
Is there existing pedestrian/cycle access to the site, or potential to create suitable access? Pedestrian?	Yes – although there are no footways on the B5405 there is sufficient verge width to provide them.
Yes / No / Unknown <i>Cycle?</i> Yes / No / Unknown	No – there are no cycle routes within the vicinity of the site
Are there any Public Rights of Way (PRoW) crossing the site? Yes / No / Unknown	Yes Public Rights of Way: Ellenhall 0.1366; Public Rights of Way: Ellenhall 5; Public Rights of Way: Seighford 0.1593; Public Rights of Way: Ranton 3; Public Rights of Way: Ranton 1
Transport commentary – including consideration of future upgrades/mitigation required etc.	The site is located on either side of the B5405 between Great Bridgeford and Woodseaves. This is a rural road not designed for high traffic volumes but does offer connections for industrial traffic from the Ladlordfields Industrial Park. Otherwise the site is accessed by single carriageway roads connecting hamlets and farms. Access is in summary poor. Development of the site would require significant improvements to the A5013 into Stafford, although this is constrained by residential developments at Great Bridgeford and to the west of Junction 14 of the M6. Alternatively, the site could be served by a new link to Junction 14, although this would require land outside the site boundary. There is a very limited bus service that runs between Hanley and Stafford along the B5405 through the site. Improvements to bus services including increased frequency and re-routing through the site would be required to create a sustainable development. There are no facilities (schools, shopping, entertainment, GP/dentist surgery, etc.) within walking distance of the site. These are available in Stafford town centre, approximately 8km from the centre of the site. New facilities would have to be provided within the development in order to reduce the need to travel. The Highways England consultation response considers the Seighford site to have traffic impacts on the M6 strategic road network.

Indicator of Suitability	Assessment
Are there veteran/ancient or other significant trees within or adjacent to the site? Are they owned by third parties? Significant trees? Yes, within / Yes, adjacent / No / Unknown Potentially veteran or ancient trees present? Yes, within / Yes, adjacent / No / Unknown Owned by third parties? Yes / No / Unknown	There are pockets of woodland (mixed conifer and broadleaved) within the site, with sporadic mature and young trees along field boundaries.
Is there any utilities infrastructure crossing the site i.e. power lines/pipe lines, or is the site in close proximity to hazardous installations? Yes / No / Unknown	No
Utilities requirement	Western Power Distribution report the following requirements: Approximately 50MVA required; 2 x 15km new 33kV circuit; Uprate 15km of 33kV circuit; New 132/33kV transformer and 132kV works; Costs approx. £17- 20million
Would development of the site result in a loss of social, amenity or community value? Yes / No / Unknown	No

8. Accessibility to Social/Green Infrastructure

Factor		Guidance
Distances to community facilities and services should be measured using walking routes from the centre of each site to each facility. Additional facilities can be added to the list. The distances are based on the assumption that 400m is equal to approximately 5 minutes' walk. This can be measured using Google Maps: https://www.google.com/maps What is the distance to the following facilities (measuredDistance (metres)Comments Distances from the Seighford		
from the edge of the site) Town / local centre / shop	400-1	Airstrip 00m >1200m 200m >3,000m to Seighford 00m
Bus /Tram Stop	400-	00m400-800m800mIrregular service to Stafford00mTown Centre
Train station	400-1	00m 200m 00m>1200m Approx. 7,000m to Stafford
Primary School	400-1	>1200m00m>3,000m to Cooper Perry200mPrimary School and All Saints00mCE (C) Primary School & Nursery, Ranton.

Stafford Borough Strategic Development Site Options

Factor	Guidance	
Secondary School	<1600m 1600-3900m > 3 900m	>3900m Stafford
Open Space / recreation facilities	<400m 400-800m >800m	>800m
Cycle Route	<400m 400-800m >800m	>800m The Way for the Millennium

9. Landscape and Visual Constraints

Indicator of Suitability	Assessment
	With reference to the Planning for Landscape Change SPD (2001), Seighford is covered by the ancient clay farmlands type and characterised by "an irregular pattern of hedged fields with ancient hedgerows and oaks, by subtle evidence of former heathland, and by a dispersed settlement pattern with small rural towns." The hedgerows, rivers and streams are noted as features of "very high" value.
Is the site low, medium or high sensitivity in terms of landscape? Low sensitivity: the site has few or no valued features, and/or valued features that are less susceptible to development and can accommodate change. Medium sensitivity: the site has many valued features, and/or valued features that are susceptible to development but could potentially accommodate some change with appropriate mitigation. High sensitivity: the site has highly valued features, and/or valued features that are highly susceptible to development. The site	 Landscape Value Seighford is not covered by any statutory landscape designations. The condition of the landscape is generally good with intact woodland, stream corridors and hedgerows such that is considered representative of the of the published landscape character area. The scenic quality is varied between areas of mature woodland, fields and the Gamesley Brook, in contrast to the industrial estate at Ladford Trading Park. There are no landscape features which are considered rare, with the gliding club airstrip being a modified landscape to enable this land use. Recreational value is limited in terms of a low number of Public Rights of Way but the gliding club airstrip is a specific recreational activity and therefore likely to be valued. There is an increased perception of tranquillity away from the B5405 (Newport Road) and trading park particularly along the watercourses. The area is understood not to have any strong association with events that contribute to the perception of natural beauty in the area. On balance the value is medium. Susceptibility The mature woodland blocks and river corridors are far less able to accommodate change compared to the open character of the intensive agricultural fields, trading park and the modified land use at the gliding
can accommodate minimal change.	club. The landform across the area is very gently undulating between 95m AOD and 100m AOD and therefore more able to accommodate change in comparison to steeply sloping sites. On balance the susceptibility is medium.
	Sensitivity The combination of the medium value and low susceptibility results in a medium sensitivity.

Is the site low, medium or high sensitivity in terms of visual amenity?	
Low sensitivity: the site is visually enclosed and has low intervisibility with the surrounding landscape, and/or it would not adversely impact any identified views.	<u>Value</u> The area is not part of a landscape which is recognised for its views in relation to planning designations or heritage assets, nor representations in art or literature; however views of churches and the rural landscape will have a local value. Overall the value is low.
Medium sensitivity: the site is somewhat enclosed and has some intervisibility with the surrounding landscape, and/or it may adversely impact any identified	Susceptibility The low lying position of the Site and areas of mature vegetation aid in reducing the visibility of the area and it is enclosed in relation to the wider surrounding landscape, albeit with views from the local road networks. The susceptibility is low.
views. High sensitivity: the site is visually open and has high intervisibility with the surrounding landscape, and/or it would adversely impact any recognised views.	Sensitivity The combination of the low value and low susceptibility results in a low sensitivity.
Coalescence and/or ribbon development/sprawl risk	The settlement pattern is dispersed across the area, with Ellenhall the closest settlement to the west of the area, for which there is the potential for coalescence. Intervening watercourses, woodland and fields provide separation between the area and Little Bridgeford and Seighford to avoid coalescence.
Defensible boundaries and level of potential containment	The Clanford Brook and Gamesley Brook provide defensible boundaries along the southern and northern edges of the area respectively. The existing road network also provide defined boundaries.

10. Heritage Constraints

Indicator of Suitability	Assessment
Would the development of the site cause harm to a designated heritage asset or its setting?	There are two designated heritage assets that fall within the boundary of the site. These include the scheduled Hextall moated site and fishponds (SM, NHLE 1007618) and the milepost (Grade II, NHLE 1258135) on Stafford Newport Road. Development of the site has the potential to impact on these assets. Both assets are statutorily protected and need to be retained. Their setting should be taken into consideration in any future development plans.
Some impact, and/or mitigation possible	A number of listed buildings and scheduled monuments are located beyond the boundary of the site. It is possible that the setting of some of these assets will experience some change if the site is developed. The setting of these assets is likely to be adversely affected resulting in some impact on their significance. This impact can be mitigated to some extent through appropriate design.
Would the development of the site cause harm	The remains of a medieval moated site, Onecote Farm (HER MST808), the north and eastern arms of which are still partially wet, abut the northern

to a non-designated heritage asset or its	edge of the site near Gamesley Brook.	
setting? Some impact, and/or mitigation possible	Medieval and later ridge and furrow has been identified within the southern boundary of the site (HER MST18784; HER18785) between The Wicket farm and the scheduled moated site Hextall Old Farm (HER MST1792), as well as to the west of Williams' Wood (HER MST18999).	
	The scheduled Ranton Hall Farm moated site (HER MST1791) stands approx. 850m south-west of the site. The remains of the scheduled Augustinian monastery Ranton abbey are located approx. 1.5km south- west of the site.	
	An Elizabeth I silver shilling findspot (HER MST15462) is recorded within the north-western edge of the site, approx. 200m north-west of Broadheath House.	
	A dam or fishpond extant in the 18th century (HER MST3450) is recorded at Gamesley Brook, in the north of the site, but had been infilled by the late 19th century.	
	The post-medieval The Wicket Farm (HER MST21862) is an extant isolated farmstead within the western edge of the site, approx. 75m south of the B5405.	
	The interior of the site is primarily characterised by the Seighford Airfield, (HER MST4326) and associated structures including airstrips, established in 1942 as a satellite facility to RAF Hixon.	
	Available HER data indicates low potential for undiscovered archaeological activity at the site, although moated sites and areas of ridge and furrow in and around the site indicate medieval use of the site. It is possible medieval or earlier archaeological deposits survive within the site interior, despite significant development as an airfield and subsequent return to agricultural use. While the moated Sites do not appear to be directly related, except in the broad sense of being similar archaeological features of a medieval agricultural landscape, removal from an agricultural landscape (even a modern one) would amount to loss of context. This will not necessarily preclude development, but design parameters may be restricted in order to minimise/mitigate this impact (see below).	
	Visibility of the site from the scheduled Ranton Abbey is likely limited by woodland and other vegetative screening.	
	The airfield itself is also of historic significance as a non-designated asset relating to development of the UK's military infrastructure during the Second World War.	
	At this stage, there does not appear to be any indication that archaeological assets at the Site would preclude any specific development. However, there is a need to establish design parameters following the production of a more detailed heritage appraisal. Parameters should identify areas within the site boundaries where development should be restricted, considering the presence of recorded archaeological assets with the site boundaries. Any impact on assets should be justified within design parameters according to national and local planning policy; particularly the National Planning Policy Framework 2019, Section 16.	
	Where development is proposed, it is likely that pre-determination archaeological evaluation works (likely comprising geophysical survey and/or trial trench evaluation). will be required. Further excavation,	

	mitigation and conservation works may be required pending the results of evaluation works if previously unknown assets are discovered. The requirement for these works will be informed by ongoing consultation with the local planning archaeologist.
Historic England consultation	This broad location would have the potential to affect the significance, including the setting of multiple heritage assets – directly or indirectly.

Planning policy constraints

Indicator of Suitability	Assessment
Is the site in the Green Belt? Yes / No / Unknown	No
Is the site allocated for a particular use (e.g. housing / employment) or designated as open space in the adopted and / or emerging Local Plan? Yes / No / Unknown	Policy E4 Raleigh Hall & Ladfordfields Recognised Industrial Estates. Land north of Ladfordfields Industrial Estate site is designated as a Rural Employment Location in the adopted Local Plan, to deliver a total of 6 hectares of new employment land.
Are there any other relevant planning policies relating to the site?	No
Is the site: Greenfield A mix of greenfield and previously developed land Previously developed land?	A mix of greenfield and previously developed land
Is the site within, adjacent to or outside the existing built up area? Within the existing built up area (infill)? Adjacent to and connected to the existing built up area? Outside and not connected to the existing built up area?	Outside and not connected to the existing built up area
Is the site within, adjacent to or outside the existing settlement boundary (if one exists)? Within the existing settlement boundary? Adjacent to and connected to the existing settlement boundary? Outside and not connected to the existing settlement boundary?	Outside and not connected to the existing settlement boundary
Would development of the site result in neighbouring settlements merging into one another? Yes / No / Unknown	Yes

Economy

Indicators of Viability	Assessment
Regeneration potential- indices of Multiple Deprivation score	 The vast majority of the site falls in the Stafford 012E LSOA, with a small portion lying in the Stafford 005D LSOA. The 2019 Index of Multiple of Deprivation (IMD) ranks the site's LSOAs as follows (1st decile is most deprived): The Stafford 012E LSOA is in the 8th deprivation decile, meaning it is amongst the 30% least deprived parts of the country; and The Stafford 005D LSOA is in the 10th deprivation decile, meaning it is amongst the 10% least deprived parts of the country. These deprivation scores highlight that there is low potential for regeneration as the area does not suffer from much deprivation.
Regeneration potential- Indices of Multiple Deprivation (surroundings)	 The surrounding area of the site contains the Stafford 005D, Stafford 006C, Stafford 007E, Stafford 015A and Stafford 015D LSOAs. The 2019 IMD ranks these surrounding LSOAs to the Site as follows: The Stafford 005D LSOA is in the 10th deprivation decile, meaning it is amongst the 10% least deprived parts of the country; The Stafford 006C LSOA is in the 8th deprivation decile, meaning it is amongst the 30% least deprived parts of the country; The Stafford 007E LSOA is in the 3th deprivation decile, meaning it is amongst the 30% least deprived parts of the country; The Stafford 007E LSOA is in the 3th deprivation decile, meaning it is amongst the 30% most deprived parts of the country; The Stafford 015A LSOA is in the 8th deprivation decile, meaning it is amongst the 30% least deprived parts of the country; The Stafford 015D LSOA is in the 8th deprivation decile, meaning it is amongst the 30% least deprived parts of the country. The Stafford 015D LSOA is in the 6th deprivation decile, meaning it is amongst the 50% least deprived parts of the country. These scores show that the surrounding areas vary in their levels of deprivation. Some areas do not tend to suffer deprivation at all, whilst the easterly areas towards Stafford have high regeneration potential and areas to the west have medium regeneration potential.

Indicators of Viability	Assessment
Economic development potential- assessment conclusion	The surrounding area has a strong concentration of employment, containing a number of businesses (including international companies) in high-value sectors. The nearby Ladfordfields Industrial Park accommodates manufacturing companies including multiple that specialise in the automotive sector. The site's location outside of Stafford town centre and close to the M6 Junction 14 is a combination which presents opportunities for future employment sites due to close proximity to the Strategic Road Network. Future employment development in this location can help to enhance the existing cluster of activity to facilitate growth of a key sector. The workers in this location show high levels of occupation and strong qualifications, representative of a skilled workforce required to support high priority sectors. Additional housing can help to increase the supply of skilled workers needed to support the growth in manufacturing and related businesses, in turn driving productivity growth.

Conclusions

Conclusions	Assessment
The site is potentially suitable	Potentially suitable
The site is not suitable	

Conclusions	Assessment			
Summary of justification for rating	 The site is largely agricultural land with an airstrip and a strategic employment location (Ladfordfields Industrial Park) either side of the B5405; There are pockets of ancient woodland on the southern and western edge of the site, and pockets of woodland priority habitat in the central part of the site; The site is within the impact risk zone of Doxey and Tillington Marshes SSSI in Stafford; The northern part of the of site and parts of the south / south eastern part of the are located in Flood Zones 2 and 3 associated with the Gamesley Brook and Hextall Brook; The site is largely Grade 3 good to moderate quality agricultural land with public rights of way crossing the site; The B5405 is a rural road not designed for high traffic volumes but does offer connections for industrial traffic from the Ladlordfields Industrial Park. Development of the site would require a new road offsite to Stafford and the M6; The site has a medium sensitivity to development in terms of landscape value and susceptibility to accommodate change in the open character of agricultural fields and the gliding airstrip. The low lying position of the site and areas of mature vegetation aid in reducing the visibility of the area and it is enclosed in relation to the wider surrounding landscape; Intervening watercourses, woodland and fields provide separation between the area and Little Bridgeford and Seighford to avoid coalescence; The Clanford Brook and Gamesley Brook provide defensible boundaries; There are two designated heritage assets within the site, the Hextall moated scheduled monument and fishponds and the Gatel II listed milepost on Stafford Newport Road. Impact on the setting of these assets can potentially be mitigated through appropriate design; The clanford Brook and Gamesley Brook provide defined boundaries; The area two thesi to located currently contains a number of businesses with a good concentration of employment i			

C: Land to the North of Redhill

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Торіс	Details
Site Reference / Name	Land to the North of Redhill
Provide r la construction de la construcción de la	
Site Address / Location	Land to the North of Redhill
Settlement(s) (adjacent/nearby)	Stafford and Stone are located to the south and north of the site along the A34. Two smaller settlements of Great Bridgeford and Hopton Heath are located to the west and east of the site respectively.
Gross Site Area (Hectares)	1088.65
SHLAA/SHELAA Reference (if applicable)	Part of the site is considered: Site ID WHI01; Site ID WHI02; Site CRE01 and Site ID CRE02 (part of)

	Details		
Торіс	Details		
SHLAA/SHELAA Conclusions (if applicable)	Site ID WHI01		
	Available:	The site is available	
	Suitable:	No; the site is not within or	
		adjacent to a currently recognised	
		Local Plan settlement.	
	Achievable:	The site is achievable	
	Status:	Not currently developable. A review of the adopted Sustainable Settlement Hierarchy would be required to remove the constraint.	
	Site ID WHI02		
	Available:	The site is available	
	Suitable:	No; the site is not within or adjacent to a currently recognised Local Plan settlement.	
	Achievable:	The site is achievable	
	Status:	Not currently developable. A	
	Status.	review of the adopted Sustainable	
		Settlement Hierarchy would be	
		required to remove the constraint.	
	Site ID CRE02		
	Available:	The site is available	
	Suitable:	Part of the site is adjacent to the currently recognised Local Plan settlement of Stafford. The eastern section of the site is deliverable, however, the M6 motorway provides a physical barrier that would prevent the western section of the site being developed.	
	Achievable:	The site is achievable	
	Status:	Part of the site is deliverable.	
Existing land use	Agricultural, with s employment areas	some sparse/small residential and s.	
Residential Development Capacity (Proposed by Landowner or SHLAA/HELAA)	-		
Site identification method / source (e.g. SHELAA, Call for Sites consultation etc.))	Consultant constraints maps research		
Planning history (Live or previous applications)	None recent or relevant «Planning_history»		
Neighbouring uses	Agricultural and s	parse residential	

Assessment of Suitability

Environmental Constraints

Indicator of Suitability	Assessment
 Site is predominantly, or wholly, within or adjacent to the following statutory environmental designations: Yes / No / partly or adjacent Ancient Woodland Area of Outstanding Natural Beauty (AONB) Biosphere Reserve Local Nature Reserve (LNR) National Nature Reserve (NNR) National Park Ramsar Site Site of Special Scientific Interest (SSSI)* Special Area of Conservation (SAC) Special Protection Area (SPA) Does the site fall within a SSSI Impact Risk Zone and would the proposed use/development trigger the requirement to consult Natural England? 	The site is located approx. 2km from the Doxey And Tillington Marshes SSSI and within the Cannock Chase 15km buffer zone.
Site is predominantly, or wholly, within or adjacent to the following non statutory environmental designations: Yes / No / partly or adjacent / Unknown Green Infrastructure Corridor Local Wildlife Site (LWS) Public Open Space Site of Importance for Nature Conservation (SINC) Nature Improvement Area Regionally Important Geological Site Other	Unknown «Nonstatutory_environmental_designations»
Site is predominantly, or wholly, within Flood Zones 2 or 3? Flood Zone 1: Low Risk Flood Zone 2: Medium Risk Flood Zone 3 (less or more vulnerable site use): Medium Risk Flood Zone 3 (highly vulnerable site use): High Risk	Defined as Flood Zone 1. However, the site is located in the headwaters of 5-6 small watercourses which feed into the River Trent (to east) and the Meece Brook to west and south). The risk of flooding from these watercourses will need to be assessed further to determine the developable area of the site. The drainage pattern across the site should be preserved in future development. Given the upstream location of the site, suitable flood storage will need to be retained on the site to deliver a reduction in flood risk downstream. The SFRA (2019) reports incidents of overtopping of the Trent in Weston which is downstream of this site. «Flood_Zone»
 Site is at risk of surface water flooding? Less than 15% of the site is affected by medium or high risk of surface water flooding – Low Risk >15% of the site is affected by medium or high risk of surface water flooding – Medium Risk 	The site generally falls within very low risk, however small pockets of the site are considered as medium to high surface water flood risk. «Surface_water_flooding»

Indicator of Suitability	Assessment
Is the land classified as the best and most versatile agricultural land (Grades 1, 2 or 3a) Yes / No / Unknown	Yes – Mostly Grade 3 good to moderate quality agricultural land with some areas of Grade 2 very good quality agricultural land.
Site contains habitats with the potential to support priority species? Does the site contain local wildlife-rich habitats? Is the site part of:	Yes - The site contains small areas of Deciduous Woodland priority habitat.
 UK BAP Priority Habitat; a wider ecological network (including the hierarchy of international, national and locally designated sites of importance for biodiversity); wildlife corridors (and stepping stones that connect them); and/or an area identified by national and local partnerships for habitat management, enhancement, restoration or creation? Yes / No / Unknown 	The Environment Agency (EA) have indicated that there are a number of brooks which have been subject to modification therefore development presents an opportunity to provide biodiversity net gain by designing blue-green corridors. There are records of a number of protected species which should be fully considered. «Site_contains_habitats_with_the_potentia»
Site is predominantly, or wholly, within or adjacent to an Air Quality Management Area (AQMA)? Yes / No / Unknown	No
Geology	 <u>Superficial;</u> The following are present across some areas of site; Glaciofluvial sheet deposits across the west and north-east Till across the north-east and south-east of the site River terrace deposits in the north-eastern extent of the site Peat in sporadic locations in the south-east of the site Alluvium in sporadic locations in the east of the site Alluvium in sporadic locations in the east of the site Mercia Mudstone (mudstone and halite stone) across majority of the site Stafford Halite Member across the northern area of the site
Made Ground	No Made Ground is mapped at the site, although it is expected based on current/ former site use
Radon	Less than 1% homes above the action level

Indicator of Suitability	Assessment
Contamination	 Yes Current mapping: Current farms and farmland Current Marston Metals (scrap yard) Adjacent to the south – current Redhill Business Park, including self-storage facility, manufacturers, electric utility company, warehouses Historical mapping: A number of former marl pits (potential for infilled land) Former tanks, near Enson Moor Farm Former smithy Former sewage filter beds, north of Yarlet Hall Landfill; A number of small landfills across the site including; Authorised landfill – Hundred Acre Farm ('other' waste) Historical landfill – Elmhurst Farm (first input 1986, last input 1988, inert/commercial/industrial waste) Historical landfill – Birch Farm (first input 1988, last input 1980, inert/ industrial waste) Historical landfill – New Farm (first input 1979, last input 1984, last input 1984, last input 1984, last input 1989, inert/commercial/industrial waste) Historical landfill – Hays Lane/Beacon View Farm (first input 1979, last input 1984, last input 1989, inert/commercial/industrial waste)
	The Environment Agency indicates that all sites may have smaller areas of contamination down to individual farm or industrial unit scale. Development of these sites however provides the opportunity to address these contamination issues and provide sites that are cleaner and healthier for the water environment.

Indicator of Suitability	Assessment
Aquifer status	 <u>Superficial;</u> Glaciofluvial sheet deposits, river terrace deposits and alluvium are Secondary A aquifers Till is designated Secondary (Undifferentiated) aquifer <u>Bedrock;</u> Mercia Mudstone and Stafford Halite Member designated Secondary B aquifers <u>Source Protection Zones (SPZ);</u> None within 1km from the site
Minerals	North eastern area and parts of the western extent are within a Mineral Safeguarding Area (MSA) for Sand and Gravel
Water Quality and Waste	The Environment Agency indicates that Land to the North of Redhill Business Park site has 'limited or no headroom but relaxed permit limits to accommodate additional growth' or 'tight limits but headroom available'.
	Severn Trent indicate that Land to the North of Redhill Business Park is remote from a sewerage network, therefore infrastructure would need to be provided. There may be an option to transfer to Brancote WwTW although this is East of Stafford and may require significant infrastructure.

Physical Constraints

Indicator of Suitability	Assessment
Is the site: Flat or relatively flat Gently sloping or uneven Steeply sloping	Gently sloping or uneven
Is there existing vehicle access to the site, or potential to create suitable access? Yes / No / Unknown	Yes - good access – A34 dual carriageway runs north-south through the middle of the site. The M6 also runs through the western extent of the site; there is potential to create a new motorway junction, subject to support from Highways England. Other rural lanes also cross the site. «Vehicular_access»
Is there existing pedestrian/cycle access to the site, or potential to create suitable access? Pedestrian? Yes / No / Unknown Cycle? Yes / No / Unknown	There is potential to create relevant infrastructure.
Are there any Public Rights of Way (PRoW) crossing the site?	Yes- 5 footpaths and 1 bridleway across the site.

Indicator of Suitability	Assessment
Transport commentary – including consideration of future upgrades/mitigation required etc.	The site is bisected by the A34, a dual carriageway that connects Stone and Stafford. This provides opportunities to create new junctions on the A34 to serve development on the site. The additional traffic generated is likely to require upgrades to existing junctions along the A34 and within Stone and Stafford. Design of the development would have to take into consideration severance caused by the A34 to pedestrian and cycle movements between the eastern and western parts of the site. The M6 also runs through the western extent of the site. It may be possible to create a new motorway junction serving the site, although the location of a new junction may be constrained by the proximity to Junction 14 to the south and the southbound Motorway Service Area to the north, and the requirement to provide separation of at least 2km between slip roads. Direct access to the M6 is not considered essential to promote development on the site, however. Bus service 101 operates along the A34 providing regular services (2/hour in the peaks, 3/hour off peak) between Stafford and Stone. National Cycle Network Route 5 passes through the site, to the east of the A34, and runs between Stone and Stafford. The site abuts the North of Stafford Strategic Development Location (SDL). This provides opportunities to integrate pedestrian, cycle and public transport provision between the site and Stafford town centre. The SDL also includes employment development would be needed to facilitate and reduce potential adverse impacts created by severance of the site. The centre of the site is approximately 6km from Stafford railway station and 6.5km from Stone railway station. Large parts of the site would therefore lie within reasonable cycling distance of a station and, with the provision of suitable infrastructure, would promote sustainable travel. Although no facilities (schools, shopping, medical, entertainment) are within walking distance, the scale of the development would be sufficient to support these within the site, reducing the need to

Indicator of Suitability	Assessment
Are there veteran/ancient or other significant trees within or adjacent to the site? Are they owned by third parties? Significant trees? Yes, within / Yes, adjacent / No / Unknown Potentially veteran or ancient trees present? Yes, within / Yes, adjacent / No / Unknown Owned by third parties? Yes / No / Unknown	The site has small areas of deciduous woodland.
Is there any utilities infrastructure crossing the site i.e. power lines/pipe lines, or is the site in close proximity to hazardous installations? Yes / No / Unknown	Yes The National Grid high-pressure gas transmission pipeline FM21- Audley to Alrewas and the FM04 - Alrewas to Audley crosses the southern and northern part of the site respectively from west to east. The pipeline imposes a constraint on the siting of buildings and fixed plant and machinery with a 15 metre buffer zone on each side of the pipe where built development cannot be permitted.
Utilities requirement	Western Power Distribution report the following requirements: Approximately 60MVA required; New 60MVA BSP at a suitable location between Stafford and Eccleshall; Extend Rugeley – Stafford 132kV circuit approx. 8km; 2 x 60MVA 132/33kV Tx's +33kV switchboard at BSP; Extend 33kV infrastructure to site; Costs approx. £20million.
Would development of the site result in a loss of social, amenity or community value? Yes / No / Unknown	No (However, it could be argued that the loss of that number of footpaths etc would impact the way the community use the area and its value?)«Loss_of_social_amenity_or_community_val»

Accessibility to Social/Green Infrastructure

Factor		Guidance	
Distances to community facilities and services should be measured using walking routes from the centre of each site to each facility. Additional facilities can be added to the list. The distances are based on the assumption that 400m is equal to approximately 5 minutes' walk. This can be measured using Google Maps: <u>https://www.google.com/maps</u>			red
What is the distance to the following facilities (measured from the edge of the site)	Distance (metres)	Comments Junction of A34 Stone Road Whitgreave Lane has been used to measure distance- th is marginally closer to Staffor than the centre of the site mi be.	nis rd
Town / local centre / shop	400-	400m >1200m -1200m 4,200m to Stafford Town Cer 200m 200m	ntre
Bus /Tram Stop	400-	400m <400m 0-800m 800m	

Stafford Borough Strategic Development Site Options

Factor	Gui	dance
Train station	<400m	>1200m
	400-1200	m 5,080 to Stafford Station
	>1200m	
Primary School	<400m	>1200m
	400-1200	n 1,800 to Yarlet School
	>1200m	
Secondary School	<1600m	1600-3900m
	1600-3900	m 2,500m to Sir Graham Balfour
	>3900m	School
Open Space / recreation	<400m	N/A
facilities	400-800n	1
	>800m	
Cycle Route	<400m	>800m
	400-800n	1
	>800m	

Landscape and Visual Constraints

	Accordment
Indicator of Suitability	Assessment
Is the site low, medium or high sensitivity in terms of landscape?	With reference to the Planning for Landscape Change SPD (2001), the area is covered by the Settled Farmlands Landscape Character Type (LCT). This is characterised as " <i>There is a varied pattern of small to medium sized hedged fields with a scatter of small woodlands, often of ancient origin. The settlement pattern is mixed, and not distinctive.</i> " The key landscape features include " <i>hedgerow oak…hedge banks…undulating sloping landform; steep wooded stream valleys.</i> " Landscape Value The Site is not covered by any statutory landscape designations.
Low sensitivity: the site has few or no valued features, and/or valued features that are less susceptible to development and can accommodate change. Medium sensitivity: the site has many valued	The condition of the fields and vegetation patterns appears good, and in combination with the agricultural and transport land uses is representative of the LCT, with areas of the landscape reflecting the historic field patterns. The scenic quality is consistent with a rural landscape. There are no rare landscape features. Recreational value is via public rights of way including the Stones Circle Challenge.
site has many valued features, and/or valued features that are susceptible to development but could potentially accommodate some change with appropriate mitigation.	Perceptual aspects are varied due to the main roads and inter-visibility with settlement patterns and large-scale commercial areas at the northern edge of Stafford. The area is not understood to have any association with artistic or historic events which contribute to the perception of natural beauty. On balance the value is medium.
High sensitivity: the site has highly valued features, and/or valued features that are highly susceptible to development. The site can accommodate minimal change.	Landscape Susceptibility The open field pattern is generally situated across low lying and flat land although there are localised elevated areas at the northern edge of the area, which due to their elevation are less able to accommodate change. Mature woodland blocks and hedgerows are consistent across the area and reflective of the historic field pattern and less able to accommodate change. On balance the susceptibility is medium.
	Landscape Sensitivity The combination of the medium value and medium susceptibility results in a medium sensitivity.

Is the site low, medium or high sensitivity in terms of visual amenity? Low sensitivity: the site is visually enclosed and has low intervisibility with the surrounding landscape, and/or it	<u>Visual Value</u> The Site is not part of a landscape which is recognised for its views in relation to planning designations or heritage assets, nor representations in art or literature. The value is low.
would not adversely impact any identified views. Medium sensitivity: the site is somewhat enclosed and has some intervisibility with the surrounding landscape, and/or it may adversely impact any identified views.	<u>Visual Susceptibility</u> There are elevated locations within the site which are publicly accessible and from these there are views across parts of the site, which include for infrastructure and large scale commercial development in Stafford. The low-lying position of the area in respect of elevated land on the north side of the River Trent means that there is inter-visibility with the wider landscape. The susceptibility is high.
High sensitivity: the site is visually open and has high intervisibility with the surrounding landscape, and/or it would adversely impact any recognised views.	<u>Visual Sensitivity</u> The combination of the low value and high susceptibility results in a medium sensitivity.
Coalescence and/or ribbon development/sprawl risk	Risk of ribbon development adjacent to the main roads and perception of sprawl from Stafford, northwards towards Stone, as well as rick of coalescence with Ashton by Stone, subject to design options and establishment of landscape buffers.
Defensible boundaries and level of potential containment	Infrastructure (e.g. M5) provides boundaries to part of the site, but natural physical containment is limited, requiring design options to ensure a robust northern edge to development to retain separation between Stafford, Aston by Stone, and Stone.

Heritage Constraints

Indicator of Suitability	Assessment
Would the development of the site cause harm	There are no designated heritage assets within this site. However, there are a number of listed buildings that are located just outside its boundary. These include the Church of St Leonard (Grade II, NHLE 1242960), to the south-east; and Black and White Cottage (Grade II, NHLE 1273480), in the village of Whitgreave, to the south-west.
to a designated heritage asset or its setting? Some impact, and/or mitigation possible	Additional designated heritage assets are located in the vicinity of the site. These include the Trent and Mersey Canal Conservation Area; Enson House (Grade II, NHLE 1259816) and Enson Farmhouse (Grade II, NHLE 1259770), to the east. The remains of Creswell Chapel (SM, NHLE 1006113; Grade II, NHLE 1242636); Grade II listed buildings in the villages of Great Bridgeford, Shallowford and Aston-by-Stone. Sandon Park RPG (Grade II, NHLE 1001166) and the Battle of Hopton Heath (1643) Registered Battlefield (1000015) are located approximately 2km to the east and south-east of the site.

	Further assessment is required in order to understand the significance of these assets and how their setting contributes to their significance. It is expected that development of the Site will have an effect on the setting of some of these assets. If the design of the development takes into consideration the setting of these assets, in a way that the scale, height, mass and materials of the proposed development respect that setting, then the impact on these assets is not expected to be significant.
Would the development of the site cause harm to a non-designated heritage asset or its setting? Some impact, and/or	Earthworks associated with the deserted medieval settlement of Yarlet (HER MST3709; MST1752), including holloways, a possible house platform, and ridge and furrow field systems, are recorded near the centre of the Site. Development would probably impact heavily on these remains; a scheme of investigation works developed in consultation with the county archaeological monitor would be required. This would initially comprise evaluation works (geophysical survey and/or trenching) but would likely require further excavation. Dependent upon character, extent and preservation of remains, excavation of deserted medieval settlements can be lengthy and comparatively expensive, involving an inherent level of unpredictability.
	Areas of ridge and furrow (HER MST4248; MST12340; MST5669; MST4245; MST17864; others) are recorded within the Site boundary. around Whitgreave, Whitgreave Manor at the western side of the Site, and geophysical and earthwork survey evidence of a shifted/shrunken medieval village centre (HER MST4247) indicate moderate to high potential for medieval remains. Similarly, to development at Yarlet (see above), a scheme of investigation works developed in consultation with the county archaeological monitor would be required. Development around Whitgreave may have similar implications for impact and mitigation as those at Yarlet.
	Post-medieval marl pits (HER MST17861; HERMST17860) survive as water-filled features in the within the Site boundary, south-west of Whitgreave Manor. It is possible that a development scheme may be required/recommended to incorporate these as landscape features.
mitigation possible	Other sporadic areas of medieval ridge and furrow are recorded across the Site.
	A possibly Bronze Age pit alignment (HER MST4282) is recorded approximately 350m north-east of the Site near Upper Enson Farm. The orientation and extent is not known, but it is possible that the pit alignment extends into the Site. Further research would be required to establish whether this is the case. However, this should also be taken as an indication of possible prehistoric activity in this area, and a scheme of investigation works developed in consultation with the county archaeological monitor would be required. This would initially comprise evaluation works (geophysical survey and/or trenching) but would probably require further excavation if prehistoric remains were identified.
	The scheduled remains of the medieval Cresswell Chapel (NHLE 1006113) are located approx. 850m south-west of the Site. While at this distance, and level of preservation, the remains of the Chapel are unlikely to be impacted by development of the Site, it is potentially an indicator of surviving medieval remains in the area.
	Extant remains of isolated late 18th and 19th century farmsteads are

	located at Astonhill Farm (HER MST21406) near the northern edge of the Site boundary, Elmhurst Farm (HER MST21840) in the north- west of the Site, Springfield House/Whitgreave Manor Farm (HER MST18032) in the south-west of the Site, Redhill Farm (HER MST18031) in the south of the Site, Marston New Farm (HER MST17395) in the south-east of the Site. While, as isolated farmsteads, there is not direct relationship between these assets except in the sense of being similar contemporary features of a 19th century agricultural landscape, development could result in loss of context and significance for these assets if cut off from the agricultural setting, which would need to be justified under national and local planning policy and guidance.
	At this stage, there does not appear to be any indication that archaeological assets at the Site would preclude any specific development. However, there is a need to establish design parameters following the production of a more detailed heritage appraisal. Parameters should identify areas within the site boundaries where development should be restricted, considering the presence of recorded archaeological assets with the site boundaries. Any impact on assets should be justified within design parameters according to national and local planning policy; particularly the National Planning Policy Framework 2019, Section 16.
	Where development is proposed, it is likely that pre-determination archaeological evaluation works (probably comprising geophysical survey and/or trial trench evaluation). It is likely that further excavation works would be required in relation to medieval remains at Yarlet and Whitgreave in particular. Early preparation and investigation according to a scheme developed in consultation with country archaeological monitors is advisable to minimise risk.
Historic England consultation	This broad location would have the potential to affect the significance, including the setting of multiple heritage assets – directly or indirectly. Consider the setting of heritage assets further from the broad location and consider views and relationships within the landscape.

Planning policy constraints

Indicator of Suitability	Assessment
<i>Is the site in the Green Belt?</i> Yes / No / Unknown	No
Is the site allocated for a particular use (e.g. housing / employment) or designated as open space in the adopted and / or emerging Local Plan? Yes / No / Unknown	No
Are there any other relevant planning policies relating to the site?	Cannock Chase SAC 15km buffer; Multiple areas covered by HER designation.
Is the site: Greenfield A mix of greenfield and previously developed land Previously developed land?	Largely Greenfield

Indicator of Suitability	Assessment
Is the site within, adjacent to or outside the existing built up area? Within the existing built up area (infill)? Adjacent to and connected to the existing built up area? Outside and not connected to the existing built up area?	Adjacent to and connected to the existing built up area
Is the site within, adjacent to or outside the existing settlement boundary (if one exists)? Within the existing settlement boundary? Adjacent to and connected to the existing settlement boundary? Outside and not connected to the existing settlement boundary?	Adjacent to and connected to the existing settlement boundary
Would development of the site result in neighbouring settlements merging into one another? Yes / No / Unknown	No

Economy

Indicators of Suitability	Assessment	
Regeneration potential- indices of Multiple Deprivation score	 The site is almost entirely within the Stafford 006C LSOA, with a small portion falling into the Stafford 004A LSOA. The 2019 Index of Multiple of Deprivation (IMD) ranks the site's LSOAs as follows (1st decile is most deprived): The Stafford 006C LSOA is in the 8th deprivation decile, meaning it is amongst the 30% least deprived parts of the country; and The Stafford 004A LSOA is in the 6th deprivation decile, meaning it is amongst the 50% least deprived parts of the country. These scores show that the area suffers from fairly low amounts of deprivation however, areas around the northern part of the site could have some regeneration potential. 	
Regeneration potential- Indices of Multiple Deprivation (surroundings)	 The surrounding area of the site contains the Stafford 005A Stafford 005D, Stafford 006B, Stafford 006D, Stafford 008A and Stafford 012E LSOAs. The 2019 IMD ranks these surrounding LSOAs to the Site as follows: The Stafford 005A LSOA is in the 7th deprivation decile, meaning it is amongst the 40% least deprived parts of the country; The Stafford 005D LSOA is in the 10th deprivation decile, meaning it is amongst the 10% least deprived parts of the country; The Stafford 006B LSOA is in the 9th deprivation decile, meaning it is amongst the 20% least deprived parts of the country; and The Stafford 006D LSOA is in the 9th deprivation decile, meaning it is amongst the 20% least deprived parts of the country; and The Stafford 006D LSOA is in the 9th deprivation decile, meaning it is amongst the 20% least deprived parts of the country. The Stafford 008A LSOA is in the 9th deprivation decile, meaning it is amongst the 30% least deprived parts of the country. The Stafford 012E LSOA is in the 9th deprivation decile, meaning it is amongst the 30% least deprived parts of the country. The Stafford 012E LSOA is in the 9th deprivation decile, meaning it is amongst the 30% least deprived parts of the country. The Stafford 012E LSOA is in the 8th deprivation decile, meaning it is amongst the 30% least deprived parts of the country.	

Indicators of Suitability	Assessment
Economic development potential- assessment conclusion	The area contains high levels of employment with some key business assets located within Redhill Business Park. The Redhill Business Park is identified as one of the key industrial and logistics sites in the Economic and Housing Development Needs Assessment (EHDNA), managing to attract international businesses, such as General Electric and Jaguar Land Rover, away from more renowned areas. These companies represent key assets for the Local Enterprise Partnership (LEP) area with potential to act as anchors for the development of advanced manufacturing and energy sectors. The location of the site brings further opportunities such as accessibility to the M6 Junction 14 and the proximity to Stafford town centre. Future employment development in this location can be complementary to growth in key industries. The presence of existing clusters presents an opportunity on which to build on. Proposed housing provision can help to attract the supply of skilled workers for new and growing businesses. This in turn can help to contribute to economic priorities of the area, including employment and productivity growth.

Conclusions

Conclusions	Assessment
The site is potentially suitable The site is not suitable	Potentially suitable

Conclusions	Assessment		
Summary of justification for rating	 The site is largely in agricultural use and located on the A34 and M6 between Stafford and Stone; The site is located approx. 2km from the Doxey and Tillington Marshes SSS; The site is within flood zone 1 and has low risk of surface water flooding; The site is mostly Grade 3 good to moderate quality agricultural land; with some areas of Grade 2 very good quality agricultural land; The site contains small areas of Deciduous Woodland priority habitat; There are a number of small historic landfills across the site; There are a number of small historic landfills across the site; There are a number of spray across the site; There are an untiple public rights of way across the site; There are a number of spray and a dual carriageway that connects Stone and Stafford. This provides opportunities to create new junctions on the A34 to serve development on the site. The additional traffic generated is likely to require upgrades to existing junctions along the A34 and within Stone and Stafford. Design of the development would have to take into consideration severance caused by the A34 to pedestrian and cycle movements between the eastern and western parts of the site; The site abuts the North of Stafford Strategic Development Location (SDL). This provides opportunities to integrate pedestrian, cycle and public transport provision between the site and Stafford town centre. The SDL also includes employment development to ube north of the Redhill Business Park, providing potential employment opportunities for residents; HS2 is planned to run through the centre of the site from north to southeast. Mitigation/design of the development would be needed to facilitate and reduce potential adverse impacts created by severance of the site; The centre of the site is approximately 6km from Stafford railway station and 6.5km from Stone railway station. Large parts of the		

Conclusions	Assessment
	 Severn Trent indicate that Land to the North of Redhill Business Park is remote from a sewerage network, therefore infrastructure would need to be provided. here may be an option to transfer to Brancote WwTW although this is East of Stafford and may require significant infrastructure.

D: Meecebrook

Site Details

Торіс	Details		
Site Reference / Name	Meecebrook		
Species Species			
Site Address / Location	Meecebrook	a dana karang manana dan marang ang ang ang ang ang ang ang ang ang	
Settlement(s) (adjacent/nearby)	Swynnerton to the north of the site, Yarnfield to the east and Eccleshall to the south.		
Gross Site Area (Hectares)	1114		
SHLAA/SHELAA Reference (if applicable)	Part of site - Site ID SW Training Area, ST21 60 The site is 224.1 hectar used as a military traini	QT res, and is currently	
SHLAA/SHELAA Conclusions (if applicable)	Site ID SWY20		
	Available:	The site will become available in the next 5 years – 10 years.	
	Suitable:	No; the site is not within or adjacent to a currently recognised Local Plan settlement.	
	Achievable:	The site is achievable	
	Status:	Not currently developable. A review of the adopted Sustainable Settlement Hierarchy would be required to remove the constraint.	

	Details
Торіс	Details
Existing land use	Landfill at the northern edge of the site, MOD training camp in the northern half of the site, with small areas of employment and residential and agriculture throughout the southern half of the site.
Gross Density (dph)	30
Residential Development Capacity (Proposed by Landowner or SHLAA/HELAA)	Potential Yield on SHELAA Site ID SWY20 = 4,033
Site identification method / source (e.g. SHELAA, Call for Sites consultation etc.)	Stafford Borough Council SHELAA 2018, and consultant constraints maps research
Planning history (Live or previous applications)	 S.17/12/403 W. Variation of conditions 10 and 18 of planning permission S.16/09/403 W to maximise the treatment capacity of the aggregate treatment and recycling facility and increase of HGV movements. Grant - with conditions. May 2018 S.16/09/403 W. Meece Landfill and Soil Recycling Facility, Cold Meece. Aggregate Treatment and Recycling Facility. Grant - with conditions. December 2016 S.15/14/403 W. Meece Landfill Site, Yarnfield Road, Swynnerton, Coldmeece. Development of a temporary facility to compost green waste. Grant - with conditions. May 2016 S.15/12/403 W. Meece Landfill Site, Yarnfield Road, Swynnerton, Coldmeece. Application not to comply with (to vary) Conditions 1, 2, 10, 22, 24, 25, 26, 29, 30 and 31 of planning permission S.37608 in order to extend landfill operations to 30 September 2035, to extend the final restoration to 30 September 2036 and to amend the landfilling phasing, restoration and aftercare scheme. Grant - with conditions. December 2015
Neighbouring uses	Agricultural and residential

Assessment of Suitability

Environmental Constraints

Indicator of Suitability	Assessment
Site is predominantly, or wholly, within or adjacent to the following statutory environmental designations: Yes / No / partly or adjacent • Ancient Woodland • Area of Outstanding Natural Beauty (AONB) • Biosphere Reserve • Local Nature Reserve (LNR) • National Nature Reserve (NNR) • National Nature Reserve (NNR) • National Park • Ramsar Site • Site of Special Scientific Interest (SSSI)* • Special Area of Conservation (SAC) • Special Protection Area (SPA) Does the site fall within a SSSI Impact Risk Zone?	Partly or adjacent The south east corner of the site is located within the Cannock Chase Special Area of Conservation (SAC) 15km buffer.
Site is predominantly, or wholly, within or adjacent to the following non statutory environmental designations: Yes / No / partly or adjacent / Unknown Green Infrastructure Corridor Local Wildlife Site (LWS) Public Open Space Site of Importance for Nature Conservation (SINC) Nature Improvement Area Regionally Important Geological Site Other	Unknown
Site is predominantly, or wholly, within Flood Zones 2 or 3? Flood Zone 1: Low Risk Flood Zone 2: Medium Risk Flood Zone 3 (less or more vulnerable site use): Medium Risk Flood Zone 3 (highly vulnerable site use): High Risk	The Meece Brook and associated tributary flow through the centre of the site. The floodplain either side of these watercourses is defined as Flood Zone 2 and 3 and there are a large number of ponds adjacent to the watercourses. The remainder of the site is defined as Flood Zone 1. The risk of river flooding will need to be considered in terms of the main access routes to new development. The flood map outlines show the B5026 will flood at two locations between Smitty Lane and the White House Farm. HS2 will pass over the Meece Brook near Swynnerton (upstream of the Development area).

Indicator of Suitability	Assessment
Site is at risk of surface water flooding? - Less than 15% of the site is affected by medium or high risk of surface water flooding - Low Risk - >15% of the site is affected by medium or high risk of surface water flooding – Medium Risk	Medium Risk The Risk of Surface Water Flooding mapping identifies surface water ponding on the site. The Surface Water Management Plan identifies frequent flooding within the site area.
Is the land classified as the best and most versatile agricultural land (Grades 1, 2 or 3a) Yes / No / Unknown	Yes The site is largely Grade 2 and 3 best and most versatile agricultural land.
Site contains habitats with the potential to support priority species? Does the site contain local wildlife-rich habitats? Is the site part of: • UK BAP Priority Habitat; • a wider ecological network (including the hierarchy of international, national and locally designated sites of importance for biodiversity); • wildlife corridors (and stepping stones that connect them); and/or • an area identified by national and local partnerships for habitat management, enhancement, restoration or creation? Yes / No / Unknown	Yes Large pockets of the northern half of the site contain Deciduous Woodland priority habitat. The EA have indicated that the site has potential for biodiversity net gains through the enhancement of the existing brownfield sites.

Indicator of Suitability	Assessment
Geology	Superficial;
	The following are present in some areas across the site;
	- Glaciofluvial deposits and glaciofluvial sheet deposits in sporadic
	locations across the site
	- River terrace deposits in the centre of the site
	 Alluvium across the centre of the site
	Bedrock;
	- Mercia Mudstone (mudstone and halite stone) across majority of
	the site
	- Stafford Halite Member across the southern area of the site
	- Wildmoor Sandstone across the northern area of the site
	- Butterton-Swynnerton Dykes in small areas south of Yarnfield
	(within the site boundary)
Made Ground	No Made Ground is mapped at the site, although it is expected
	based on current/former site use
Radon	Majority of site – less than 1% homes above the action level
	Northern extent – maximum radon potential is 1 – 3%

Indicator of Suitability	Assessment
Contamination	 Ves Current mapping: Current railway Current farms and farmland Current Swynnerton Training Camp – an Army training base (MOD land) with sewage works Current Industrial Estate and Brookside Business Park, including truck rental, logistics, civil engineering and car dealers Historical mapping; Former clay and gravel pits (potential for infilled land) Former garage Landfill: Authorised/effective landfills on-site and adjacent to east – Biffa Waste Services Ltd - Meece 1 and Meece 2 landfills (waste landfillig >25,000T, excluding inert waste) Historical landfills under same footprint – New Birch House/ Meece Refuse Tip (first input 1970 and 1977, no last input date provided, inert/commercial/industrial household waste) Historical landfill – Hoyal Ordnance Factory (first input 1963, last input 1971, commercial/ industrial/household waste) Historical landfill – Land near Norton Bridge (first input 1994, last input 1996) Historical landfill – Highlows Farm approximately 180m to the east of the site (first input 1991, last input 1993, inert/industrial waste) Other web-based sources: Suggest that the northern area of the site was the former location of Royal Ordnance Factory Swynnerton. This was a filling factory (munitions, including highly combustible, explosive materials) during World War II
	opportunity to address contamination issues and provide sites that are cleaner and healthier for the water environment.
Aquifer status	 <u>Superficials:</u> Glaciofluvial sheet deposits and glaciofluvial deposits, river terrace deposits and alluvium designated Secondary A aquifers <u>Bedrock:</u> Mercia Mudstone and Stafford Halite Member designated Secondary B aquifers Wildmoor Sandstone designated Principal aquifer Butterton-Swynnerton Dykes designated Secondary A aquifer <u>Source Protection Zones (SPZ);</u> None within 1km from the site

Indicator of Suitability	Assessment
Minerals (and geological designations)	Approximately half of the site is within an MSA for Sand and Gravel Highlows Farm Quarry, Coldmeece approximately130m east of the site is a RIGS designated site (now known as 'Local Geological Site')
Water Quality and Waste	The Environment Agency indicates that the site has 'limited or no headroom but relaxed permit limits to accommodate additional growth' or 'tight limits but headroom available'. The Meecebrook site can drain to the Eccleshall STW, which has relaxed permit limits and headroom.
	Severn Trent have indicated that the site has a highly limited environmental capacity in the area (up to 3,000 properties) utilising Eccleshall and Sturbridge WwTW. Any significant development would have to be transferred to Pirehill WwTW or Strongford WwTW.
	The Meece Landfill and processing facility is located adjacent to the site.

Physical Constraints

Indicator of Suitability	Assessment
Is the site: Flat or relatively flat Gently sloping or uneven Steeply sloping	Gently sloping
Is there existing vehicle access to the site, or potential to create suitable access? Yes / No / Unknown	Yes Roads surrounding and within the site have potential, with upgrades, to provide suitable access to the wider site along with the new junction on the M6. The railway runs through the middle of the site, which potentially could provide a new station and create more sustainable transport links.
Is there existing pedestrian/cycle access to the site, or potential to create suitable access? Pedestrian? Yes / No / Unknown Cycle? Yes / No / Unknown	Yes No – there are no cycle routes within the vicinity of the site.
Are there any Public Rights of Way (PRoW) crossing the site? Yes / No / Unknown	Yes A footpath runs through the centre of the site.

Indicator of Suitability	Assessment	
Transport commentary – including consideration of future upgrades/mitigation required etc.	The site can be accessed by a number of local roads, including Newcastle Road to the west, B5026 Stone Road to the south and Meece Road and Swynnerton Road to the east. These are all single carriageway rural roads and not designed to accommodate large volumes of traffic. Although some upgrading could be undertaken within the site, it is considered unlikely that adequate links to the strategic road network and other key destinations could be achieved by upgrading existing roads outside the site boundary, and therefore a new junction on the M6 and a link to the site is considered essential. This would require land outside the site boundary, and support from Highways England. The site lies within a rural area with very limited bus services. The railway line between Stafford and Crewe runs through the site and this offers the potential to serve the site with a new station. This would require support from Network Rail. A new station could provide the focal point of an integrated public transport strategy, including new frequent bus services. The nearest facilities are in Stone, approximately 5km to the east of the centre of the site. However, the scale of the development would be sufficient to support provision of these within the site, reducing the need to travel. HS2 is planned to run to the east of the site. Mitigation to overcome the potential severance caused by both HS2 and the M6 would be required. Highways England indicate that the Meecebrook site will have traffic impacts on the M6 strategic road network. It is understood that the Meecebrook site could benefit from HS2, in terms of access to a new railway station. This is not a certainty at this stage, although would significantly improve the sustainability of the site. Furthermore, the possibility of an additional junction on the M6 motorway has been separately put forward; although this is only a preliminary concept at this stage. Attention is drawn to DTT Circular 02/2013, section titled 'Access to the Strategic Road Network' (paragraphs 37 to 44).	
Are there veteran/ancient or other significant trees within or adjacent to the site? Are they owned by third parties? Significant trees? Yes, within / Yes, adjacent / No / Unknown Potentially veteran or ancient trees present? Yes, within / Yes, adjacent / No / Unknown Owned by third parties? Yes / No / Unknown	There is significant tree cover in the northern part of the site.	

Indicator of Suitability	Assessment
Is there any utilities infrastructure crossing the site i.e. power lines/pipe lines, or is the site in close proximity to hazardous installations? Yes / No / Unknown	Yes Two high pressure gas pipelines, the FM04 - Alrewas to Audley and the FM21 - Audley to Alrewas National Grid Gas Pipeline, cross the southern part of the site in northwest-southeast direction. The pipeline imposes a constraint on the siting of buildings and fixed plant and machinery with a 15 metre buffer zone on each side of the pipe where built development cannot be permitted.
Utilities requirement	Western Power Distribution report the following requirements: Approximately 80MVA required; New 90MVA BSP at a suitable location between Stafford and Eccleshall; Extend Rugeley – Stafford 132kV circuit approx. 10km; 2 x 90MVA 132/33kV Tx's +33kV switchboard at BSP; Extend 33kV infrastructure to site; Costs approx. £23million; Alternative is to feed from the north from Barlaston, with similar costs also for this scheme.
Would development of the site result in a loss of social, amenity or community value? Yes / No / Unknown	Unknown

Accessibility to Social/Green Infrastructure

Factor	Guidance		
Distances to community facilities and services should be measured using walking routes from the			
centre of each site to each facility. Additional facilities can be added to the list. The distances are			
based on the assumption that 40	based on the assumption that 400m is equal to approximately 5 minutes' walk. This can be measured		
using Google Maps: https://www			
5 5 i <u> </u>			
What is the distance to the	Distance	Comments	
following facilities (measured	(metres)		
from the edge of the site)	()	Measured from the Y junction in	
, , , , , , , , , , , , , , , , , , ,		Cold Meece.	
	<400m	>1200m	
Town / local centre / shop	400-1200m	1,300m to Yarnfield	
	>1200m		
Bus /Tram Stop	<400m	<400m	
Bus / Ham Stop	400-800m	141m to service to Stafford	
	>800m	Town Centre	
Train station	<400m	>1200m	
Train Station	400-1200m	6,000m to Stone Train Station	
	>1200m		
Primary School	<400m	>1200m	
	400-1200m	1,500 to Springfields First	
	>1200m	School in Yarnfield	
Secondary School	<1600m	>3900m	
Cocondary Concor	1600-3900m	Stone	
	>3900m		
Open Space / recreation facilities	<400m	>800m	
	400-800m		
	>800m		
Cycle Route	<400m	>800m	
-	400-800m		
	>800m		

Landscape and Visual Constraints

Indicator of Suitability	Assessment
Is the site low, medium or high sensitivity in terms of landscape?	With reference to the Planning for Landscape Change SPD (2001), the northern part of Meecebrook is covered by the Sandstone Hills and Heath Landscape Character Type (LCT). This is characterised as "the landform is more pronounced, comprising hills and dissected plateauxThe settlement pattern is generally dispersed, with expanded hamlets." The southern part of Meecebrook is covered by the Settled Plateau Farmland Slopes LCT which is characterised by "some mixed farming in a semi-regular pattern of hedged fields, with scattered woods, often of ancient origin, and areas of remnant heath. There is a dispersed settlement pattern of hamlets and farmsteads, with urban influences in places."
Low sensitivity: the site has few or no valued features, and/or valued features that are less susceptible to development and can accommodate change. Medium sensitivity: the site has many valued features, and/or valued features that are susceptible to development but could potentially accommodate some change with appropriate mitigation. High sensitivity: the site has highly valued features, and/or valued features that are highly susceptible to development. The site can accommodate minimal change.	Landscape Value Meecebrook is not covered by any statutory landscape designations. The condition of the fields and vegetation cover appears good, as does the landscape structure across Swynnerton Park, balanced with areas of derelict and former MoD usage which are in poor condition. The landscape is representative of the published LCT. The scenic quality is generally high. There are no landscape features which are considered rare. Recreational value is limited due to few public rights of way, although the area is crossed by the Stones Circle Challenge route. Tranquillity is increased away from railway line which crosses the area and within the former MoD land uses to the extensive woodland cover. There is no artistic or cultural association with natural beauty. The value is medium.
	Landscape Susceptibility Meecebrook is situated across undulating landform, with the southern part of the area across valley sides of the Meece brook, rising to 119m Above Ordnance Datum (AOD), and the northern part of the area rising from Coldmeece at 105m AOD to 135m AOD along Birch House Lane. The susceptibility is medium.
	Landscape Sensitivity The combination of the medium value and medium susceptibility results in a medium sensitivity.

Is the site low, medium or high sensitivity in terms of visual amenity? Low sensitivity: the site is visually enclosed and has low intervisibility with the surrounding landscape, and/or it would not adversely	<u>Visual Value</u> Overall the area is not part of a landscape which is recognised for its views in relation to planning designations but there is visual association with Swynnerton Park and views from across the landscape from elevated parts of the area. The value is medium.
impact any identified views. Medium sensitivity: the site is somewhat enclosed and has some intervisibility with the surrounding landscape, and/or it may adversely impact any identified views. High sensitivity: the site is	<u>Visual Susceptibility</u> The undulating landform and therefore elevated position of parts of the area results in a higher inter-visibility with the surrounding landscape than compared to the enclosed nature of the former MoD area, where mature vegetation screens views. The susceptibility is medium
visually open and has high intervisibility with the surrounding landscape, and/or it would adversely impact any recognised views.	<u>Visual Sensitivity</u> The medium value and medium susceptibility results in a medium sensitivity.
Coalescence and/or ribbon development/sprawl risk	Potential risk of coalescence with Yarnfield, Coldmeece, Swynnerton and Sturbridge.
Defensible boundaries and level of potential containment	Road networks provide and mature woodland across the former MoD area provides defensible boundaries and a level of containment to part of the Meecebrook area, balanced with elevated land across the area which is not contained.

Heritage Constraints

Indicator of Suitability	Assessment
	There are seven listed buildings that fall within the site boundary. They are all Grade II listed and include Hilcote Hall (NHLE 1039090), to the south; Baden Hall (NHLE 1294280) and Hill Crest (NHLE 1374179) to the west; and Hammerhouse Farmhouse (NHLE 1039089), to the east. Development of the site will change the rural setting of these assets resulting in potentially adverse effects. The design of any proposed development should consider the setting of these assets and incorporate them into the new development, preserving, and where possible, enhancing their significance.
Would the development of the site cause harm to a	The M6, to the east of the site, runs north-west to south-east and acts as a physical barrier between the site and any heritage assets to the east of the motorway.
designated heritage asset or its setting? Some impact, and/or mitigation possible (assuming that the listed buildings within the site boundary will be retained)	Two scheduled monuments, three conservation areas and a number of additional listed buildings are located in the vicinity of the site. The majority of these listed buildings fall within these three conservation areas and/or within villages or other settlements.
	Eccleshall, Chebsey and Swynnerton Conservation Areas are located to the southwest, south and north of the site, respectively. They mostly encompass the historic core of the settlements and although modern development has taken place (apart from Chebsey), they have a largely rural setting that extends partly within the site. Development of the site has the potential to affect the setting of these conservation areas, including views from the conservation areas to the site.
	Consideration of the design of the development, including height, mass and scale as well as appropriate landscaping and screening could mitigate some of the potential harm caused. The setting of the listed buildings, outside the conservation areas that fall within urban settlements are not likely to be affected by the development of the site. «Designated_heritage_asset_harm»
Would the development of the site cause harm to a non- designated heritage asset or its setting? Some impact, and/or mitigation possible	Mounds initially identified as barrows near the northern end of the site (HER MST1829) have been more recently interpreted as natural limestone outcrops.
	Disturbed remains of the scheduled Bronze Age Swynnerton Park Barrow (HER MST501) are located approximately 200m north-west of the site. A findspot is recorded of artefacts including Roman coins and Saxon brooches recovered by metal detecting, although the exact location of finds is not known.
	The farmland of Swynnerton Park forms part of the setting of the Grade I Listed Swynnerton Hall, and its gardens that were originally planned by Capability Brown but mainly designed by Trubshaw in the early 19 th Century.
	Ankerton, approx. 500m north-west of HMP & Young Offenders Institute Drake Hall, which lies in the southern area of the site, is suggested as the possible site of a deserted medieval village (HER MST2090), with a possible trackway (HER MST4659)
	Areas of medieval or later ridge and furrow are identified near the

	pumping station in the north-west corner of the site (HER MST5657) and in the south of the site around Heamies (HER MST19033; MST19035).
	Post-medieval buildings at the west edge of the site in Millmeece include Millmeece Mill (HER MST2287) and Millmeece Manor Farm (HER MST21839). A further isolated post-medieval farmhouse stands within the Site boundary at Lower Heamies Farm (HER MST21859)
	Post-medieval water meadow systems (HER MST17504) along the Meece Brook at the western edge of the site, and extending into the area of the Site south of Coldmeece have been largely destroyed by later development, although some drains and possible earthworks survive
	A post-medieval landscape garden (HER MST6206) is recorded in association with Baden Hall near HMP & Young Offenders Institute Drake Hall.
	First World War kennels (HER MST 19991; MST20000; MST 20001) are recorded within the Site boundary, approximately 850m southwest of Yarnfield.
	The southern boundary of the site is formerly an 18th century turpike road.
	Non-designated assets within the site boundary north of Coldmeece indicate very limited archaeological potential.
	Most assets lie at the edges of the site boundary, and those within it are primarily post-medieval. A barrow and findspot at Swynnerton Park at the northern edge of the site may indicate an area of higher potential.
	The area of the site north of Coldmeece is characterised by moderate development and disturbance including landfill, indicating the likelihood of unknown surviving archaeological assets is relatively low. However, the area south of Coldmeece remains less developed the presence of Meece Brook as a natural water source may indicate a higher potential for unknown archaeological activity.
	At this stage, there does not appear to be any indication that archaeological assets at the Site would preclude any specific development. However, there is a need to establish design parameters following the production of a more detailed heritage appraisal. Parameters should identify areas within the site boundaries where development should be restricted, considering the presence of recorded archaeological assets with the site boundaries. Any impact on assets should be justified within design parameters according to national and local planning policy; particularly the National Planning Policy Framework 2019, Section 16.
Historic England consultation	Where development is proposed, it is likely that pre-determination archaeological evaluation works (likely comprising geophysical survey and/or trial trench evaluation). will be required. Further excavation, mitigation and conservation works may be required pending the results of evaluation works if previously unknown assets are discovered. The requirement for these works will be informed by ongoing consultation with the local planning archaeologist. This broad location would have the potential to affect the significance,

including the setting of multiple heritage assets - directly or indirectly.

Planning policy constraints

Indicator of Suitability	Assessment
<i>Is the site in the Green Belt?</i> Yes / No / Unknown	The northeast boundary of the site is adjacent to the Green Belt.
Is the site allocated for a particular use (e.g. housing / employment) or designated as open space in the adopted and / or emerging Local Plan?	No
Yes / No / Unknown	
Are there any other relevant planning policies relating to the site?	The south eastern part of the site falls within Cannock Chase SAC 15km Zone of Influence.
Is the site: Greenfield A mix of greenfield and previously developed land Previously developed land?	Mix
Is the site within, adjacent to or outside the existing built up area? Within the existing built up area (infill)? Adjacent to and connected to the existing built up area? Outside and not connected to the existing built up area?	Outside
Is the site within, adjacent to or outside the existing settlement boundary (if one exists)? Within the existing settlement boundary? Adjacent to and connected to the existing settlement boundary? Outside and not connected to the existing settlement boundary?	Outside

Economy

Indicators of Suitability	Assessment
Regeneration potential- indices of Multiple Deprivation score	 The site is split almost evenly between the Stafford 005A LSOA and the Stafford 005C. The 2019 Index of Multiple of Deprivation (IMD) ranks the site's LSOAs as follows (1st decile is most deprived): The Stafford 005A LSOA is in the 7th deprivation decile, meaning it is amongst the 40% least deprived parts of the country; and The Stafford 005C LSOA is in the 7th deprivation decile, meaning it is amongst the 40% least deprived parts of the country. These scores show that the area has medium levels of regeneration potential as the area suffers from some, albeit fairly low, amounts of deprivation.
Regeneration potential- Indices of Multiple Deprivation (surroundings)	 The surrounding area of the site contains the Stafford 002E Stafford 005D, Stafford 005E and Stafford 006C LSOAs. The 2019 IMD ranks these surrounding LSOAs to the Site as follows: The Stafford 002E LSOA is in the 7th deprivation decile, meaning it is amongst the 40% least deprived parts of the country; The Stafford 005D LSOA is in the 10th deprivation decile, meaning it is amongst the 10% least deprived parts of the country; The Stafford 005E LSOA is in the 10th deprivation decile, meaning it is amongst the 10% least deprived parts of the country; The Stafford 005E LSOA is in the 10th deprivation decile, meaning it is amongst the 10% least deprived parts of the country; and The Stafford 006C LSOA is in the 8th deprivation decile, meaning it is amongst the 30% least deprived parts of the country. These scores show that the surrounding areas do not suffer from high levels of deprivation, with low regeneration potential.
Economic development potential- assessment conclusion	The area where the site is located has a strong concentration of employment despite no major employment sites apparent in the area. Manufacturing is an important industry for the area, specifically to the east with the Raleigh Hall Industrial Estate located in Sturbridge. Businesses specialising in the advanced manufacturing of applied materials, a priority sector across the borough, are prominent in this Industrial Estate. Additionally, BT Openreach have recently invested in its digital engineering site in Yarnfield, creating employment in another priority area. There is some potential for future development to build on the existing activities by supporting growth of existing industries through the provision of employment and housing sites. However, there is a risk that the scale of housing and jobs proposed may exceed what the area is able to accommodate. The proposed scale of intervention may require further investment in infrastructure to increase attractiveness of the site for high value businesses. The proximity to the railway line and M6 does provide the opportunity to upgrade connectivity.

Stafford Borough Strategic Development Site Options

Conclusions

Conclusions	Assessment
The site is potentially suitable	Potentially suitable
The site is not suitable	

Conclusions	Assessment
Summary of justification for rating	 The Environment Agency indicates that the site has 'limited or no headroom but relaxed permit limits to accommodate additional growth' or 'tight limits but headroom available'. The Meecebrook site can drain to the Eccleshall STW, which has relaxed permit limits and headroom. Severn Trent have indicated that the site has a highly limited environmental capacity in the area (up to 3,000 properties) utilising Eccleshall and Sturbridge WwTW. Any significant development would have to be transferred to Pirehill WwTW or Strongford WwTW. The Meece Landfill and processing facility is located adjacent to the site.

E: Hixon Airfield

Site Details

Торіс	Details	
Site Reference / Name	Former Hixon Airfield	
MP Wadden Farm 79 Fm P Amerton Fu 80 Weston Find P PH Weston Find P PH PH PH P		
78 Birch Ye Hall		
Site Address / Location	Former Hixon Airfield, Hixon, ST18 0PF, Staffordshire	
Settlement(s) (adjacent/nearby)	Amerton, Hixon, Shirleywich, Stowe-by-Chartley & Weston	
Gross Site Area (Hectares)	119.9 Ha (SHELAA)	
Net Developable Area (Hectares)	106.8 Ha for housing and mixed uses (Site ID HIX070); and 13.1 ha for employment uses (Site ID HIX08).	
SHLAA/SHELAA Reference	Site ID HIX07, Site ID HIX08	

Торіс	Details	
SHLAA/SHELAA Conclusions	Site ID HIX07 Available:	The site is available
	Suitable:	The site is designated as a Recognised Industrial Estate in the Local Plan, which only promotes and protects employment generating uses.*
	Achievable:	The site is achievable
	Status:	Not currently developable. A review of the Local Plan would be required to remove the constraint.
	*The site is not designated as a Recognised Industrial Estate but shares a boundary with this designation. Site ID HIX08	
	Available:	The site is available
	Suitable:	No; but the site is adjacent to a Recognised Industrial Estate.
	Achievable:	The site is achievable
	Status:	Not currently developable. A review of the Local Plan would be required to remove the constraint.
Existing land use	Disused airfield, with tem	iporary uses.
Land use being considered, if known (e.g. housing, community use, commercial, mixed use)	Housing for HIX07; and employment for HIX08.	
Residential Development Capacity (Proposed by Landowner or SHLAA/HELAA)	SHELAA proposes 1,923 dwellings for Site ID HIX07 (106.8 Ha); Proposed mixed development promoted by developer: 2,281 dwellings, a school, retail and community uses and leisure facilities on the overall site (127.4 Ha)*. *AECOM estimate the site to be 106.8Ha as stated in the SHELAA.	
Commercial Development Capacity (Employment Floorspace estimates Hectares or sq. m)	The SHELAA proposes that Site ID HIX08 (southwest corner of whole site) be considered for employment purposes.	
Site identification method / source (e.g. SHELAA, Call for Sites consultation	Stafford Borough Council SHELAA 2018, and consultant constraints mapping research	

	Details
Topic	
Topic Planning history (Live or previous applications)	 19/29954/OUT Phased development of light industrial/general industrial/storage and distribution buildings (outline) with details of access Land At Air & Ground Aviation New Road Hixon Stafford. Awaiting decision; 16/25315/COU Change of use of former airfield runway for storage of commercial vehicles and up to six commercial vehicle auctions per year; office/sales/facilities building; landscaping works Land At Hixon Airfield Industrial Estate Hixon Stafford. Decision Allowed. Jul 2017; 16/25380/COU Change of use of former airfield runway to storage of crushed concrete hardcore for use at adjacent construction sites for a temporary period of up
	to five years Land At Hixon Airfield Industrial Estate Hixon Stafford. Allowed Jan 2017; 16/23616/OUT Phased development of a science, technology and commerce park for research and development uses (Use Class B1(b)) with ancillary office space (outline with details of access and landscaping) Land Adjacent Former Runway Hixon Airfield New Road Hixon Stafford. Refusal Nov 2016; S.09/16/4009 W Composting scheme with in-building primary treatment and external windrows, including a reception building, weighbridge, offices and facilities, with skip-based waste transfer station for inert materials
	which cannot be composted. Refused and appeal withdrawn. February 2010. Refusal Nov 2016; 14/19873/COU Change of use from former concrete aircraft runway to provide compensatory space for Ground Nesting Birds (GNB) Former Hixon Airfield, off Hixon Industrial Estate Former Runway Land Hixon Stafford. Allowed Jul 2014.
Neighbouring uses	Disused railway line and agricultural uses to the north; Residential uses in village of Stowe-by-Chartley to the northeast; Woodland, disused railway line and agricultural uses to the northwest, Agricultural uses to the east; Industrial uses at Hixon Airfield Industrial Estate to the south and southeast; and Active railway line and agricultural uses to the west.

11.

Assessment of Suitability

Environmental Constraints

Indicator of Suitability	Assessment
Site is predominantly, or wholly, within or adjacent to the following statutory environmental designations: Yes / No / partly or adjacent • Ancient Woodland • Area of Outstanding Natural Beauty (AONB) • Biosphere Reserve • Local Nature Reserve (LNR) • National Nature Reserve (NNR) • National Nature Reserve (NNR) • National Park • Ramsar Site • Site of Special Scientific Interest (SSSI)* • Special Area of Conservation (SAC) • Special Protection Area (SPA) Does the site fall within a SSSI Impact Risk Zone and would the proposed use/development trigger the requirement to consult Natural England?	No. The site is within the SSSI impact risk zone of Pasturefields Salt Marsh SSSI and Chartley Mosses SSSI. The site is less than 1km from Pasturelands Salt Marsh SSSI and SAC, and less than 2km from Chartley Mosses SSSI and National Nature Reserve, Midland Meres & Mosses - Phase 1 Ramsar Site and West Midlands Mosses SAC.
Site is predominantly, or wholly, within or adjacent to the following non statutory environmental designations: Yes / No / partly or adjacent / Unknown Green Infrastructure Corridor Local Wildlife Site (LWS) Public Open Space Site of Importance for Nature Conservation (SINC) Nature Improvement Area Regionally Important Geological Site Other	Unknown
Site is predominantly, or wholly, within Flood Zones 2 or 3? Flood Zone 1: Low Risk Flood Zone 2: Medium Risk Flood Zone 3 (less or more vulnerable site use): Medium Risk Flood Zone 3 (highly vulnerable site use): High Risk	The Amerton Brook flows through the north west corner of the site. This area of the site is within Flood Zones 2 and 3. Development should be set back from this area. The Amerton Brook flows towards the A51; options for accessing the site from the A51 may be constrained by the Amerton Brook. The EA have indicated that detailed modelling is not currently available but if undertaken the flood extents would be better defined. This could increase/decrease the area suitable for development. Integrated flood risk and surface water drainage solutions could be considered.

Indicator of Suitability	Assessment
 Site is at risk of surface water flooding? Less than 15% of the site is affected by medium or high risk of surface water flooding – Low Risk >15% of the site is affected by medium or high risk of surface water flooding – Medium Risk 	Low Risk The Risk of Flooding from Surface Water (ROFSW) mapping identifies a surface water flowpath south from the site towards New Road. Given the upstream location of the site, runoff generated by the site will need to be carefully managed to reduce the flood risk to the downstream settlement of Hixon.
Is the land classified as the best and most versatile agricultural land (Grades 1, 2 or 3a) Yes / No / Unknown	Grade 3 good to moderate quality agricultural land
 Site contains habitats with the potential to support priority species? Does the site contain local wildlife-rich habitats? Is the site part of: UK BAP Priority Habitat; a wider ecological network (including the hierarchy of international, national and locally designated sites of importance for biodiversity); wildlife corridors (and stepping stones that connect them); and/or an area identified by national and local partnerships for habitat management, enhancement, restoration or creation? Yes / No / Unknown 	The northern boundary of the site is Deciduous woodland priority habitat. The site is adjacent to Floodplain Grazing Marsh priority habitat.
Geology	 <u>Superficial;</u> Eastern area underlain by till Western area underlain by river terrace deposits <u>Bedrock;</u> Mercia Mudstone (mudstone)
Made Ground	No Made Ground is mapped at the site, although it is expected based on current/former site use
Radon	Less than 1% homes above the action level

Indicator of Suitability	Assessment
Contamination	Yes
	Current mapping;
	- Disused Hixon Airfield
	- 'Dismantled railway' labelled along northern
	site boundary
	- Current railway along western site boundary
	 Adjacent to the south – current Airfield
	Industrial Estate, including equipment
	suppliers, garages (vehicle repair), engineers
	and plastic fabrication
	Historical mapping;
	 Former Stafford and Uttoxeter railway along
	northern site boundary
	 Former sand pit (potential for infilled land) on wastern site boundary.
	western site boundary - Former farm
	- Former depot
	Landfill;
	- None within 250m from the site
	- None within 250m nom the site
	The Environment Agency indicates that when
	taking into account opportunities provided by
	redevelopment, the Hixon Airfield site potentially
	has significant areas of land contamination.
	Development of this site however provides the
	opportunity to address these contamination
	issues and provide sites that are cleaner and
	healthier for the water environment.
Aquifer status	Superficial;
	- Till – Secondary (Undifferentiated) aquifer
	- River terrace deposits - Secondary A aquifer
	Bedrock;
	- Mercia Mudstone – Secondary B aquifer
	Source Protection Zones (SPZ):
A discourse la	- None within 1km from the site
Minerals	Approximately 60-70% of the site is within an
	MSA for Sand and Gravel

Indicator of Suitability	Assessment
Water Quality and waste	The Environment Agency indicates that the Hixon Airfeld site partially drains to sewage treatment works that have relaxed permit limits and headroom.
	Severn Trent have indicated that there is a limited capacity in the Hixon and Weston area (up to 5,000 properties) utilising Hixon WwTW. Any significant development above 5,000 homes would have to be transferred to Brancote WwTW.
	The Environment Agency indicates that status of the receiving watercourses should also be taken into account when considering the vulnerability of the water environment at that location, with those waterbodies under greatest stress posing the biggest constraint to additional large scale growth in the catchment. These locations include Hixon Airfield, which has a poor WFD ecological status.

Physical Constraints

Indicator of Suitability	Assessment
Is the site: Flat or relatively flat Gently sloping or uneven Steeply sloping	Flat or relatively flat
Is there existing vehicle access to the site, or potential to create suitable access? Yes / No / Unknown	Yes
Is there existing pedestrian/cycle access to the site, or potential to create suitable access? Pedestrian? Yes / No / Unknown Cycle? Yes / No / Unknown	No – none of the roads bounding the site have footways No
Are there any Public Rights of Way (PRoW) crossing the site? Yes / No / Unknown	Yes Public Rights of Way: Stowe-by-Chartley 32(a); Public Rights of Way: Stowe-by-Chartley 32(b) Public Rights of Way: Stowe-by-Chartley 34

Indicator of Suitability	Assessment
Indicator of Suitability Transport commentary – including consideration of future upgrades/mitigation required etc.	Assessment There is good vehicular access from the south, via the Airfield industrial Estate access road, although this is a private road and would need upgrading with provision of footway/cycleways in order to provide access to the site. Two new access roads could be constructed onsite from the east (Stowe Lane) and the north east (Bridge Lane). However, these are rural lanes not designed to accommodate high traffic volumes and would require significant upgrading. Ideally a new road could be constructed to the A51 arterial road to improve access to the wider network, however this would require the purchase of land to the west outside the site boundary, and would have to cross the railway line. There is an hourly bus service between Uttoxeter and Stafford that runs through Hixon. However, the majority of the site lies some distance from the nearest bus stops on New Road. Improvements to bus services including increased frequency and re-routing through the site would be required to create a sustainable development. A new station on the active railway line would dramatically improve public transport access. However, the size of the site may not be sufficient to support the level of investment that would be required. Support would also be required from Network Rail. There are some facilities in Hixon, including a primary school and convenience store. Other services, including GP/dentist surgery, supermarket, etc. are available in Stafford, approximately 10km to the west. There are no cycle facilities within the vicinity of the site. The main employment opportunities will be in Stafford, however the distance from the site is too far for cycling to be a viable choice for most residents. The Highways England consultation response considers the Hixon Airfield to have a low traffic impacts on the M6 strategic road network.
Are there veteran/ancient or other significant trees within or adjacent to the site? Are they owned by third parties? Significant trees? Yes, within / Yes, adjacent / No / Unknown Potentially veteran or ancient trees present? Yes, within / Yes, adjacent / No / Unknown Owned by third parties? Yes / No / Unknown	There are no trees on the site due to former airfield uses. The northern boundary is a deciduous woodland priority habitat.

Indicator of Suitability	Assessment
Is there any utilities infrastructure crossing the site i.e. power lines/pipe lines, or is the site in close proximity to hazardous installations? Yes / No / Unknown	Yes – A high pressure gas pipeline, the Sandon/Drayton Bassett National Grid Gas Pipeline, crosses the site in north-south direction. The pipeline imposes a constraint on the siting of buildings and fixed plant and machinery with a 15 metre buffer zone on each side of the pipe where built development cannot be permitted.
Utilities requirement	Western Power Distribution report the following requirements: Approximately 40MVA required; Establish new 132/11kV primary off Rugeley – Stafford; Approx. 4km of 132kV dual circuit cable; New primary with 2 x 132/11kV Tx's and 11kV switchboard; Costs approx. £12million
Would development of the site result in a loss of social, amenity or community value? Yes / No / Unknown	No

Accessibility to Social/Green Infrastructure

Factor	Guidance		
Distances to community facilities and services should be measured using walking routes from the			
centre of each site to each facility. Additional facilities can be added to the list. The distances are			
based on the assumption that 400m is equal to approximately 5 minutes' walk. This can be measured			
using Google Maps: https://www.g	google.com/maps		
What is the distance to the	Distance	Comments	
following facilities (measured	(metres)		
from the edge of the site)			
Town / local centre / shop	<400m	>1200m	
	400-1200m	Hixon	
	>1200m		
Bus /Tram Stop	<400m	>800m	
	400-800m	841 from Hixon to Uttoxeter	
	>800m	Town Centre	
Train station	<400m	>1200m	
	400-1200m	Stafford	
	>1200m		
Primary School	<400m	>1200m	
	400-1200m	St Peter's C of E Primary	
	>1200m	School, Hixon	
Secondary School	<1600m	>3900m	
	1600-3900m	Weston Road Academy,	
	>3900m	Stafford	
Open Space / recreation	<400m	>800m	
facilities	400-800m		
	>800m	4	
Cycle Route	<400m	>800m	
	400-800m		
	>800m		

Landscape and Visual Constraints

Indicator of Suitability	Assessment
	With reference to the Planning for Landscape Change SPD (2001), Hixon is covered by the Settled Farmlands Landscape Character Type. This is characterised as a <i>"There is a varied pattern of small to medium sized hedged fields with a scatter of small woodlands, often of ancient origin. The settlement pattern is mixed, and not distinctive."</i> The key landscape features include <i>"hedgerow oakhedge banksundulating sloping landform; steep wooded stream valleys."</i>
Is the site low, medium or high sensitivity in terms of landscape? Low sensitivity: the site has few or no valued features, and/or valued features that are less susceptible to development and can accommodate change. Medium sensitivity: the site has many valued features, and/or valued features that are susceptible to development but could potentially accommodate some change with appropriate mitigation. High sensitivity: the site has highly valued features, and/or valued features that are highly susceptible to development. The site can accommodate minimal change.	 <u>«Landscape sensitivity»Value</u> Hixon is not covered by any statutory landscape designations. The condition of the landscape is generally fair with some intact hedgerows and narrow tree belts, balanced with a modified land cover of the airfield and a dismantled railway such that it is not representative of the character type. The scenic quality is low, being an extensive airfield bordered by the Airfield industrial Estate and residential properties adjacent to Stowe Lane. There are no landscape features which are considered rare. Recreational value is via a Public Right of Way across the disused airfield which connects to the industrial estate and part of the disused railway. Tranquillity is limited by the inter-visibility with residential and commercial land uses. The area is understood not to have any strong association with events that contribute to the perception of natural beauty in the area. On balance the value is low. <u>Susceptibility</u> The landform is flat overall at around 85m AOD and as a disused airfield can accommodate change. The susceptibility is low.

Is the site low, medium or high sensitivity in terms of visual amenity? Low sensitivity: the site is visually enclosed and has low intervisibility with the surrounding landscape, and/or it would not adversely impact any identified views. Medium sensitivity: the site is somewhat enclosed and has some intervisibility with the surrounding landscape, and/or it may adversely impact any identified views. High sensitivity: the site is visually open and has high intervisibility with the surrounding landscape, and/or it would adversely impact any	ValueThe Site is not part of a landscape which is recognised for its views in relation to planning designations or heritage assets, nor representations in art or literature.The value is low.Susceptibility The low lying position of the Site and areas of mature vegetation aid in reducing the visibility of the Site and overall it is enclosed in relation to the surrounding landscape.The susceptibility is low.Sensitivity The combination of the low value and low susceptibility results in a low sensitivity.
recognised views. Coalescence and/or ribbon development/sprawl risk	Hixon's settlement pattern is irregular, being nucleated around the junctions of Station Road and Egg Lane, such that the Airfield industrial Estate risks severing connectivity between development of the area and Hixon. Due to the area's location between railway lines and road networks there would be a very low risk of coalescence, ribbon development or sprawl in isolation, however there is the potential cumulative impact from the development of Weston to the immediate north and the two sites should be considered holistically.
Defensible boundaries and level of potential containment	The dismantled railway to the north, railway to the west, Stowe Lane to the east and the Airfield Industrial Estate to the south provide defensible boundaries and a high level of potential containment.

Heritage Constraints

Indicator of Suitability	Assessment
Mould the development of the	The former Hixon Airfield is located to the north-west of the village of Hixon. There are no designated heritage assets within the boundary of this site. However, there are a number of heritage constraints, including designated heritage assets, in close proximity to the site.
Would the development of the site cause harm to a designated heritage asset or its setting? Some impact, and/or mitigation possible	There are a number of listed buildings within 500m from the site. These include the Grange Farmhouse (Grade II, NHLE) in the hamlet of Amerton; the Church of St. John the Baptist (Grade II*, NHLE 1273551) with grounds including a Grade II listed churchyard cross (NHLE1273529); and the Ingle Nook Cottage (Grade II, NHLE 1273552) in the village of Stowe-by-Chartley. The Wychdon Lodge and Outbuildings (Grade II, NHLE 1393071), also sits approx. 370m south west of the site. These assets have a rural setting that is likely to be affected by the development of the site. The significance of these assets is likely to be impacted however this impact can be mitigated with appropriate design.

	Development of the site has the potential to affect the setting of Chartley Castle (SM, NHLE 1011192; Grade II*, NHLE 1258139). The remains of the castle are located in a raised position, illustrating its defensive use with views extending to the surrounding countryside, including the site. Therefore, development of the site has the potential to adversely affect the setting of this asset. Appropriate design and landscaping can help mitigate potential harm caused to the significance of this asset.
	The listed buildings in the village of Hixon are screened by the site by intervening buildings in the village, with their setting being mostly within the village, apart from the assets to the south which retain some rural setting. The Airfield Industrial Estate, between the village of Hixon and the site, provides additional screening between the majority of the site and the assets within the village of Hixon. It is unlikely that development of the site will affect the significance of these assets.
	The Trent and Mersey Canal Conservation Area runs to the west of the site encompassing the Trent and Mersey Canal and development associated with it. There is a railway line running between the conservation area and the site, providing a form of separation. However, development of the site has the potential to affect views from the conservation area towards the site. The design of a proposed development should take this conservation area and potential views from it into consideration.
	The Grade II listed Park and Garden, Sandon Park (NHLE 1001166) is located approx. 2.3km north-west of the Site. There does not appear to have been a historic association between the site and the RPG or any key views towards the site.
Would the development of the	If the site at Weston is also developed, the cumulative impact of both sites on the historic environment should be considered. The site is an airfield and the former site of RAF Hixon. Therefore, the site is of historic significance as a non- designated asset. Publicly available HER data indicates limited non-designated assets in the surrounding landscape of the site, including a possible Bronze Age pit alignment (HER MST4270) identified as a cropmark in aerial photography, approximately 360m south-west of the site.
site cause harm to a non- designated heritage asset or its setting? Some impact, and/or mitigation possible Limited or no impact or no requirement for mitigation	A possibly Saxon Earthwork Enclosure (HER MST4569) encompasses the village of Stowe-by-Chartley abutting the north-east boundary of the Site. Development of the Site should not impact on this feature, and restrictions may be placed on development near it. Its proximity is also an indicator that currently unknown early medieval assets could exist within the boundary of the proposed development Site.
	A scheduled medieval Moated Site and Fishpond (HER MST754) is located near Gayton, approx. 2km north-west of the Site. The distance from the Site likely means the asst will not be affected by development.

	The Historic Landscape of the surrounding area is characterised by fieldscapes and piecemeal enclosure, with the notable exception of the New Road Industrial estate immediately to the south of the Site. HER data indicates possible prehistoric and early medieval activity in the area of the site. Previous development of the site as an airfield means there is relatively low potential for surviving remains on the site, but cannot be ruled out.	
	At this stage, there does not appear to be any indication that archaeological assets at the Site would preclude any specific development. However, there is a need to establish design parameters following the production of a more detailed heritage appraisal. Parameters should identify areas within the site boundaries where development should be restricted, considering the presence of recorded archaeological assets with the site boundaries. Any impact on assets should be justified within design parameters according to national and local planning policy; particularly the National Planning Policy Framework 2019, Section 16.	
	Where development is proposed, it is likely that pre- determination archaeological evaluation works (likely comprising geophysical survey and/or trial trench evaluation).	
Historic England consultation	This broad location would have the potential to affect the significance, including the setting of multiple heritage assets – directly or indirectly. Additionally, consider the cumulative impacts of taking forward Site E and Site F, as well as the potential for merging two settlements through large scale new development.	

Planning policy constraints

Indicator of Suitability	Assessment
Is the site in the Green Belt? Yes / No / Unknown	No
Is the site allocated for a particular use (e.g. housing / employment) or designated as open space in the adopted and / or emerging Local Plan? Yes / No / Unknown	Historic Environment Record - Area: RAF Hixon; and Cannock Chase SAC 15km zone
Are there any other relevant planning policies relating to the site?	Part of the site is within the Hixon Neighbourhood Plan area, however there are no site specific polices for the site.
Is the site: Greenfield A mix of greenfield and previously developed land Previously developed land?	A mix of greenfield and previously developed land
Is the site within, adjacent to or outside the existing built up area? Within the existing built up area (infill)? Adjacent to and connected to the existing built up area? Outside and not connected to the existing built up area?	Adjacent to and connected to the existing built up area?

Indicator of Suitability	Assessment
Is the site within, adjacent to or outside the existing settlement boundary (if one exists)? Within the existing settlement boundary? Adjacent to and connected to the existing settlement boundary? Outside and not connected to the existing settlement boundary?	Outside and not connected to the existing settlement boundary
Would development of the site result in neighbouring settlements merging into one another? Yes / No / Unknown	No

Economy

Indicators of Suitability	Assessment
Regeneration potential- indices of Multiple Deprivation score	 The site is split almost evenly between the Stafford 008A LSOA and the Stafford 008D LSOA. The 2019 Index of Multiple of Deprivation (IMD) ranks the site's LSOAs as follows (1st decile is most deprived): The Stafford 008A LSOA is in the 9th deprivation decile, meaning it is amongst the 20% least deprived parts of the country; and The Stafford 008D LSOA is in the 9th deprivation decile, meaning it is amongst the 20% least deprived parts of the country. These deprivation scores highlight that there is low potential for regeneration as the area does not suffer from much deprivation.
Regeneration potential- Indices of Multiple Deprivation (surroundings)	 The surrounding area of the site contains the Stafford 011E and Stafford 008C LSOAs. The 2019 IMD ranks these surrounding LSOAs as follows: The Stafford 011E LSOA is in the 8th deprivation decile, meaning it is amongst the 30% least deprived parts of the country; and The Stafford 008C LSOA is in the 9th deprivation decile, meaning it is amongst the 20% least deprived parts of the country. These scores show that the surrounding areas also have low regeneration potential.
Economic development potential- assessment conclusion	The area attracts major businesses with good concentration of employment located within the Airfield Industrial Estate immediately to the south of the site which includes businesses operating in the advanced manufacturing auto-aero priority sector. The cluster includes the presence of JCB, which is a key asset for the borough. There is a further employment site in Pasturefields, further to the south of the site. Future employment land has the potential to bring additional clustering opportunities for businesses in the area, complementary to the priority sectors, which can support the creation of high-value jobs. Planned housing can help to bring additional workforce needed to support the employment growth while limiting out- commuting.

Conclusions

Conclusions	Assessment	
The site is potentially suitable	The site is potentially suitable for development	
The site is not suitable		

Conclusions	Assessment		
Summary of justification for rating	 The site is a former airfield with temporary uses, located to the north of a designated Recognised Industrial Estate; The site is within the SSSI impact risk zone of Pasturefields Salt Marsh SSSI and Chartley Mosses SSSI; The Amerton Brook flows through the north west corner of the site. This area of the site is within Flood Zones 2 and 3. Development should be set back from this area which is also deciduous woodland priority habitat. The Amerton Brook flows towards the A51; options for accessing the site from the A51 may be constrained by the Amerton Brook; The site is Grade 3 good to moderate quality agricultural land with approximately 60-70% of the site is within an MSA for Sand and Gravel; The site contains multiple public rights of way; There is good vehicular access from the south, however roads would need upgrading with provision of pavements. Two new access roads could be constructed onsite from the east (Stowe Lane) and the north east (Bridge Lane). Some of the rural roads near the site are not designed to cope with high traffic volumes so may require widening and straightening. Ideally a new road could be constructed to the A51 arterial road to improve access to the wider network, however, this would require the purchase of land offsite to the west. In addition, a station on the active railway line would dramatically improve public transport access; A high pressure gas pipeline, the Sandon/Drayton Bassett National Grid Gas Pipeline, crosses the site in north-south direction. The pipeline imposes a constraint on the siting of buildings and fixed plant and machinery with a 15 metre buffer zone on each side of the pipe where built development cannot be permitted; The site has low landscape value and low sensitivity to development. The dismantled railway to the north, railway to the west, Stowe Lane to the east and the Airfield Industrial Testate to the south provide defensible boundaries and a high level of potential containment;		

Conclusions	Assessment	
	 The Environment Agency indicates that the Hixon Airfeld site partially drains to sewage treatment works that have relaxed permit limits and headroom. Severn Trent have indicated that there is a limited capacity in the Hixon and Weston area (up to 5,000 properties) utilising Hixon WwTW. Any significant development above 5,000 homes would have to be transferred to Brancote WwTW. The Environment Agency indicates that status of the receiving watercourses should also be taken into account when considering the vulnerability of the water environment at that location, with those waterbodies under greatest stress posing the biggest constraint to additional large scale growth in the catchment. These locations include Hixon Airfield, which has a poor WFD ecological status. 	

F: Weston

Site Details

Торіс	Details	
Site Reference / Name	Partially Site ID WES02, Land east of Weston	
Mor Lay Pm Billor Mor Lay Pm Billor More Lay Pm Billor More Lay Pm Billor PH Bil		
Site Address / Location	Land east of Weston, ST18 0JS, Staffordshire	
Settlement(s) (adjacent/nearby)	Amerton, Gayton, Shirleywich, Stowe-by-Chartley & Weston	
Gross Site Area (Hectares)	«Gross_Site_Area_ha»216.78 Ha	
SHLAA/SHELAA Reference (if applicable)	Site ID WES02 site (13.9 Ha).	is located in the southwest portion of
SHLAA/SHELAA Conclusions (if applicable)	Available:	The site is available.
	Suitable:	The site is adjacent to a currently recognised Local Plan Settlement.
	Achievable:	The site is achievable.
	Status:	The site is potentially developable based on the compliance with Policy C5 of the Local Plan and Paragraph 71 of the NPPF.
Existing land use	Agricultural	
Residential Development Capacity (Proposed by Landowner or SHLAA/HELAA)	Site ID WES02: 251 homes	

Торіс	Details
Site identification method / source (e.g. SHELAA, Call for Sites consultation etc.))	Constraints analysis by consultant; and SHELAA
Planning history (Live or previous applications)	 17/27663/FUL – Permission granted for provision of sewage disposal treatment plant and discharge of treated effluent to a watercourse. 10/13641/FUL – Permission refused for refurb and change of use from agricultural building to dwelling. 07/08945/FUL – Permission granted for conversion of agricultural buildings to form four dwellings and adaptation of farmhouse garage 06/06871/FUL – Removal of existing garden centre polytunnels and erection of new garden centre building. 04/02406/FUL – Permission refused for earth sheltered dwelling house.
Neighbouring uses	Agricultural to the north; The settlement of Amerton (residential) and agricultural to the northeast; Vacant airfield, industrial estate, agriculture and woodland to the east and southeast; Agriculture to the south; Settlement of Weston (residential) to the west; and agricultural uses to the northwest

Assessment of Suitability

Environmental Constraints

Indicator of Suitability	Assessment	
 Site is predominantly, or wholly, within or adjacent to the following statutory environmental designations: Yes / No / partly or adjacent Ancient Woodland Area of Outstanding Natural Beauty (AONB) Biosphere Reserve Local Nature Reserve (LNR) National Nature Reserve (NNR) National Park Ramsar Site Site of Special Scientific Interest (SSSI)* Special Area of Conservation (SAC) Special Protection Area (SPA) Does the site fall within a SSSI Impact Risk Zone and would the proposed use/development trigger the requirement to consult Natural England? 	No The site is within the Pasturefields Salt Marsh SSSI and Chartley Moss SSSI. The site is approx. 2.5km from Chartley Moss National Nature Reserve, West Midlands Mosses SAC, the Midland Meres & Mosses - Phase 1 Ramsar Site and Chartley Moss SSSI	
Site is predominantly, or wholly, within or adjacent to the following non statutory environmental designations: Yes / No / partly or adjacent / Unknown Green Infrastructure Corridor Local Wildlife Site (LWS) Public Open Space Site of Importance for Nature Conservation (SINC) Nature Improvement Area Regionally Important Geological Site Other	Unknown	
Site is predominantly, or wholly, within Flood Zones 2 or 3? Flood Zone 1: Low Risk Flood Zone 2: Medium Risk Flood Zone 3 (less or more vulnerable site use): Medium Risk Flood Zone 3 (highly vulnerable site use): High Risk	Medium Risk to High Risk A significant proportion of the site is in Flood Zone 3 associated with the Trent and Mersey Canal and its tributaries. The SFRA (2019) reports the most recent incident of overtopping in January 2013. It may be possible to bring forward development on parts of the site, along the A51 corridor, or in the north east. However large parts of the site will not be available for development. The EA have indicated that detailed modelling is not currently available but if undertaken the flood extents would be better defined. This could increase/decrease the area suitable for development. Integrated flood risk and surface water drainage solutions could be considered.	

Indicator of Suitability	Assessment
 Site is at risk of surface water flooding? Less than 15% of the site is affected by medium or high risk of surface water flooding – Low Risk >15% of the site is affected by medium or high risk of surface water flooding – Medium Risk 	Central parts of the site have low to medium flood risk from surface water. The northern part of the site (north of the A518) has medium to high surface water flood risk.
Is the land classified as the best and most versatile agricultural land (Grades 1, 2 or 3a) Yes / No / Unknown	Central part of site with flood risk issues is Grade 4 poor quality agricultural land, with remainder of site being Grade 3 good to moderate quality agricultural land
 Site contains habitats with the potential to support priority species? Does the site contain local wildlife-rich habitats? Is the site part of: UK BAP Priority Habitat; a wider ecological network (including the hierarchy of international, national and locally designated sites of importance for biodiversity); wildlife corridors (and stepping stones that connect them); and/or an area identified by national and local partnerships for habitat management, enhancement, restoration or creation? Yes / No / Unknown 	Yes The central part of the site is a Floodplain Grazing Marsh Priority Habitat and Refined Coastal and Floodplain Grazing Marsh. The site borders Good quality semi-improved grassland
Site is predominantly, or wholly, within or adjacent to an Air Quality Management Area (AQMA)? Yes / No / Unknown	No
Geology	 <u>Superficial;</u> Northern area underlain by glaciofluvial sheet deposits and peat Eastern extent underlain by till Southern and western area underlain by river terrace deposits Southern-western extent underlain by alluvium <u>Bedrock;</u> Mercia Mudstone (mudstone)
Made Ground	No Made Ground is mapped at the site, although it is expected based on current/former site uses
Radon	Less than 1% homes above the action level

Indicator of Suitability	Assessment
Contamination	 Yes Current mapping: Current farms and farmland 'Dismantled railway' labelled along southeastern site boundary Current railway across central site area Disused Hixon Airfield to the south of the site Historical mapping: Former Stafford and Uttoxeter railway along southern site boundary and southern area of the site Former Weston Salt Works and Manure Works on south-western site boundary (until 1921-1922) when it becomes a former Albaster Bowl Works, then a depot Former smithy Landfills: None within 250m from the site Other: Peat deposits The Environment Agency indciates that when taking into account opportunities provided by redevelopment, all sites may have smaller areas of contamination down to individual farm or industrial unit scale. Development of these sites
	provides the opportunity to address these contamination issues and provide sites that are cleaner and healthier for the water environment.
Aquifer status	 <u>Superficial:</u> River terrace deposits, alluvium and glaciofluvial sheet deposits designated Secondary A aquifers Till designated Secondary (Undifferentiated) aquifer <u>Bedrock:</u> Mercia Mudstone designated Secondary B aquifer <u>Source Protection Zones (SPZ):</u> None within 1km from the site
Minerals	All but a small section in the far east of the site is within a Mineral Safeguarding Area for Sand and Gravel.

Indicator of Suitability	Assessment
Water Quality and Waste	The Environment Agency indicates the Weston
	site partially drains to sewage treatment works
	which have relaxed permit limits and headroom.
	Severn Trent have indicated that there is a limited
	capacity in the Weston area (up to 5,000
	properties) utilising Hixon WwTW.
	Any significant development above this would
	have to be transferred to Brancote WwTW.
	The Environment Agency indicates that status of
	the receiving watercourses should also be taken
	into account when considering the vulnerability of
	the water environment at that location, with those
	waterbodies under greatest stress posing the
	biggest constraint to additional large scale growth
	in the catchment. These locations include
	Weston, which has a poor WFD ecological status.

Physical Constraints

Indicator of Suitability	Assessment
Is the site: Flat or relatively flat Gently sloping or uneven Steeply sloping	Gently sloping or uneven
Is there existing vehicle access to the site, or potential to create suitable access? Yes / No / Unknown	Yes There is potential to create access from A roads
Is there existing pedestrian/cycle access to the site, or potential to create suitable access? Pedestrian? Yes / No / Unknown Cycle? Yes / No / Unknown	Yes There is potential to create suitable access
Are there any Public Rights of Way (PRoW) crossing the site? Yes / No / Unknown	Yes Public Rights of Way: Weston 6; and Public Rights of Way: Weston 10

Indicator of Suitability	Assessment
Transport commentary – including consideration of future upgrades/mitigation required etc.	The site's main vehicular access is provided by the A51 which is dualled north of Weston. This offers good access to Stone. However, access to Stafford and Rugeley is poorer with single carriageway A518 and A51 roads respectively. The site also has some narrow lanes such as Wadden Lane which are not suitable for serving a large development. Pedestrian and cyclist access is limited or non-existent. There is an hourly bus service between Uttoxeter and Stafford that runs through Hixon and Weston along the A51 and A518. However, the majority of the site lies to the north of the A51 and is some distance from the nearest bus stops in Weston. Improvements to bus services including increased frequency and re-routing through the site would be required to create a sustainable development. A new station on the active railway line would dramatically improve public transport access. However, the size of the site may not be sufficient to support the level of investment that would be required. Support would also be required from Network Rail. Facilities in Weston are very limited, although there is a primary school. Other services, including GP/dentist surgery, supermarket, etc. are available in Stafford, approximately 8km to the west. The A51 separates the main part of the site. There are no cycle facilities within the vicinity of the site. The main employment opportunities will be in Stafford, however the distance from the site. There are no cycle facilities within the vicinity of the site. The main employment opportunities will be in Stafford, however the distance from the site is too far for cycling to be a viable choice for most residents.
Are there veteran/ancient or other significant trees within or adjacent to the site? Are they owned by third parties? Significant trees? Yes, within / Yes, adjacent / No / Unknown Potentially veteran or ancient trees present? Yes, within / Yes, adjacent / No / Unknown Owned by third parties? Yes / No / Unknown	Yes There are mature deciduous trees along the southern boundary with Hixon Airfield.

Indicator of Suitability	Assessment
Is there any utilities infrastructure crossing the site i.e. power lines/pipe lines, or is the site in close proximity to hazardous installations? Yes / No / Unknown	Yes High pressure gas pipeline, the Sandon/Drayton Bassett National Grid Gas Pipeline, crosses the site in northwest-southeast direction. The pipeline imposes a constraint on the siting of buildings and fixed plant and machinery with a 15 metre buffer zone on each side of the pipe where built development cannot be permitted.
Utilities requirement	Western Power Distribution report the following requirements: Approximately 35MVA required; Establish new 132/11kV primary off Rugeley – Stafford; Approx. 4km of 132kV dual circuit cable; New primary with 2 x 132/11kV Tx's and 11kV switchboard; Costs approx. £12million.
Would development of the site result in a loss of social, amenity or community value? Yes / No / Unknown	No

Accessibility to Social/Green Infrastructure

Factor	Guidance
Distances to community facilities and services should be measured using walking routes from the	
centre of each site to each facility. Additional facilities can be added to the list. The distances are	
based on the assumption that 400m is equal to approximately 5 minutes' walk. This can be measured	
using Google Maps: <u>https://www.google.com/maps</u>	

What is the distance to the following facilities (measured from the edge of the site)	Distance (metres)	Comments Distance measured from the A518
<i>Town / local centre / shop</i>	<400m 400-1200m >1200m	400-1200m Weston
Bus /Tram Stop	<400m 400-800m >800m	>800m Services from Weston to Stafford Town Centre and Uttoxeter Town Centre
Train station	<400m 400-1200m >1200m	>1200m Stafford Train Station
Primary School	<400m 400-1200m >1200m	>1200m St Andrew's C of E Primary School
Secondary School	<1600m 1600-3900m >3900m	>3900m Stafford
<i>Open Space / recreation facilities</i>	<400m 400-800m >800m	>800m Weston
Cycle Route	<400m 400-800m >800m	>800m

Landscape and Visual Constraints

Indicator of Suitability	Assessment
Is the site low, medium or high sensitivity in terms of landscape? Low sensitivity: the site has few or no valued features, and/or valued features that are less susceptible to development and can accommodate change. Medium sensitivity: the site has many valued features, and/or valued features that are susceptible to development but could potentially accommodate some change with appropriate mitigation. High sensitivity: the site has highly valued features, and/or valued features that are highly susceptible to development. The site can accommodate minimal change.	With reference to the Planning for Landscape Change SPD (2001), most of Weston is covered by the Settled Farmlands Landscape Character Type (LCT). This is characterised as a " <i>There is a varied pattern of small to medium sized hedged fields with a scatter of small woodlands, often of ancient origin. The settlement pattern is mixed, and not distinctive.</i> " The key landscape features include " <i>hedgerow oak…hedge banks…undulating sloping landform; steep wooded stream valleys.</i> " The northern edge of Weston is covered by the Settled Plateau Farmland Slopes LCT which is characterised by "some mixed farming in a semi-regular pattern of hedged fields, with scattered woods, often of ancient origin, and areas of remnant heath. There is a dispersed settlement pattern of handlets and farmsteads, with urban influences in places." The west edge of Weston is covered by the Riparian Alluvial Lowlands LCT, which is characterised as " <i>landscapes of levels and lowland river valley…Large nucleated villages are typical, and the dominant land uses are cropping with some stock rearing in large hedged fields of a regular pattern, with few woodlands."</i> Landscape Value The Site is not covered by any statutory landscape designations. The condition of the fields, vegetation patterns and river corridors appear good, and in combination with the agricultural and transport land uses is representative of the LCT. The scenic quality is higher in proximity to the river corridors and away from the main roads. The river corridors are valued features, however overall there are no rare landscape features within Weston. Recreational value is limited to a few public rights of way at the northern edge of Weston. Perceptual aspects are varied due to the main roads and inter-visibility with settlement patterns. The area is not understood to have any association with artistic or historic events which contribute to the perception of natural beauty. On balance the value is medium. Landscape Sensitivity The plains of the River Trent, part of the Mersey Canal
	The combination of the medium value and medium susceptibility results in a medium sensitivity .

Is the site low,	
medium or high	
sensitivity in terms of	
visual amenity?	
Low sensitivity: the site is visually enclosed and has low intervisibility with the surrounding landscape, and/or it would not adversely impact any identified views. Medium sensitivity: the site is somewhat enclosed and has some intervisibility with the surrounding landscape, and/or it may adversely impact any identified views. High sensitivity: the site is visually open and has high intervisibility with the surrounding	Visual ValueThe Site is not part of a landscape which is recognised for its views in relation to planning designations or heritage assets, nor representations in art or literature.The value is low.Visual SusceptibilityThe low lying position of the Site and areas of mature vegetation aid in reducing the visibility of part of the Site, although proximity to Weston and views from the valley sides on the opposite side of the River Trent result in a high visibility of the western part of the Site. The susceptibility is medium.Visual Sensitivity The combination of the low value and medium susceptibility results in a medium sensitivity.
landscape, and/or it would adversely impact any recognised views.	
Coalescence and/or ribbon development/sprawl risk	Risk of sprawl and ribbon development adjacent to the A51 and potential coalescence between Weston, Amerton and Gayton. Development also needs to be considered in relation to Hixon to the south.
Defensible boundaries and level of potential containment	Mersey Canal, dismantled railway and road networks provide defensible boundaries and potential containment.

Heritage Constraints

Indicator of Suitability	Assessment
Would the development of the site cause harm to a designated heritage asset or its setting? Some impact, and/or mitigation possible	There are two designated heritage assets within the boundary of this site. These include Grange Farmhouse (Grade II, NHLE 1258140) in the south- east corner of the site and the Trent and Mersey Canal Conservation Area, in the south-west part of the site. Development of the site has the potential to impact on these assets. Any design proposals should preserve and enhance the significance of these assets including their setting. The Trent and Mersey Canal Conservation Area and associated assets should be considered as a whole and not just the part of the asset that falls within the site.
	Development of the site will have as a result the expansion of the village of Weston. There are three listed buildings in the village of Weston, one of which is the Grade II* St Andrew's Church (NHLE 1273479) incorporating a

	13th century tower and a 19th century spire. While it is not expected that the development will have a significant impact on the significance of the church, the spire of the church is visible in some views from the surrounding countryside and it should be considered during the design process. The rest of the buildings in the village of Weston are not expected to experience an impact as a result of the proposed development.
	The setting of Weston Hall (Grade II*, NHLE 1258043) is likely to be affected by the development of the site. This impact is not expected to be significant however the setting of the asset should be considered during any development proposals.
	Development of the site has the potential to affect the setting of the scheduled and listed Chartley Castle (SM, NHLE 1011192; Grade II*, NHLE 1258139). The remains of the castle are located in a raised position, illustrating its defensive use with views extending to the surrounding countryside, including the site. Therefore, development of the site has the potential to adversely affect the setting of this asset. Appropriate design and landscaping can help mitigate some of the harm caused to the significance of this asset.
	Sandon Park (NHLE 1001166) is a Grade II registered park and garden that extends approximately 850m north-west of the site. No significant impacts are expected on this asset, as there is no historic association between the site and the park and there are no designed views towards the site. However, the setting of the park and associated assets should be further considered during future development proposals.
	A number of additional listed buildings and scheduled monuments are spread across the surrounding countryside. No significant impacts are expected as a result of the development of the site however their setting should be considered and taken into consideration during the development of the site.
	A possible Bronze Age pit alignment (HER MST4270) is identified as a cropmark on aerial photographs of 1975 within the southern edge of the site.
Would the development of the site cause harm to a non-designated heritage asset or its	A possibly Saxon Earthwork Enclosure (HER MST4569) encompasses the village of Stowe-by-Chartley approx. 300m south-east of the Site. Development would likely not directly impact this feature, although its proximity to the Site is an indicator that currently unknown early medieval assets could exist within the boundary of the proposed development Site.
	The northern area of the site is along Amerton Brook and south of the A518 is characterised by a post-medieval water meadow system (HER MST13567), with a rectangular crop mark indicating an enclosure of unknown date (HER MST4266) identified on aerial photographs.
setting? Some impact, and/or	The disused and dismantled Stafford and Uttoxeter Railway (HER MST12320) runs along the southern edge of the site.
mitigation possible	Documentary evidence indicates a Salt Works (HER MST12316), Manure Works (HER MST12317) and associated Tramway (HER MST12319) stood at the western edge of the Site in the south of the village of Weston.
	The possible presence of a Bronze Age pit alignment in the south of the site may indicate limited prehistoric activity. Water meadows in the northern area of the site appear to be post-medieval. Other post-medieval and modern assets appear to have been largely dismantled or demolished, indicating that development of these areas of the Site are likely to be of low impact to the historic environment.

	At this stage, there does not appear to be any indication that archaeological assets at the Site would preclude any specific development. However, there is a need to establish design parameters following the production of a more detailed heritage appraisal. Parameters should identify areas within the site boundaries where development should be restricted, considering the presence of recorded archaeological assets with the site boundaries. Any impact on assets should be justified within design parameters according to national and local planning policy; particularly the National Planning Policy Framework 2019, Section 16.
	Where development is proposed, it is likely that pre-determination archaeological evaluation works (likely comprising geophysical survey and/or trial trench evaluation).
Historic England consultation	This broad location would have the potential to affect the significance, including the setting of multiple heritage assets – directly or indirectly. Additionally, consider the cumulative impacts of taking forward Site E and Site F, as well as the potential for merging two settlements through large scale new development.

Planning policy constraints

Indicator of Suitability	Assessment
<i>Is the site in the Green Belt?</i> Yes / No / Unknown	No
Is the site allocated for a particular use (e.g. housing / employment) or designated as open space in the adopted and / or emerging Local Plan?	No
Yes / No / Unknown	
Are there any other relevant planning policies relating to the site?	No
Is the site: Greenfield A mix of greenfield and previously developed land Previously developed land?	Greenfield
Is the site within, adjacent to or outside the existing built up area? Within the existing built up area (infill)? Adjacent to and connected to the existing built up area? Outside and not connected to the existing built up area?	Adjacent to and connected to the existing built up area
Is the site within, adjacent to or outside the existing settlement boundary (if one exists)? Within the existing settlement boundary? Adjacent to and connected to the existing settlement boundary? Outside and not connected to the existing settlement boundary?	Adjacent to and connected to the existing settlement boundary

Economy

Indicators of Suitability	Assessment
Regeneration potential- indices of Multiple Deprivation score	 The site is entirely within the Stafford 008A LSOA. The 2019 Index of Multiple of Deprivation (IMD) ranks the site's LSOA as follows (1st decile is most deprived): The Stafford 008A LSOA is in the 9th deprivation decile, meaning it is amongst the 20% least deprived parts of the country. This deprivation ranks highlight that there is low potential for regeneration as the area does not suffer from much deprivation.
Regeneration potential- Indices of Multiple Deprivation (surroundings)	 The surrounding area of the site contains the Stafford 004A, Stafford 006, Stafford 008D LSOAs and Stafford 011E. The 2019 IMD ranks these surrounding LSOAs as follows: The Stafford 004A LSOA is in the 6th deprivation decile, meaning it is amongst the 50% least deprived parts of the country; The Stafford 006C LSOA is in the 8th deprivation decile, meaning it is amongst the 30% least deprived parts of the country; The Stafford 008D LSOA is in the 9th deprivation decile, meaning it is amongst the 30% least deprived parts of the country; The Stafford 008D LSOA is in the 9th deprivation decile, meaning it is amongst the 20% least deprived parts of the country; and The Stafford 011E LSOA is in the 8th deprivation decile, meaning it is amongst the 30% least deprived parts of the country;
Economic development potential- assessment conclusion	The area attracts major businesses with good concentration of employment located within the Airfield Industrial Estate immediately to the south of the site which includes businesses operating in the advanced manufacturing auto-aero priority sector. The cluster includes the presence of JCB, which is a key asset for the borough. The employment site in Pasturefields is easily accessible by the A51 and enhances attractiveness for future development as a business location. Future employment development could benefit from the proximity to existing sectors and assets, helping to advance employment growth in these areas. The housing, as well as the housing allocations in the vicinity, could bring in the necessary workforce to support the future development and lessen commuting needs. This scale of proposed activity would likely be supported in the area.

Conclusions

Conclusions	Assessment
The site is potentially suitable The site is not suitable	Potentially suitable
Summary of justification for rating	 The site is located east and south of Weston, with the site's main vehicular access potentially provided by the A51 which is dualled north of Weston; The site is within the SSSI impact risk zone of the Pasturefields Salt Marsh SSSI and Chartley Moss SSSI. The site is approx. 2.5km from Chartley Moss National Nature Reserve, West Midlands Mosses SAC, the Midland Meres & Mosses - Phase 1 Ramsar Site and Chartley Moss SSSI; A significant proportion of the site is in Flood Zone 3 associated with the Trent and Mersey Canal and its tributaries. There is potential to bring forward development on parts of the site will not be suitable for development due to flood risk; The northerm part of the site (north of the A518) is prone to medium to high surface water flood risk; The central part of site with flood risk issues is Grade 4 poor quality agricultural land; The central part of the site is a Floodplain Grazing Marsh Priority Habitat and Floodplain Grazing Marsh; Public transport access could be improved by adding a station to the active railway line running through the site; High pressure gas pipeline, the Sandon/Drayton Bassett National Grid Gas Pipeline, crosses the site in northwest-southeast direction. The pipeline imposes a constraint on the siting of buildings and fixed plant and machinery with a 15 metre buffer zone on each side of the pipe where built development cannot be permitted; The site has a medium landscape value and medium susceptibility to development resulting in a medium landscape sensitivity. The low lying position of the Site, although proximity to Weston and views from the valley sides on the opposite side of the River Trent result in a high visibility of the wester mpart of the Site; Mersey Canal, dismantled railway and road networks provide defensible boundaries and potential containment; There are two designated heritage assets within the site, a Grade II listed building in the south-west act or

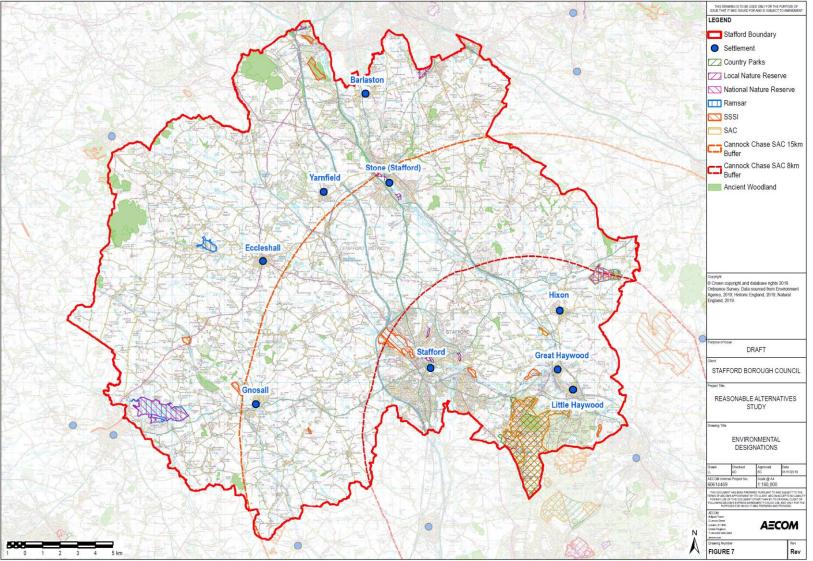
Conclusions	Assessment
Summary of justification for rating	 The area where the site is located does appear to attract some main employers, with a cluster of industrial and manufacturing companies to the south of the site. Consequently, manufacturing is the most prominent broad industrial group for the area, including a good portion in high-tech manufacturing. Workers do not tend to live close to their place of work, and typically travel by car; The Environment Agency indicates the Weston site partially drains to sewage treatment works which have relaxed permit limits and headroom. Severn Trent have indicated that there is a limited capacity in the Weston area (up to 5,000 properties) utilising Hixon WwTW. Any significant development above this would have to be transferred to Brancote WwTW. The Environment Agency indicates that status of the receiving watercourses should also be taken into account when considering the vulnerability of the water environment at that location, with those waterbodies under greatest stress posing the biggest constraint to additional large scale growth in the catchment. These locations include Weston, which has a poor WFD ecological status.

Appendix B - Constraints and Opportunities

Environment

11.1 The below summary map depicts the key environmental constraints and designations within Stafford Borough Council, including 15km and 8km buffer areas for the Cannock Chase SAC.

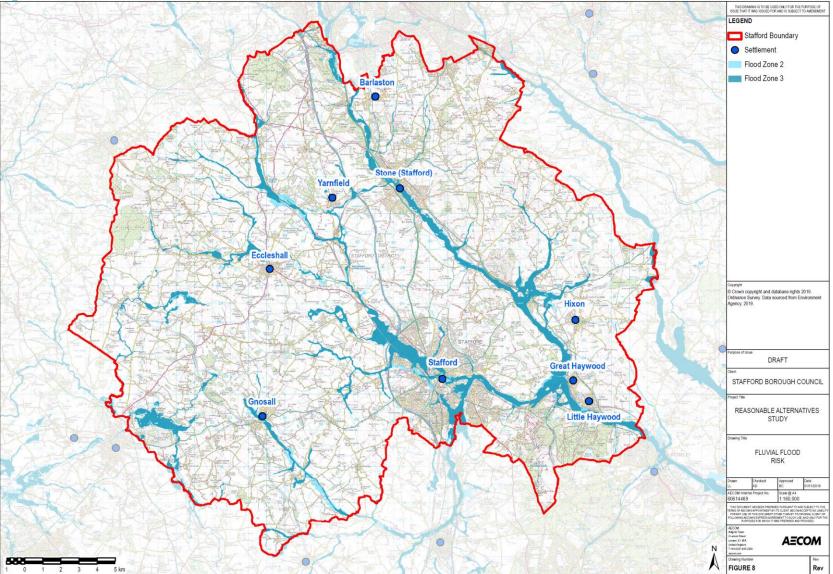
Figure 8 Environmental Designations



Flood Risk

11.2 Fluvial Flood Risk Zones 2 and 3 are shown in the below map.

Figure 9 Fluvial Flood Risk



Stafford Borough Strategic Development Site Options

Geo-environmental

11.3 The below maps illustrate the principal: geo-environmental designations; and Bedrock and Superficial Geology found in Stafford.

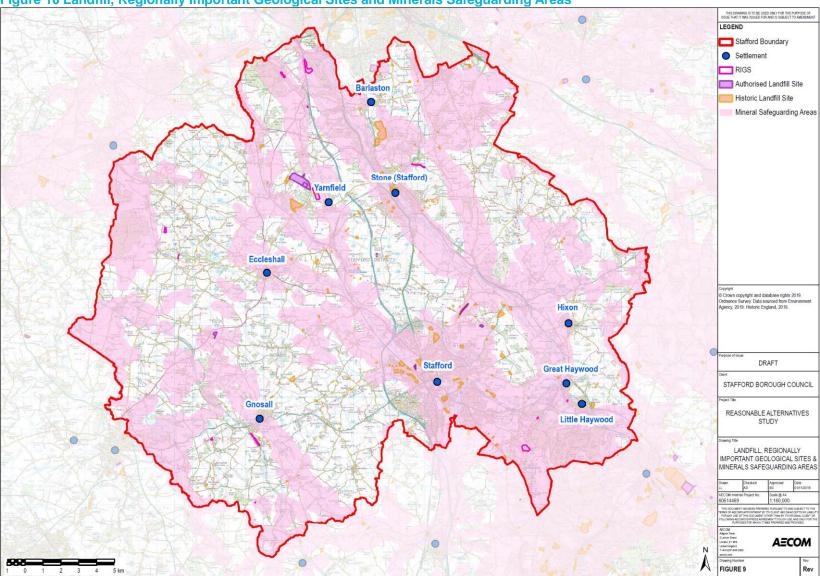




Figure 11 Bedrock Geology

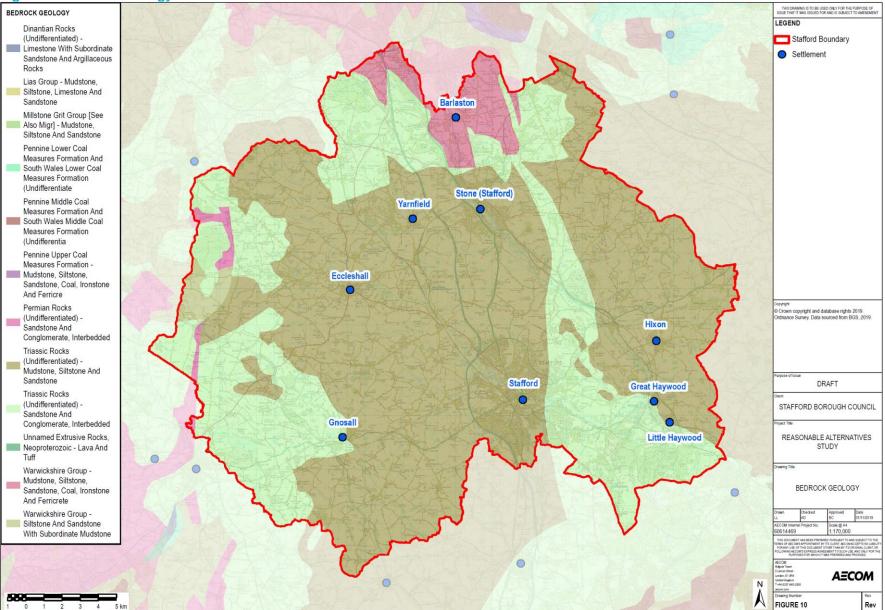
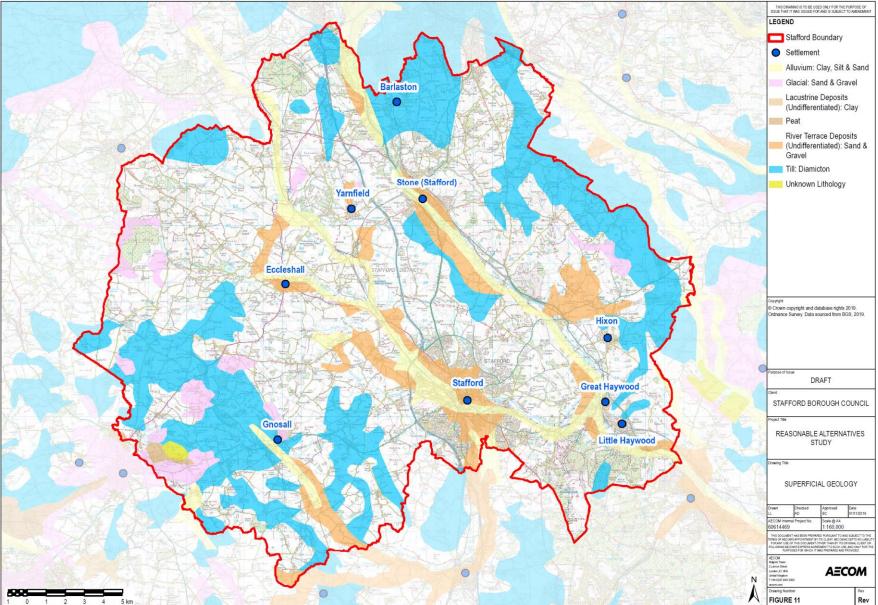


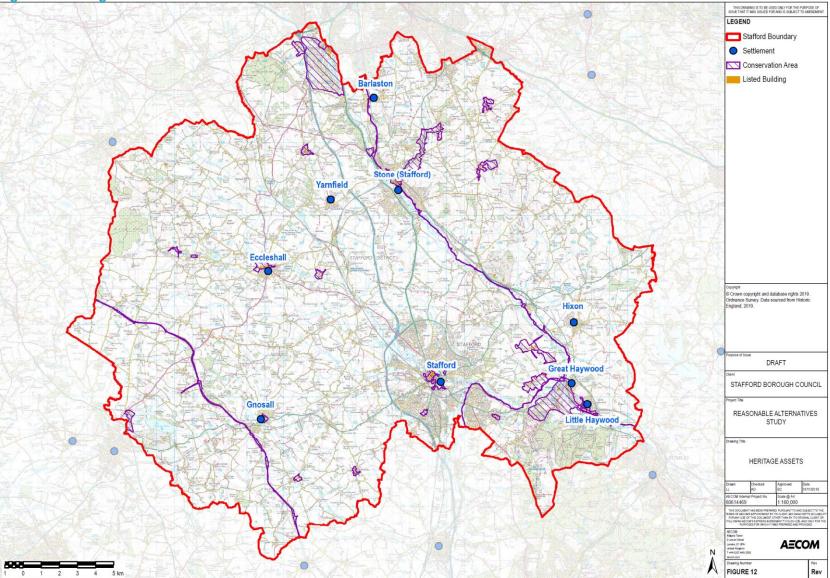
Figure 12 Superficial Geology



Heritage

11.4 The below map illustrates the principal heritage assets found in the study area.

Figure 13 Heritage Assets



Stafford Borough Strategic Development Site Options

Infrastructure

11.5 Key social infrastructure, transport and utilities are shown in the below maps.

Figure 14 Social Infrastructure

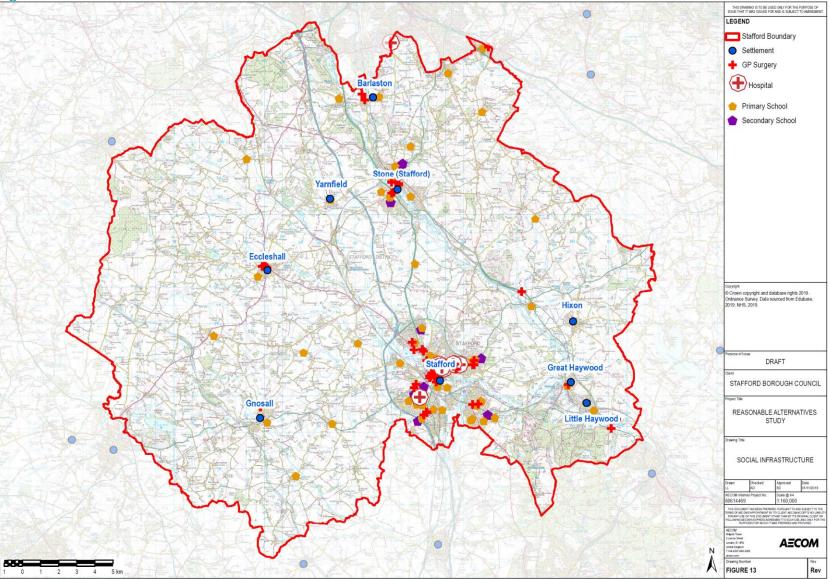
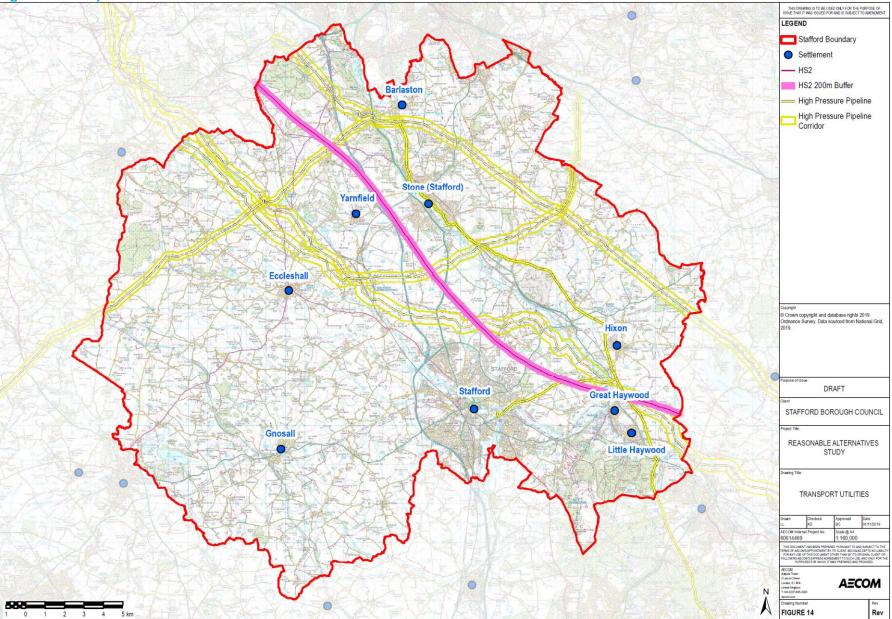


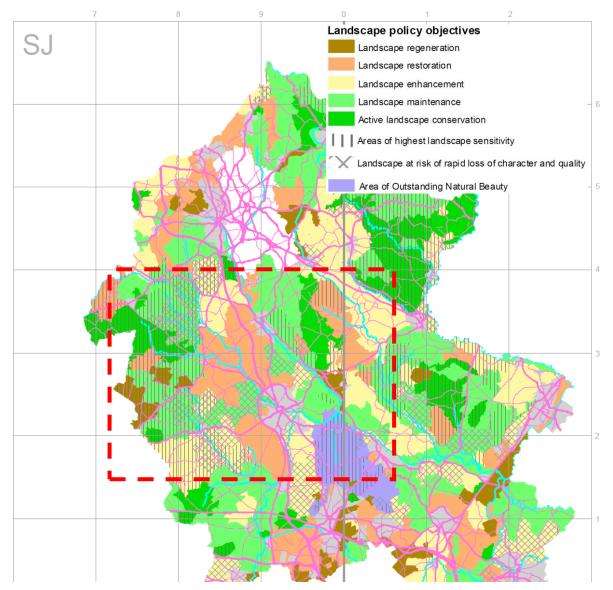
Figure 15 Transport and Utilities



Landscape

11.6 The Staffordshire Planning for Landscape Change and Character Assessment was adopted on 10 May 2001 as Supplementary Planning Guidance to the Staffordshire and Stoke on Trent Structure Plan 1996-2011. Although this Plan has now been revoked, the Staffordshire and Stoke on Trent Joint Waste Local Plan (2010 – 2026) (Adopted March 2013) requires that regard is given to Planning for Landscape Change or its successor document which will remain a material consideration. Relevant sections of the Supplementary Planning Guidance for Stafford Borough are reproduced below:





⁴¹ Accessed at: <u>https://www.staffordshire.gov.uk/environment/Environment-and-countryside/NaturalEnvironmentLandscape.aspx</u>

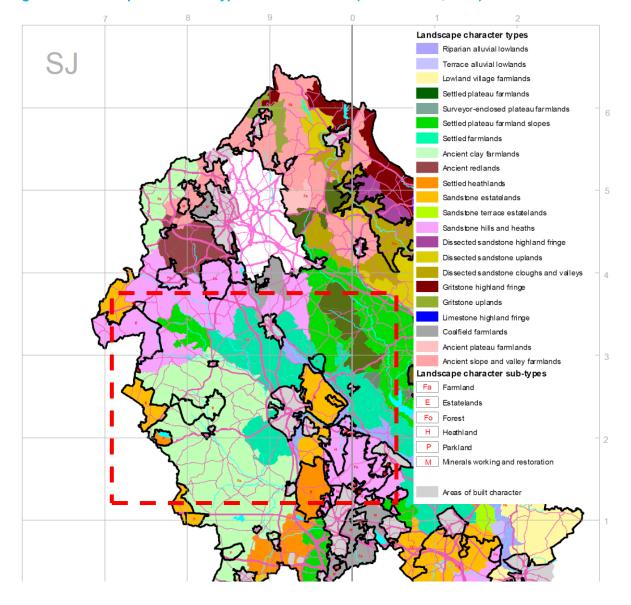


Figure 17 Landscape Character Types in Staffordshire (Source: SCC, 2001)

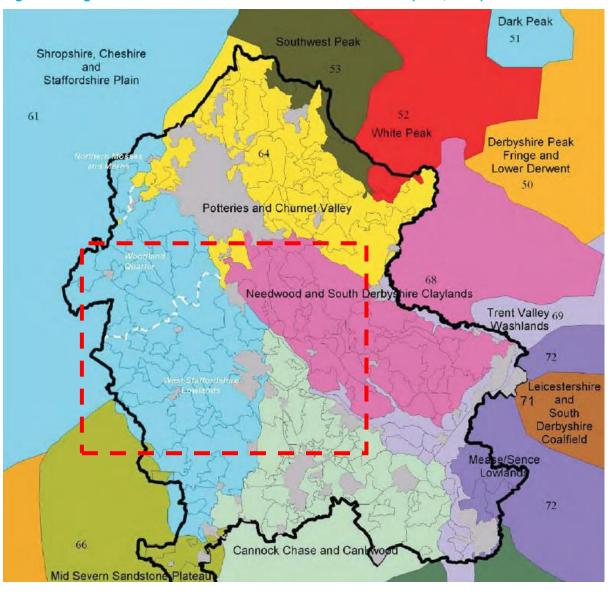


Figure 18 Regional Character Areas in and around Staffordshire (SCC, 2001)

David Carlisle Associate Director E: david.a.carlisle@aecom.com

AECOM Limited Aldgate Tower 2 Leman Street London E1 8FA United Kingdom aecom.com