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EXECUTIVE SUMMARY

- i) This report appraises the potential of various areas for new employment allocations in Shrewsbury and Atcham Borough in Shropshire. It has been carried out for Shrewsbury and Atcham Borough Council (SABC) and Shropshire County Council to provide robust evidence to underpin and inform the Local Development Framework, and to help develop clear and realistic planning policies to 2026.
- ii) SABC provided an initial long list of suggested areas to be considered, based on potential development locations in Shrewsbury, linked to strategic transport routes and public transport corridors; existing employment areas; housing areas; and/or areas which are able to accommodate a reasonable scale of development (upwards of eight ha) within the town's road bypasses. The potential rural locations focus on areas of previous employment development or allocations; and the few settlements of suitable scale and service provision.
- iii) The long list has been considered initially for market attractiveness and transport issues to generate a more focused short list of preferred options. These sites have then been investigated in more detail to consider ownership, economic, development, sustainability, environmental constraints, ground conditions and infrastructure issues to identify those most feasible for development.
- iv) Each urban location has been graded using a standard scoring system made up of six individual measures. These are: proximity to M54, prominence, orientation, accessibility, environmental setting and flexibility. The rural options are assessed more subjectively because general areas are suggested as opposed to specific sites.
- v) The preferred sites, based on market assessment, more than provide the 50-52.5 ha required to 2026 according to the Regional Spatial Strategy and are shown in Table ES1. Large areas of land are highlighted, but it is assumed that only defined areas will be used for employment, so an indicative size for the potential employment land allocation is shown in the Table. In total 67 ha could be provided, split evenly between industrial uses (mainly B1c, but some B2 and small-scale B8), although this is flexible, and can be left, to some degree, to market forces to decide. This will also be affected and controlled by economic development and planning policies.

- vi) Six ha, nine percent, is in the rural area. This is close to the 15 percent recommended by previous guidance from BE Group. The slight rural shortfall could be made up by enlarging the sites or encouraging development at the Borough's rural industrial estates, e.g. Leaton, Condoover or Malehurst.

Table ES1 – Preferred Sites Based on Marketability

Site	Indicative Size, ha	Urban/Rural	Office Area, ha	Industrial Area, ha
Oteley Road	20	Urban	10	10
Shrewsbury Business Park South	10	Urban	10	0
Ellesmere Road	10	Urban	5	5
West of Battlefield Road	7	Urban	0	7
Oxon Business Park Extension	12	Urban	6	6
Meole Brace	2	Urban	2	0
Atcham Industrial Estate	5	Rural	0	5
Leebotwood	1	Rural	0.5	0.5
Total	67	-	33.5	33.5

- vii) This portfolio of preferred sites (Table ES2) means there is no need to break into 'new' areas on the western side of Shrewsbury (i.e. off Hanwood and Mytton Oak Roads). If for whatever reason, any of this land is not viable, the next best options would be further expanding the Oxon Business Park Extension to incorporate areas to the west (providing the North West Relief Road is built). The last choice would be to open up a new business park in the west – there is no real difference between any of the four locations in this area: Hanwood Roundabout North and South or Mytton Oak Roundabout North and South.
- viii) The transport assessment looked at the potential sites in terms of linkages to housing, related uses, other employment, strategic road network, public transport and site access. This validates those sites identified in the market assessment.
- ix) In terms of landscape assessment only three urban sites have a sensitivity grading above medium. They are Churncote Roundabout North, Ellesmere Road and London Road/College Link. By their very nature, rural sites can have a significant landscape impact, but this is an accepted trade-off (as long as development is appropriate).

- x) There is no real flood risk affecting any of the urban sites in consideration. However, there are some small-scale water features within or adjacent to some of the sites that will need appropriate management. Of the rural sites, three have high flood risk potential – Dorrington, Minsterley and Malehurst – none of which are preferred from a marketability viewpoint anyway.

- xi) The initial assessment of the ground conditions of the sites has highlighted a number of potential geo-environmental development constraints. However, suitable mitigation measures can be employed to enable their development. Further assessment may determine whether or not these potential constraints pose a risk to the proposed developments and their relative magnitude of risk. It is recommended that the following sequence of studies and investigations are undertaken: detailed desk study, preliminary ground investigation, followed by full ground investigation.

- xii) In light of the poor level of information readily available from the utilities company, further actions are needed. Further enquiries to the utilities companies, calculation of anticipated loadings for each site, detailed site assessments, information review and planned improvement works. However it is too early in the sites' planning to finalise this information.

- xiii) The portfolio of sites will more than meet the land supply required into the future, as well as providing scope to cover any contingencies. They meet national, regional and local planning policy. They should prove attractive to private sector developers and occupiers, minimising the need for public sector intervention.

Table ES2 – Preferred Sites Summary Matrix

Site	Total Approx. Size, ha	Indicative Employment Size, ha	Office Area, ha	Industrial Area, ha	Urban/Rural	Sustainable (inc Transport Assessment)	Other Major Constraints	Score	Reinforces Existing Employment Area
Oteley Road	63.5	20	10	10	Urban	Yes	No	57	No
Shrewsbury Business Park South	10.0	10	10	0	Urban	Yes	No	55	Yes
Ellesmere Road	46.8	10	5	5	Urban	Yes	Dependant on North West Relief Road RAMSAR site	48	Partially
West of Battlefield Road	7.8	7	0	7	Urban	Yes	No	46	Yes
Oxon Business Park Extension	38.9 (part)	12	6	6	Urban	Yes	Dependant on North West Relief Road	32	Yes
Meole Brace	5.8	2	2	0	Urban	Yes	No	39	Yes
Atcham Industrial Estate	5.0	5	0	5	Rural	Yes	No	-	Yes
Leebotwood	1.0	1	0.5	0.5	Rural	Yes	No	-	Partially
Total	178.8	67	33.5	33.5					

Note: Faber Maunsell's later, more detailed, Transport Strategy Report discounted the Ellesmere Road site for employment/mix-use development

1.0 INTRODUCTION

- 1.1 This report appraises the potential of various areas for new employment allocations in Shrewsbury and Atcham Borough in Shropshire. It has been carried out for Shrewsbury and Atcham Borough Council (SABC) and Shropshire County Council (SCC).
- 1.2 It has been commissioned to provide robust evidence to underpin and inform the Local Development Framework, and allow SABC to develop clear and realistic planning policies to 2026, following on from an earlier Economic Assessment and Employment Land Study (also carried out by BE Group).
- 1.3 The report has been compiled by BE Group, economic development and property consultants based at the Ingot House, Kelvin Close, Birchwood, Warrington WA3 7PB. BE Group's Agency team are experts on all aspects of the property market. The company advises national developers and investors such as Duchy of Lancaster, Development Securities, Modus Properties and St Modwen. The company also provides property advice to major blue chip companies such as BNFL, Fujitsu, Thermo Electron and Electrowatt.
- 1.4 The company's Economic Development team are experts in employment land review assessments, having carried out such studies for Leicester City Council, Derby City Council, Denbighshire County Council and North Shropshire District Council for example, amongst many others. BE Group has also had considerable input (in various capacities) into the development of three of the North West's strategic employment sites over recent years: Chester Business Park, Wirral International Business Park and Halton's Daresbury Park.
- 1.5 BE Group has been assisted by Faber Maunsell, highways and engineering experts.
- 1.6 Shrewsbury is a sub-regional focus for development and a strategic centre in the West Midlands Regional Spatial Strategy. Linked to this, the Borough of Shrewsbury and Atcham has been named as a New Growth Point by the Government, establishing a partnership for sustainable growth. Integral to the approach is that housing and employment development should be brought forward in balance and with associated infrastructure provision.

- 1.7 This commission focuses on identifying appropriate additional employment land as part of this approach, and is an initial phase of work prior to more detailed feasibility studies and economic assessments of sites to be taken forward as preferred options. The study relates to class B employment uses, including offices, and considers both the urban and rural areas of the Borough, although the main focus is Shrewsbury. It concentrates on new land supply but recognises that sites may also come forward in Shrewsbury town centre.
- 1.8 Although not the focus of this report, land for waste management uses will also be needed. Waste management as an environmental technology is not an ‘end of pipe’ problem, but an integral part of the sectoral mix of the modern economy. Where relevant, appropriate sites for such a use will be highlighted.

Sites Long List

- 1.9 SABC provided an initial long list of suggested locations to be considered. These are shown in Table 1. Site plans are provided at Appendix 1. This list has been generated from a consideration of potential development locations in Shrewsbury, linked to strategic transport routes and public transport corridors; existing employment areas; housing areas; and/or areas which are able to accommodate a reasonable scale of development (upwards of eight ha) within the town’s road bypasses. The potential rural locations focus on areas of previous employment development or allocations; and the few settlements of suitable scale and service provision. It is considered that the long list represents a comprehensive set of realistic options.

Table 1 – Sites Long List

Urban	Rural
West of Battlefield Road	Atcham Industrial Estate
A53/A49 Junction	Leaton Industrial Estate
Adj 320 Monkmoor Road	Condover Industrial Estate
Shrewsbury Business Park South	Leebotwood
Land at Nobold & Mousecroft Lane	Dorrington
London Road/College Link	Ford
Oteley Road	Minsterley
Meole Brace	Malehurst
Mytton Oak Roundabout North	
Mytton Oak Roundabout South	

Urban	Rural
Hanwood Roundabout North	
Hanwood Roundabout South	
Oxon Business Park Extension	
Ellesmere Road	
Oxon Park & Ride	
Churncote Roundabout North	
Churncote Roundabout South	

Methodology

- 1.10 A number of research methods have been used in the compilation of data for this study. They include site visits, face-to-face and telephone interviews with property market stakeholders such as developers, investors and their agents.
- 1.11 Extensive consultation with various arms of the public sector with responsibility for the study area has also been entered into. Desktop analysis of existing reports and documents has also been filtered into the overall findings.
- 1.12 The long list has been considered initially for market attractiveness and transport issues to generate a more focused short list of preferred options. These sites have then been investigated in more detail to consider ownership, economic, development, sustainability, environmental constraints, ground conditions and infrastructure issues to identify those most feasible for development.

2.0 STRATEGY CONTEXT

Introduction

- 2.1 As part of the research a number of reports and strategies that have relevance to the development of new employment areas are reviewed. Whilst some documents have a focus local to Shrewsbury and Atcham Borough others are considered that have a national or regional perspective.
- 2.2 An understanding of the strategies and reports contained within this section is needed to show strategic alignment and a holistic approach to promote sustainable development.
- 2.3 The following key documents have a major influence on development decisions in the Borough and include Regional, County and local planning guidance together with the Regional Economic Strategy.

Regional Spatial Strategy for the West Midlands 2004

- 2.4 Regional Planning Guidance provides a spatial strategy to guide the preparation of local authority development plans and attempts to address four principal challenges:
- Urban renaissance
 - Rural renaissance
 - Diversifying and modernising the region's economy
 - Modernising the transport infrastructure of the West Midlands.
- 2.5 Shrewsbury is identified as a sub-regional focus for development (one of five, along with Telford, Worcester, Hereford and Rugby). It is also a strategic town centre within the region (one of 25 identified in policy PA11). Furthermore the Borough has been named as a New Growth Point by the Department for Communities and Local Government confirming its role as a location for growth.
- 2.6 Guidance related to employment land and development, most applicable to the Borough, is covered by the following policies: PA1, PA5, PA6 and PA11. Where development opportunities are outside the major urban areas Policy PA1 emphasises sustainable development to meet the needs of rural renaissance and local regeneration. PA6 provides a portfolio of employment land, which meets needs in terms of quality, quantity, availability and suitability. PA11 looks in particular at

Shrewsbury (among others in the region) as a focus for large-scale leisure and office developments.

- 2.7 There is a general requirement to manage the scale of development in the County to help to promote urban renaissance elsewhere in the West Midlands. However, Shrewsbury's role as a sub-regional focus, suggests that this will be a less severe constraint in the Borough than in other parts of the County. Although this policy is primarily directed towards housing, its implications for the economy cannot be overlooked.

West Midlands Economic Strategy 2004

- 2.8 Advantage West Midlands' Regional Economic Strategy 'Creating Advantage' identifies twin themes that will drive all actions: creating wealth through enterprise and providing access to opportunity. The strategy has cross cutting ideas: including fostering an innovative culture, valuing equality of opportunity and building a sustainable future. Four main pillars have been identified to provide a focus to deliver the strategy:

- Developing a diverse and dynamic business base
- Promoting a learning and skilful region
- Creating the conditions for growth
- Regenerating communities.

- 2.9 It includes delivering premises for early stage and grow-on businesses to help develop a knowledge economy in the region. It also says, "ensuring the provision of good quality sites in the right location and of the right type is a key condition for growth." The Strategy is currently under review, but is likely to continue to support the development of high value sectors and the provision of the necessary infrastructure to increase the number of business start-ups.

National Planning Guidance

- 2.10 In respect of employment, relevant national planning policy guidance is set out in six key statements:
- PPS1: Delivering Sustainable Development including Economic Development
 - PPG4: Industrial and Commercial Development and Small Firms
 - PPS6: Town Centres
 - PPS7: Sustainable Development in Rural Areas

- PPS12: Local Development Frameworks
- PPG13: Transport.

2.11 These guidance notes and statements are intended to assist local authority policy makers and the following key factors are important in deciding on new employment land allocations within Local Development Frameworks:

- Provide sufficient land to meet future business and commercial requirements
- Provide land readily capable of development i.e. servicing and remediation costs minimal
- Provide sites well served by infrastructure i.e. services, communication and transport
- Utilise sustainable locations
- Avoid locations that are not well served by public transport.

2.12 In particular PPG4 requires development plans to take account of the different needs of businesses; provide for choice, flexibility and competition; and realistically assess the needs of businesses. They need to ensure that sufficient land is provided which takes account of their locational needs, which is readily capable of development and is well served by infrastructure.

The Shropshire and Telford and Wrekin Joint Structure Plan 1996-2011

2.13 In respect of employment, the Joint Structure Plan strategic objectives are defined as:

- Conserving resources
- Improving the quality of life
- Achieving sustainable development patterns
- Fostering a prosperous economy within a sustainable framework.

2.14 The spatial strategy set out in the Joint Structure Plan acknowledges that most development shall take place in or on the edge of the principal growth centres of Telford and Shrewsbury. This strategy will therefore align itself with the principles of sustainable development, which advocates development close to existing areas of employment and housing to allow greater connectivity between jobs and the workforce. Underpinning this strategy are a number of factors:

- Providing well located and accessible sites
- Sustaining communities with employment opportunities

- Locating employment near to transport infrastructure.

2.15 It also highlights the potential of Shrewsbury to continue to develop and enhance its role as a County town taking advantage of its strategic position and using the most sustainable sites for suitable development.

The Shrewsbury and Atcham Borough Local Plan 2001

2.16 In respect of employment the Shrewsbury and Atcham Local Plan seeks to reinforce the objectives of the Shropshire and Telford and Wrekin Joint Structure Plan, in particular:

- Protecting employment land from other forms of development
- Providing a range of opportunities for commercial development
- Attracting inward investment to broaden the economic base
- Creating commercial opportunities in Shrewsbury to maintain its economic vitality and viability
- Facilitating opportunities in Shrewsbury town centre to maintain its vitality and viability.

2.17 The Local Plan focuses development on Shrewsbury, which is the main concentration of population, services and transport infrastructure. Therefore employment land is allocated in and around the town to create a sustainable pattern of development – linking housing to employment. It also creates larger, quality areas that are capable, not only of accommodating local growth, but also attracting inward investment and other opportunities, reflecting its role as Shropshire's County town.

2.18 Employment development in rural areas is expected to be small scale, located on principal transport routes with public transport and appropriate level of services and facilities.

2.19 The Local Plan therefore allocated 14 additional sites, only two of which were outside Shrewsbury. As well as identifying existing employment areas to be protected. They included a range of opportunities, mainly in-fill sites at existing employment areas. The larger allocations expanded or consolidated key employment areas such as Battlefield Enterprise Park and Oxon Business Park. Emstrey Business Park was identified as a high quality landscaped office park, and since developed as such – the Shrewsbury Business Park.

Shrewsbury Northern Corridor Regeneration Framework

- 2.20 This study, commissioned by Shrewsbury & Atcham Borough Council, Shropshire County Council and Advantage West Midlands looks at the A5112/A5191 area of Shrewsbury.
- 2.21 A key strand of this strategy is the Northern Enterprise Quarter that encompasses the Food Enterprise Park, Battlefield Enterprise Park, Sundorne Retail Park, Park and Ride and a number of nearby greenfield sites (including West of Battlefield Road and A53/A49 Junction considered in this study). This looks to consolidate employment uses and maximising the potential for public transport uses linked to further employment and residential development in this area. The two sites (mentioned above) are recommended for consideration as greenfield sites advocating a sequential approach to their possible development for housing in the future.

Summary

- 2.22 In this sub-section the findings of the preceding research are drawn together into a number of conclusions.
- 2.23 The strategies all point towards focusing employment development of the Borough in Shrewsbury and targeting high growth sectors and therefore providing the land and buildings to attract them. They also aim to increase inward investment.
- 2.24 The employment land and premises portfolio needs to be balanced and to adequately cater to all sectors of the economy, i.e. small and large businesses, high and low quality operations.
- 2.25 The existing employment areas should be consolidated and reinforced, e.g. Battlefield, Oxon Business Park and Shrewsbury Business Park.

3.0 BACKGROUND

Introduction

- 3.1 This study concentrates on identifying the most appropriate locations for development. However as a precursor to this an understanding of how much and the type of land required is needed.
- 3.2 SABC has commissioned two recent reports looking at this and the key findings are outlined below. The outcome of two West Midlands Regional Assembly documents are also presented.

Economic Assessment and Employment Land Study 2005 (BE Group)

- 3.3 This report assessed the supply of employment land in the Borough over the period to 2021. It found that there was a 34 ha shortage of employment land to 2021, based on a supply (at April 1st 2004) of 72 ha. (This has since fallen to 62 ha, the latest available figure from April 2006). This is using an average annual take-up of 4.6 ha/year to 2010; 3.7 ha/year thereafter.
- 3.4 It recommended a phased approach, releasing land in chunks so as not to flood the market and hinder the development of this land. It prioritised expanding existing employment areas over opening up new areas on the grounds of sustainability and environmental considerations.
- 3.5 In terms of location it suggested providing some 13 ha to the north east; 5 ha to the south east; 1.5 ha to the north and some 6 ha to the north west. It also indicated that 5 ha could be allocated for industrial uses to the south of Shrewsbury.
- 3.6 It gave little definitive guidance as to the split of land between office and industrial uses. It suggested that this should be left to market forces. Generally industrial demand is stronger than office in the Borough, however all trends suggest that this should gradually reverse as time progresses.
- 3.7 The rural areas, those outside Shrewsbury should account for 15 percent of the supply. The preferred location is along the A49.
- 3.8 The only existing rural site that was identified as of particularly poor quality was The Poultry Unit, Ford.

Shrewsbury Offices Study 2007 (BE Group)

- 3.9 This report assesses the office market (use class B1a) in Shrewsbury. It found that there is approximately 121,124 sqm of offices in Shrewsbury made up by 596 properties. In terms of floorspace this is split roughly 40:40:20 between the town centre, mid-town and out-of-town areas.
- 3.10 Economic forecasts are very clear about the increasing need for offices in Shrewsbury over the next 15 years. Another 20,000 sqm will be required in the town centre, a further 40,000 sqm in the rest of the Borough (i.e. mostly in the rest of Shrewsbury – mid-town and out-of-town).
- 3.11 This office growth cannot all be accommodated in the town centre because of the physical restrictions to doing so. Therefore opportunities in mid-town locations should be promoted as well as expanding out-of-town business parks.

Regional Centres Study 2006 (Roger Tym & Partners)

- 3.12 The purpose of this report is to identify those centres in the region where major new retail, leisure and office development should be focused over the period to 2021. It assesses how growth across the region should be accommodated within planning constraints and to generate the greatest overall economic benefit.
- 3.13 In setting the context for the research, it highlights that only 31 percent of the office floorspace completed in the last three years throughout the region has been in town centres. This is because of the:
- Existence of major out-of-town employment land allocations
 - Lower costs of out-of-town accommodation
 - Difficulties of town centre development land assembly
 - Competition in town centres for higher value uses.
- 3.14 It placed Shrewsbury in the fourth of five tiers in the office town centres hierarchy, and although highlighted as performing healthily (although with some room for improvement), the research recognises the severe constraints limiting expansion of the town centre office supply – these relate to land ownership, physical/topographical (River Loop), infrastructure and Conservation Area issues.

- 3.15 According to the analysis the town centre has between 2850 and 3210 people involved in office based employment, and a total of 45,000-46,000 sqm of floorspace.
- 3.16 Based on local and regional forecasts office-based employment is expected to rise by between 900 and 1200 jobs, leading to a need for 20,000 sqm of new office floorspace to 2021 in the town centre. It also indicates that office employment will rise by 2200-2500 jobs in the rest of the town and Borough, equating to a further 40,000 sqm of floorspace.
- 3.17 Recognising the physical restrictions in Shrewsbury town centre, which will make the development of this amount of floorspace difficult, it suggests that a sequential approach be taken, using mid-town sites where possible.

West Midlands Regional Spatial Strategy Phase Two Revision

- 3.18 The West Midlands Regional Assembly is reviewing the Regional Spatial Strategy (RSS). As a result of this it is proposing housing and employment land allocations for each local authority area.
- 3.19 The West Midlands Land Advisory Group has considered a number of methodologies to estimate future employment land requirements. The Group considers the most effective and reliable methodology is a five year minimum reservoir approach based on an analysis of past trends.
- 3.20 For Shrewsbury & Atcham Borough the minimum reservoir suggested is 28 ha. This is the proportion of the indicative RSS requirement that should be available at any time during the RSS/Core Strategy period. Therefore the total 15 year supply required to 2021 is 84 ha. SABC has been informed to actually provide 112 ha, based on their local evidence, to take them up to 2026 – the timescale for this study.

Summary

- 3.21 Where possible these documents have been updated to 2026 to tie in with the brief for this report. Under the methodology used in the Economic Assessment and Employment Land Study, a further five years take-up of 3.7 ha/year would need to be added to the 34 ha shortage (identified in that report for the period to 2021). The Borough would therefore need 52.5 ha to cover demand through to 2026.

- 3.22 According to the West Midlands Regional Spatial Strategy Phase Two Revision, 112 ha is required to 2026. Given that there was 62 ha available in 2006, this suggests the Borough actually only needs a further 50 ha more land allocated.
- 3.23 Some of this land will be for offices. Up to 40-50,000 sqm of offices is estimated to be required in Shrewsbury to 2026 in out-of-town locations. At standard development densities of 3900 sqm/ha, this equates to some 10-12 ha of office land. This suggests some 40 ha of the 50 ha required will be needed for B1 b/c, B2 and B8 uses.

4.0 MARKET APPRAISAL

Introduction

- 4.1 An early stage of this analysis is to consider the market attractiveness of each location. This is based on BE Group's understanding of the property development process. It considers the characteristics that both developers and occupiers look for in a potential site.
- 4.2 Each urban location has been graded using a standard scoring system that consists of mainly objective measures. Each site is scored out of 60, made up of six individual measures, each scored out of ten. These are: proximity to M54, prominence, orientation, accessibility, environmental setting and flexibility. The scoring system is included in Appendix 2.
- 4.3 The rural options are assessed more subjectively because general areas are suggested as opposed to specific sites.

Urban Sites Grading

- 4.4 The highest scoring sites are those closest to the M54 and which can be seen from the Shrewsbury bypass. Most businesses will want to be able to get vehicles to their place of work easily and have access to markets in the major conurbations, and hence require access to the motorway network. Consequently those on the east side of Shrewsbury are more attractive in the marketplace. The detailed scores are shown in Table 2.
- 4.5 The table also includes indicative sizes for the sites identified. At this stage – the strategic overview level – it is difficult to provide an exact size to be used for employment because large broad locations are identified as possible employment areas, not specific sites. The exact sizes will be clarified at a later stage. The indicative sizes are used to understand how many sites/locations are needed to meet the Borough's employment land shortfall.

Table 2 – Urban Sites Scoring

Site	Approximate Size, ha	Score, max 60	Suggested Uses
Oteley Road	63.5	57	Offices Industrial
Shrewsbury Business Park South	10.0	55	Offices
A53/A49 Junction	2.1	49	Offices
Ellesmere Road	46.8	48	Offices Industrial
West of Battlefield Road	7.8	46	Industrial
Hanwood Roundabout North	172.9	46	Offices Industrial
Hanwood Roundabout South	186.4	46	Offices Industrial
Mytton Oak Roundabout North	60.7	45	Offices Industrial
Mytton Oak Roundabout South	172.9	45	Offices Industrial
Churncote Roundabout South	60.7	45	Offices Industrial
London Road/College Link	22.6	41	Offices Industrial
Meole Brace	5.8	39	Offices
Churncote Roundabout North	38.9 (part)	35	Offices Industrial
Oxon Business Park Extension	38.9 (part)	32	Offices Light Industrial
Adj 320 Monkmoor Road	1.9	24	Industrial
Oxon Park & Ride	38.9 (part)	24	Offices
Land at Nobold & Mousecroft Lane	19.1	22	Industrial

- 4.6 According to the scoring system the most attractive sites are Oteley Road and Shrewsbury Business Park South; there is a middle tier of sites linked to the Shrewsbury bypass and headed by A53/A49 Junction which has the potential to be accommodate a gateway/flagship scheme for Shrewsbury.
- 4.7 The less attractive sites are those to the west side of Shrewsbury, and those tucked within the urban area of the town, i.e. Adj 320 Monkmoor Road and Land at Nobold & Mousecroft Lane.

- 4.8 Although Oxon Business Park Extension and Oxon Park & Ride do not score highly, if the North West Relief Road is built, their scores will rise into the mid-40s on account of improved accessibility and prominence, because of their position in relation to its proposed route.

Urban Sub Area Site Prioritisation

- 4.9 Many of the sites are very similar in terms of their market attractiveness; and also very close together. Therefore an assessment by sub-area is made here to identify, where possible, the preferred choice by broad geographic area within the urban area as a whole.

North

- 4.10 There are four sites in this sub-area, A53/A49 Junction is better than West of Battlefield Road; and both are of much higher quality than Adj 320 Monkmoor Road. A53/A49 Junction has the potential for offices, however given its prominence and location may well be better suited to flagship commercial development. However the key site is Ellesmere Road, which in conjunction with the proposed North West Relief Road has the potential to provide a high quality business location. Although not adjoined to Battlefield Enterprise Park it offers a semi-natural extension to this successful area.
- 4.11 West of Battlefield Road 'fills in' the Harlescott/Battlefield Employment Area and given its surroundings would be suitable for general industrial, rather than office, uses. The same comment applies to Adj 320 Monkmoor Road, although the Monkmoor Road employment area is smaller, lower value and less attractive to most occupiers/developers than the other sites considered in this quadrant.

South East

- 4.12 The largest, and best, site is Oteley Road, the western portion of which has been developed for Shrewsbury Town's new football stadium. The site is of a scale that enables a major business park to be developed, that could incorporate both office and industrial areas. A mixed-use scheme could also be promoted, providing housing alongside a business park.

- 4.13 Shrewsbury Business Park South provides the natural extension to the successful Shrewsbury Business Park. This would extend the office function of this area and capitalise on the critical mass already created.
- 4.14 The London Road/College Link is an adequate site, and potentially could make a good employment location; however its situation close to Oteley Road and Shrewsbury Business Park South means it pales in comparison against them. The adjacent cemetery reduces its attractiveness, although a landscaping buffer zone could negate this issue.
- 4.15 It has been mooted that the site could provide a knowledge-based business campus in association with an expanded Shrewsbury College of Arts and Technology. However in practice the College would not be of the scale or (high enough) quality to generate any synergy. Such schemes can only realistically be linked to major universities or research facilities.
- 4.16 Meole Brace could accommodate either office or light industrial uses. Again it would make a good employment site, however, once again, it pales in comparison with Oteley Road and Shrewsbury Business Park South. In fact there is potentially more value in using this site for retail/leisure uses, given the adjacent retail park and park and ride scheme.

South West

- 4.17 There is very little difference between the four sites: Hanwood Road Roundabout North and South and Mytton Oak Roundabout North and South. All could potentially provide a major mixed-use business park of similar quality providing both office and industrial space. The slight locational differences would be irrelevant to most developers or occupiers (assuming no difference in land costs, ground conditions, etc). Although Hanwood Road might be slightly more preferable because it is linked to a more strategic route (A488) than is Mytton Oak (B4386) – but this is a very minor difference.
- 4.18 Land at Nobold & Mousecroft Lane is a poor site; in a bad location and difficult to get to. Although adjacent to the Longden Road employment area, this is a small, lower value estate and less attractive to most occupiers/developers than the other sites considered in this quadrant.

West

- 4.19 The quality of the four sites in this area are strongly linked to the construction of the North West Relief Road. Given that the sustainability benefits of extending existing employment areas, the Oxon Business Park Extension is the best option (if the road is built). Oxon Business Park is a good quality, successful employment area and which improves the marketability of the proposed expansion site. Otherwise Churncote Roundabout South is better, because it has good access and prominence, irrespective of the proposed new road.
- 4.20 The other two sites, Churncote Roundabout North and Oxon Park & Ride are less preferable, as they are less accessible, not prominent nor linked to existing employment areas.

Rural Area

- 4.21 In the rural areas the economics of development are more marginal. Demand is thinner on the ground, there is a lack of concentrated workforce, public transport is more limited and distances to markets and suppliers are further and more inaccessible. Consequently there is a need to identify the best sites, with the greatest possibility of development.

Atcham Industrial Estate

- 4.22 This is well-maintained and presented industrial estate to the east of Atcham, a village to the south east of Shrewsbury. Operated by Hereford Storage of Weobley, this is one of the best examples of a rural industrial estate in the West Midlands. On the 'right' side of Shrewsbury to link to this motorway, it is only eight miles from junction seven of the M54. Access from the B4380 that runs through Atcham is reasonable, with no obvious difficulties for HGVs.
- 4.23 There appear to be two adjacent areas where the Estate could be expanded, to the south east and to the east, both are either side of the Estate's access road. Both are flat and appear unconstrained. The former is approximately 1 ha in size, the latter 4 ha.

Leaton Industrial Estate

- 4.24 Leaton is a low-grade industrial estate targeting budget operators. Operated by Shropshire Industrial Estates it serves a rural need. To the north of Shrewsbury, it is

reasonably close to the B5067, which runs to Baschurch, however it is not prominent to it.

4.25 Although there is potential adjacent expansion land to the west of the Estate, within the Estate there are at least two plots that could be developed, of approximately 0.1 and 0.3 ha. As a whole the Estate is generally not intensively developed, and with modest reorganisation further development plots could probably be realised.

4.26 If there was demand, and the development economics were viable, the landowners would have built more accommodation already. The fact that this has not happened suggests a lack of demand. If a new allocation was made alongside the Estate, there is little likelihood of development without considerable public sector intervention.

Condover Industrial Estate

4.27 Condover is a low-grade industrial estate targeting budget operators. Operated by Shropshire Industrial Estates it serves a rural need. To the south of Shrewsbury, it is reasonably close to the A49 that, the arterial route through the south of the Borough, however it is not prominent to it.

4.28 Although there is potential adjacent expansion land to the north of the Estate, within the Estate there are a number of plots that could be developed. As with Leaton, as a whole the Estate is generally not intensively developed, and with modest reorganisation further development plots could probably be realised.

4.29 If there was demand, and the development economics were viable, the landowners would have built more accommodation already. The fact that this has not happened suggests a lack of demand. If a new allocation was made alongside the Estate, there is little likelihood of development without considerable public sector intervention.

Leebotwood

4.30 Leebotwood is a small village ten miles south of Shrewsbury on the A49. The proposed site (approximately 1 ha) is a square flat field between Shropshire Building Supplies and the A49. There is minimal employment in the village, but the site appears easily developable and is prominent to the arterial A49, with an easy direct access of it.

- 4.31 The A49 is the key rural corridor in the Borough's rural hinterland. This prominent site also lies in the Rural Regeneration Zone (which would help attract public sector funding support to ensure development). It is close to South Shropshire, and it could help to alleviate the land supply shortage in that District.

Dorrington

- 4.32 Dorrington Industrial Estate is to the east of the small village of Dorrington, which is on the A49, six miles south of Shrewsbury. There are three main occupiers there and potential to expand the area to the east; although this area is bordered by a small river and may be subject to flooding.

- 4.33 Although the Estate is only half a mile from the A49, the tight junction and narrow access are not ideal, especially for HGVs. The access road also runs past a number of houses, and intensification of development/traffic may lead to complaints.

Ford

- 4.34 The Borough's Economic Assessment and Employment Land Study 2005 questioned Ford's location as an employment centre; and the same outcome still holds true this time round. Although some development has occurred since 2005, there is no obvious reason to expand employment land provision in this area. It is on the wrong side of Shrewsbury, difficult to access (narrow roads and a low bridge limiting HGV movements) and has no prominence to arterial transport routes (which in a Shrewsbury context are the A5/A49/A53 corridors).

Minsterley

- 4.35 Minsterley is a village on the A488 that runs to Bishop's Castle. Approximately eight miles from Shrewsbury, the village is home to substantial employment in the form of Uniq and Rea Valley Speciality Foods. Although there is no known threat to the continuing presence of these companies in the village, the current trend for this type of operation is one of rationalisation. Were these companies to relocate to a more accessible location more suited to modern businesses needs, this would leave a large employment complex that would struggle to find occupiers. The result would be redevelopment, probably for a mixed-use scheme of housing and employment, breaking the buildings down to provide space for micro businesses.

- 4.36 Consequently it seems illogical to expand the employment area in Minsterley given the extent of existing employment and a possible surfeit of employment space in the future, unless the existing businesses have a specific need at some point in time.

Malehurst

- 4.37 Malehurst is a hamlet with minimal population. There is a low grade industrial estate here targeting budget operators, and which serves a rural need. To the south west of Shrewsbury, it is reasonably close to the A488 which runs to Bishop’s Castle, but is however not prominent to it.
- 4.38 Although there is potential adjacent expansion land around the Estate, within the Estate there are a number of plots that could be developed. As a whole the Estate is generally not intensively developed, and with modest reorganisation further development plots could probably be realised.
- 4.39 If there was demand, and the development economics were viable, the landowners would have built more accommodation already. The fact that this has not happened suggests a lack of demand. If a new allocation was made alongside the Estate, there is little likelihood of development without considerable public sector intervention.

Summary

- 4.40 The preferred sites, based on market assessment, more than provide the 50-52.5 ha required to 2026 are shown in Table 3. Large areas of land are highlighted, but it is assumed that only defined areas will be used for employment, so an indicative size for the potential employment land allocation is shown in the Table. In total 67 ha could be provided, split evenly between industrial uses (mainly B1c, but some B2 and small-scale B8), although this is flexible, and can be left, to some degree, to market forces to decide. This will also be affected and controlled by economic development and planning policies.
- 4.41 Six ha, nine percent, is in the rural area. This is close to the 15 percent recommended by previous guidance from BE Group. The slight rural shortfall could be made up by enlarging the sites or encouraging development at the Borough’s rural industrial estates, e.g. Leaton, Condoover or Malehurst. However, based on the current property market economics, a greater degree of public sector intervention is likely to be needed in the rural areas than in the urban.

Table 3 – Preferred Sites based on Marketability

Site	Indicative Size, ha	Urban/Rural	Office Area, ha	Industrial Area, ha
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Site	Indicative Size, ha	Urban/Rural	Office Area, ha	Industrial Area, ha
Oteley Road	20	Urban	10	10
Shrewsbury Business Park	10	Urban	10	0
Ellesmere Road	10	Urban	5	5
West of Battlefield Road	7	Urban	0	7
Oxon Business Park Extension	12	Urban	6	6
Meole Brace	2	Urban	2	0
Atcham Industrial Estate	5	Rural	0	5
Leebotwood	1	Rural	0.5	0.5
Total	67	-	33.5	33.5

- 4.42 A53/A49 Junction is excluded, because it may be better used for something other than employment. Only half of the Meole Brace site is included for a similar reason.
- 4.43 Adj 320 Monkmoor Road could also be incorporated even though it is a low quality site, as it enables further land to be 'added' easily. It merely extends an existing industrial area. However there is some doubt as to whether the private sector market would bring it forward for development. It might make an appropriate site for waste management uses.
- 4.44 This portfolio of preferred sites means there is no need to break into 'new' areas on the western side of Shrewsbury (i.e. off Hanwood and Mytton Oak Roads). If for whatever reason, any of this land is not viable, the next best options would be further expanding the Oxon Business Park Extension to incorporate areas to the west (providing the North West Relief Road is built). The last choice would be to open up a new business park in the west – there is no real difference between any of the four locations in this area: Hanwood Roundabout North and South or Mytton Oak Roundabout North and South.

5.0 TRANSPORT ASSESSMENT

Introduction

5.1 Given the particular transport issues effecting Shrewsbury and the need to integrate future development with transport infrastructure, detailed transport assessments of the potential sites have been carried out to inform the study. For the rural sites regard has been had to accessibility considerations as part of the market appraisal in Section 4.0.

5.2 Therefore this section of the report considers the potential accessibility of each of the urban sites and forms an initial 'transport assessment' of these on an individual and combined basis. The work is not intended to form a 'transport assessment' in the manner that it is usually applied – typically being a supporting document to an individual site's submission to secure planning permission. Rather it considers the sites against strategic land use and transport issues in Shrewsbury and wider Shropshire.

5.3 In preparation of this section of the report Faber Maunsell has undertaken the following tasks to ensure as full an understanding as achievable within the time/resource available:

- Comprehensive site visits to all selected sites
- Meeting with both Shropshire County Council and Shrewsbury & Atcham Borough Council officers
- Review of available documentation
- Compilation of text drawings
- Liaison and discussion with BE Group.

5.4 It should be noted that this work has been undertaken with an initial understanding of the TIF study proposals emerging from Shropshire County Council. A core aim is to consider how best land use and transport infrastructure can be mutually beneficial.

Strategic Overview/Considerations

5.5 There are several key issues to consider at strategic level when considering employment locations in the context of transport:

- Potential linkage to housing sites
- Potential linkage to other related land uses

- Potential linkage to other employment locations
- Strategic road accessibility
- Strategic public transport accessibility
- Local road accessibility (immediate site access)
- Local non-car accessibility (including public transport, walking and cycling).

5.6 In a context of changing sustainability, accessibility and environmental awareness there is a delicate balance to be applied between creating a 'transport sustainable' offer and creating a commercial offer. This is particularly important to consider in respect of two issues.

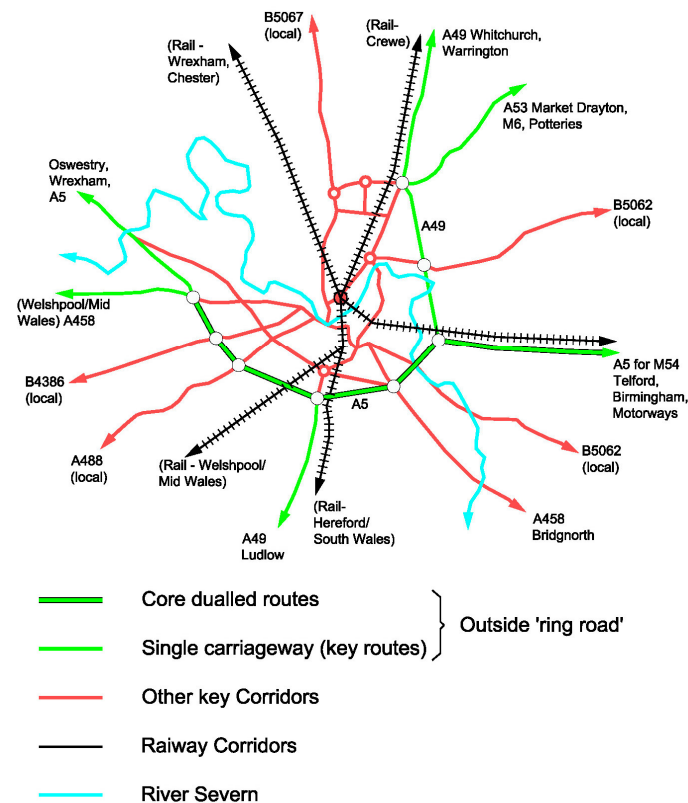
5.7 Firstly, the commercial market tends to be primarily interested in 'car accessible' locations, since this is what has 'sold' over the last 20-30 years. It is imperative to work with this to ensure sites are seen as commercially viable and therefore attractive to developers and occupiers. Refusal to accommodate car trips in a town of the scale of Shrewsbury would be an extremely negative issue for developers.

5.8 Secondly, it is however more imperative to ensure such sites are much more non-car oriented in terms of their layout/site design and linkages, at both local and strategic levels. Development should not be allowed to occur in the 'out-of-town' style manner of the last 20-30 years. Indeed development should be allowed only where significant non-car access can be created for the long term benefit of the town.

5.9 In essence it is essential to consider how a site can have good car access, but be oriented to reduce reliance and therefore use of the car at the same time. In the context of Shrewsbury, while there are several 'non-car potential' advantages of being a relatively well contained urban area, it is important to recognise that any reasonable sized employment centre will attract employees from the wider hinterland. The important issues overall are therefore to locate employment where it can:

- Readily interact with the existing urban fabric – ideally providing additional transport benefits – for example helping bus services become more frequent or financially viable
- Intercept traffic from the wider hinterland, particularly for daily users, without having a negative impact upon other land uses and the town's transport infrastructure. Indeed it is essential to maximise the potential to strengthen key non-car corridors from new development.

Figure 1 – Core Transport Network



5.10 Figure 1 shows Shrewsbury's core transport networks at town-wide level. The key features are:

- The radial nature of routes into the town, reflecting its history as a central place in the wider area, but which are often constrained close to and in the town centre
- The A5/A49 bypass around two-thirds of the town, effectively forming a strong boundary to the urban area, with little development outside of this
- The partial 'inner bypass', particularly around the south west and south east of the town, using routes of various quality/standard, such as Roman Road, Hazledine Way and Bage Way, to different levels of success and clarity
- The major urban land use and transport 'gap' in the north west of the town, created by the river corridor, between the A458 (Welshpool Road) and A528 (Ellesmere Road) radial corridors. The proposed North West Relief Road aims to overcome this, completing the ability to travel orbitally around the town, away from the town centre itself
- Relatively few significant junctions between the A5 bypass and the radial routes – in reality there are only four points of significant strategic access to

the town where the strategic routes cross and link with the bypass, namely the A49/A53 (Battlefield) junction at the north, the A5 junction for the M54 to the east, the A49 junction (Meole Brace) at the south and the A458/A5 (Welshpool Road Roundabout) at the west

- The radial nature of the railway routes, mirroring patterns of strategic road corridors, towards Telford/Birmingham (mirroring the A5 for M54 road corridor eastwards) and the routes parallel to the A49 south (for Hereford/South Wales) and north (for Crewe). The other two rail routes (west towards Welshpool for mid-Wales) and (north west towards Oswestry/Wrexham), whilst important to their catchments and having some potential daily use, do not provide the same level of strategic linkage.

5.11 In respect of land use it is important to consider that there are several employment/commercial core land use areas in Shrewsbury that need to be considered in relation to their relationship with the potential new sites:

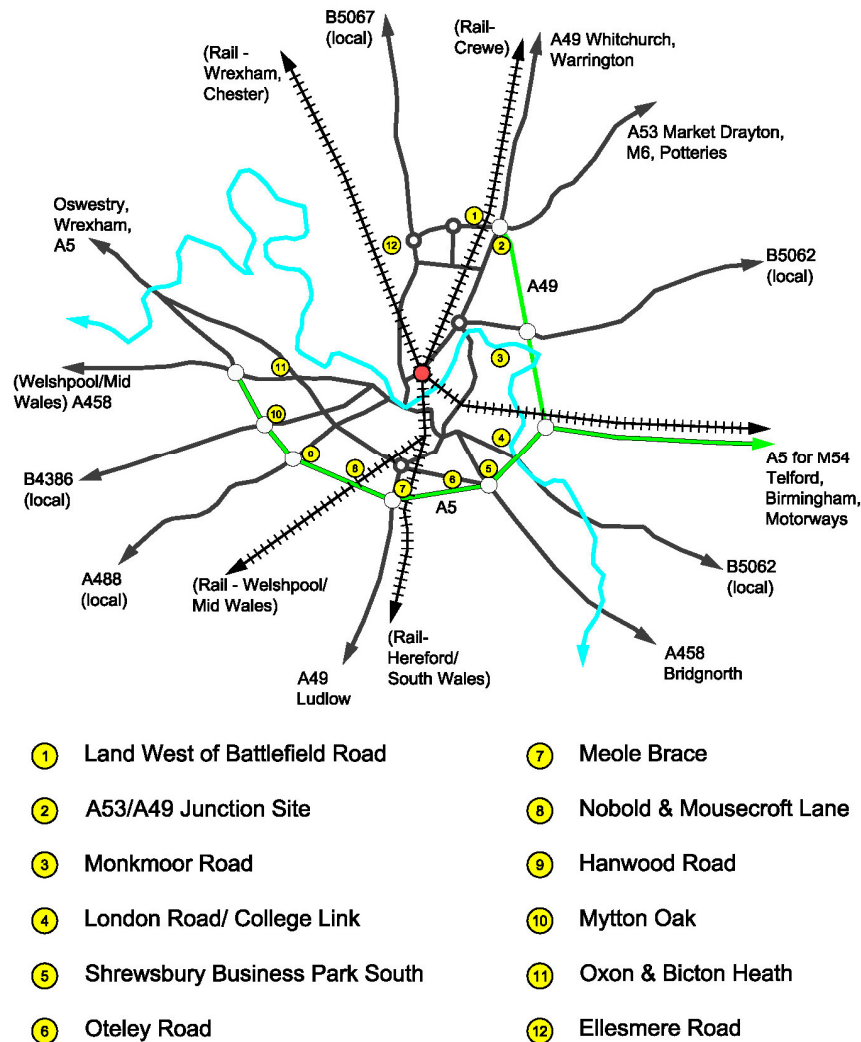
- The town centre – a tightly constrained, mixed-use area potentially needing to link with employment sites due to its central place, the nature of services available and its gateway function
- The A5112 Whitchurch Road corridor to the north, with both out-of-town retail and light industrial uses. This definition also includes an area of industrial land parallel to the road corridor itself, including Battlefield Enterprise Park and Lancaster Road Business Park, but severed from it being to the west of the railway and therefore not as linked to that road as would be desirable for easy definition
- The south eastern corner – based on the area between Shire Hall, the College and Shrewsbury Business Park
- The Meole Brace area, with the established out-of-town retail park and new football ground
- The area around Mytton Oak Road/Bicton Heath towards the west of the town centre, including the hospitals and Oxon Business Park.

5.12 There are several other smaller areas of employment, notably Nobold/Longdon Road and Monkmoor Road. These are however much more local in nature, with poor access to the strategic transport network.

Initial Sites Analysis

5.13 Figure 2 shows the 12 urban areas considered by Faber Maunsell in this strategic overview.

Figure 2 – Sites in Relation to Core Transport Network



5.14 Table 4 considers a variety of issues for each area. Each aspect is scored 1 for low linkage, 2 for medium and 3 for high linkage. In this respect linkage can be defined as 'fit', taking into account a variety of factors – for example Meole Brace is adjacent to both a park and ride facility and a rail corridor and therefore has high linkage/potential for fit.

5.15 A 'town-wide' perspective has also been incorporated – for example while land at Mytton Oak Road lies adjacent to the A5 and has roundabout access onto it, it does

not lie at the junction of a core radial route with the A5, compared to for example the Meole Brace site and therefore scores 2 rather than 3 for strategic network access. It is also not adjacent to other significant local networks and scores lower in this respect too. There is clearly the potential to link with the hospital and trips associated with that land use, however routes from here to Shrewsbury town centre can still be relatively constrained. Clearly the scoring is an initial attempt at quantification and could be detailed far more intensively than shown, however its purpose here is to enable strategic cross-comparison and prioritising of sites against one another.

Table 4 – Sites Initial Transport Assessment

No	Site	Strategic Network Access	Local Road Network/ Access Points	Public Transport	Linkage to Relevant Land Uses	Total
1	West of Battlefield Road	3	2	3	3	11
2	A53/A49 Junction	3	1	2	2	8
3	Monkmoor Road	1	1	1	2	5
4	London Road/College Link	3	2	2	2	9
5	Shrewsbury Business Park South	3	2	3	3	11
6	Oteley Road	3	2	2	2	9
7	Meole Brace	3	3	3	2	11
8	Nobold & Mousecroft Lane	1	1	1	2	5
9	Hanwood Road	2	2	1	1	6
10	Mytton Oak Road	2	2	1	1	6
11	Churncote, Oxon & Bicton Heath	2.5	3	3	2.5	11
12	Ellesmere Road	2	2	2	2	8

5.16 In respect of each of the areas the following core issues are identified, as shown in Table 5.

Table 5 – Sites Core Issues

No	Site	Issues
1	West of Battlefield Road	This site is situated between railway and a row of housing and other land uses, the latter of which separate it from the A5112. There are potential access points through this area of separation at various locations, such as the public house car park, the site itself and the car showroom forecourt. Clearly such issues would need to be considered in more depth. The site is well situated to be strategically placed if the North West Relief Road occurs. The site probably suits light industrial uses better, due to adjacency of similar uses and lack of main road profile. This site lies on a core TIF study transport corridor. Adjacency of housing needs to be considered from a 'nature of traffic generated' perspective.
2	A53/A49 Junction	This site is difficult to access, directly off the A5112. Visibility splays, bearing in mind the road curvature and speeds of vehicles, are difficult to achieve and accommodation of right turning out of the site could be problematic. The alternative of providing access via Shillingstone Drive may be possible, however this could result in a long cul de sac and conflict with residential use.
3	Monkmoor Road	Although it lies adjacent to an established light industrial area, difficulties in accessing the strategic transport network and the residential nature of roads makes it unlikely that this site would be attractive to major property developers or acceptable to local residents
4	London Road/College Link	Speed of the road combined with topography limit site access points. The development of new employment land would likely be best achieved in conjunction with the college, and depending on its specific nature, using a dual entrance. Adjacent sensitivities such as the crematorium present further constraints. Ability to provide public transport is likely to be linked to either the potential for a rail halt on the Shrewsbury-Telford line or combined with college buses. This site is not felt to be strong for employment uses alone and would need to be linked to wider redevelopment/the TIF study for a potential parkway station.
5	Shrewsbury Business Park South	This site is adjacent to both the strategic road network and the existing office-led business park. Although topography is likely to limit large parts of the site being developed, the central section appears easy to access via the current roundabout. Development of the park and ride facility to the north could be re-oriented to this site, or at least developed to create strong public transport routes both orbitally and radially.
6	Oteley Road	This substantial site offers potential to be developed in a transitional manner in relation to density and land use types. Options for access to strategic routes occur at both ends, and could be opened up further at the west if the railway can be further bridged, either for vehicles, public transport or pedestrians, creating a better link to Hereford Road. The option of using either Oteley Road or creating a new link road through the site appears possible. Potential for employment seems strong at the western end where potential to jointly use existing assets such as the railway and new football ground car parks could be explored. This

No	Site	Issues
		site could support TIF study aims of improving orbital travel opportunities.
7	Meole Brace	This site links well with both the adjacent retail park and park and ride facility, and is adjacent to one of the town's core railway routes. It is also adjacent to the A5 bypass whilst remaining within walking distance of an established residential area. The opportunity for 'smart' linkages to other land uses through truly integrated transport should not be missed. This site lies on a core TIF study corridor.
8	Nobold & Mousecroft Lane	These sites are difficult to access from the strategic transport network, with access likely to be required either via unsuitable semi-rural roads or through residential areas. While a degree of additional 'in-fill' light industrial development may be appropriate it is unlikely to be capable of being supplied to any scale.
9	Hanwood Road	Access to this area would have to be from Hanwood Road itself, which would need substantial upgrading. Whilst close to the A5 bypass the area has relatively poor links into the town centre and would necessitate a new public transport corridor, a substantial issue since routes between here and the town centre are relatively constrained.
10	Mytton Oak	Mytton Oak would need to be serviced from Mytton Oak Road or Gains Park Way. Once again it does not lie on a strategic radial route into/out of Shrewsbury and is therefore difficult to provide public transport upon. It is similar to Hanwood Road in having relatively constrained routes to the town centre.
11	Churncote, Oxon & Bicton Heath	These sites would be adjacent to other business park activity and lie on a current core corridor from two major access routes to Shrewsbury (Welshpool and Oswestry). This area is also the location of a park and ride facility and the potential for combining with this is strong. These sites become very attractive should the North West Relief Road be provided.
12	Ellesmere Road	This site is well placed to be near a future North West Relief Road and could gain access from either Ellesmere Road itself (through for example a signalled junction at Mount Pleasant Road) or directly from such a route if implemented. To do the latter would however reduce the positive journey time advantages of the relief route and in that respect be undesirable. To the south, Ellesmere Road is constrained in places already, particularly where it meets the railway and enters the town centre so mitigation measures would be required. While the site could be positively accessed its scale would perpetuate the focus of employment in the northern end of the town, creating the undesirable potential for through movement across the centre.

Summary

5.17 In summary the following conclusions are made with respect to each area in Table 6.

Table 6 – Sites Summary

No	Site	Transport Conclusion	Proceed ?
1	West of Battlefield Road	Light industrial use, new access onto A5112	Yes
2	A53/A49 Junction	Unlikely to form employment site	No
3	Monkmoor Road	Unlikely to be strategic employment site, some local development possible	No
4	London Road/College Link	Unlikely to be attractive location, unless college links created	No
5	Shrewsbury Business Park South	Excellent location for B1 office	Yes
6	Oteley Road	Excellent location for B1 and other high value employment. Need to maximise links west and utilise value of orbital connections	Yes
7	Meole Brace	Excellent location for B1, other land uses (retail) may be equally viable. Need to maximise links over railway	Yes
8	Nobold & Mousecroft Lane	Unlikely to be strategic employment site, some local industrial development possible	No
9	Hanwood Road	Unlikely to be suitable location for employment sites	No
10	Mytton Oak	Unlikely to be suitable location for employment sites	No
11	Churncote, Oxon & Bicton Heath	Potential extensions to current business park unless new link road is built, opening up substantial access opportunities for major changes along corridor.	Yes
12	Ellesmere Road	Difficult to provide good local access beyond immediate environs. Good strategic potential if North West Relief Road proceeds	Only with North West Relief Road

6.0 LANDSCAPE AND FLOODING

Introduction

6.1 In this section the findings of two studies carried out for SABC are summarised. These studies look at issues of landscape sensitivity and flooding. They are appraised in order to establish whether there are issues affecting the development of the proposed employment sites covered in this Employment Sites Assessment Study.

Landscape Sensitivity and Capacity Study 2007

6.2 This Landscape Sensitivity and Capacity study reviewed the area's landscape character and undertook an analysis of sensitivity looking at four aspects: ecological, cultural, visibility and tranquility issues. Various potential development sites were then tested to inform development planning and define landscape capacity. This was done to assess the capacity of the landscape to accommodate housing or employment development. And to identify those landscapes that should be protected from development.

6.3 The calibration of the sensitivity is shown in Table 7, as is the capacity rating.

Table 7 – Sensitivity and Capacity Ratings

Rating	Sensitivity	Capacity
High	Key characteristics of landscape are very vulnerable to change and/or have significant value as a landscape resource	Thresholds for significant change are very high and much of the area can be developed
High-Medium	Key characteristics of landscape are vulnerable to change and/or have high value as a landscape resource	Thresholds for significant change are high and the area is able to accommodate a significant proportion for development
Medium	Key characteristics of landscape are susceptible to change and have value as a landscape resource	Thresholds for change are intermediate with some ability to accommodate development in some part
Medium-Low	Key characteristics of landscape are resilient to change and/or are of limited intrinsic value as a landscape resource	Thresholds for change are low and development can be accommodated only in limited situations
Low	Key characteristics of landscape are robust and/or are of relatively low intrinsic value as a landscape resource	Thresholds for change are very low and the area is unable to accommodate development without significant adverse effects

- 6.4 In terms of employment there is high or high-medium landscape development capacity in five of the zones appraised in Shrewsbury, all associated with existing business areas. Most areas of Shrewsbury have no potential for development due to their character, location or potential effect on residential areas. Most rural areas are also severely constrained because of the high amenity value of their environment and landscape.
- 6.5 The landscape assessment of the potential urban employment sites is shown in Table 8. Adjacent 320 Monkmoor Road was not included in the Landscape Sensitivity and Capacity Study, nor were the rural employment areas assessed in this Employment Sites Assessment Study.

Table 8 – Urban Employment Sites Landscape Assessment

Site	Sensitivity	Capacity
Oteley Road	Medium-Low	High-Medium/ Medium-Low
Shrewsbury Business Park South	Medium-Low	High-Medium
A53/A49 Junction	Medium-Low	Medium
West of Battlefield Road	Medium-Low	High-Medium
Hanwood Roundabout North	Medium	Low
Hanwood Roundabout South	Medium	Low
Mytton Oak Roundabout North	Medium	Low
Mytton Oak Roundabout South	Medium	Low
Churncote Roundabout South	Medium	Low
London Road/College Link	High-Medium	Low
Meole Brace	Low	High
Churncote Roundabout North	High-Medium	Low
Oxon Business Park Extension	Medium	Medium-Low
Adj 320 Monkmoor Road	Not Assessed	Not Assessed
Oxon Park & Ride	Medium	Medium-Low
Land at Nobold & Mousecroft Lane	Medium	Medium-Low
Ellesmere Road	High-Medium	Medium-Low

Draft Strategic Flood Risk Assessment 2007

- 6.6 This is a Level 1 Strategic Flood Risk Assessment (SFRA) in accordance with Planning Policy Statement 25 (PPS25). Its objective is to inform the plan making process of Shrewsbury & Atcham Local Development Framework.

6.7 One of the key principles of PPS25 is that the sequential test should be applied to proposed development sites. This is to ensure alternative areas with less risk of flooding are proposed for development before those at a greater risk.

6.8 The SFRA allows SABC to:

- Manage flood risk
- Identify the need for flood risk assessments in key locations
- Determine the acceptability of flood risk in relation to emergency planning
- Allocate appropriate sites for development
- Identify opportunities for reducing flood risk
- Ensure the Council meets its obligations under PPS25.

6.9 The main measure is defined in PPS25 in relation to flood zones and is shown in Table 9.

Table 9 – Flood Risk Measures

Measure	Simple Definition
Zone 1: Low Probability	Land having less than 1 in 1000 annual probability of flooding in any year
Zone 2: Medium Probability	Land having between 1 in 100 and 1 in 1000 probability of river flooding in any year
Zone 3a: High Probability	Land having 1 in 100 or greater probability of river flooding in any year
Zone 3b: The Functional Floodplain	Land where water has to flow or be stored in times of flood. Annual flood probability of 1 in 20 or greater in any year

6.10 Each of the sites considered in this Employment Sites Assessment Study have been assessed against the flood risk assessment in the SFRA. The findings are outlined in Tables 10 and 11.

Table 10 – Urban Employment Sites Flood Risk Assessment

Site	Flood Risk
Oteley Road	Low - generally High in small area to south west corner near rail line
Shrewsbury Business Park South	Low
A53/A49 Junction	Low
West of Battlefield Road	Low – generally

Site	Flood Risk
	High along brook to southern edge
Hanwood Roundabout North	Low
Hanwood Roundabout South	Low
Mytton Oak Roundabout North	Low
Mytton Oak Roundabout South	Low
Churncote Roundabout South	Low
London Road/College Link	Low
Meole Brace	Low
Churncote Roundabout North	Low
Oxon Business Park Extension	Low
Adj 320 Monkmoor Road	Low
Oxon Park & Ride	Low
Land at Nobold & Mousecroft Lane	Low
Ellesmere Road	Low - generally Functional Floodplain along southern boundary

Table 11 – Rural Employment Sites Flood Risk Assessment

Site	Flood Risk
Atcham Industrial Estate	Low
Leaton Industrial Estate	Low
Condoover Industrial Estate	Low
Leebotwood	Low
Dorrington	High
Ford	Low
Minsterley	High
Malehurst	High

Summary

- 6.11 In terms of landscape assessment only three urban sites have a sensitivity score above medium. They are Churncote Roundabout North, Ellesmere Road and London Road/College Link. By their very nature, rural sites can have a significant landscape impact, but this is an accepted trade-off (as long as development is appropriate).

- 6.12 There is no real flood risk affecting any of the urban sites in consideration. However, there are some small-scale water features within or adjacent to some of the sites that will need appropriate management. Of the rural sites, three have high flood risk potential – Dorrington, Minsterley and Malehurst – none of which are preferred from a marketability viewpoint anyway.

7.0 SHORTLISTED SITES – OWNERSHIP AND PLANNING

Introduction

7.1 This section looks in detail at those sites that are preferred following the initial market assessment, strategic transport overview, and having regard to landscape character and flood risk assessments. These strands of analysis generate a similar shortlist of sites, although two rural sites are also included – Leebotwood and Atcham Industrial Estate. The urban areas are:

- West of Battlefield Road
- Shrewsbury Business Park South
- Oteley Road
- Meole Brace
- Churncote/Oxon & Bicton Heath
- Ellesmere Road.

7.2 For each area the owner is identified together with their aspirations for the land; an overview of made of any proposals to establish economic viability. This is combined with an assessment of planning issues. Sustainability is also covered in more depth.

Sustainability

7.3 All the urban sites are well related to established residential areas. However both Churncote/Oxon & Bicton Heath and Ellesmere Road would break into virgin greenfield areas. They are heavily dependent upon the construction of the new North West Relief Road to make them viable and attractive employment propositions.

7.4 The other four sites, although outside the urban area boundary are within established road infrastructure and there has been other development in and around them which makes them less of a departure from the town's urban form.

7.5 At this stage designs have not been finalised but careful management can ensure development is integrated into the surrounding urban form. Furthermore planning conditions can ensure the provision of facilities and infrastructure to encourage a greater proportion of journeys to be made by walking, cycling and public transport. Sustainable construction techniques could also be adhered to. These would include energy efficiency measures to achieve Eco Homes and BREEAM standards. It could

also incorporate sustainable urban drainage systems and renewable on-site energy generation.

- 7.6 Of the rural sites Leebotwood is well related to existing residential areas, however Atcham Industrial Estate is not. However the latter site reinforces an established and successful rural business location (which are in short supply).

West of Battlefield Road

- 7.7 The site north of ABP, off Battlefield Road is owned by the Sundorne Estate. The Estate is represented by Balfours in Shrewsbury. The ownership extends to the access onto Battlefield Road. There are believed to be no abnormal constraints to development, although no ground tests, etc have been done. However there were some investigations carried out when the bypass to the north was built. In the past when they have looked at this site, there was concern over the visibility of the proposed access junction, however this may have been rectified by the new access into the housing opposite.

- 7.8 The site is designated as countryside in the Local Plan. There are no other specific policies attached to it.

Shrewsbury Business Park South

- 7.9 The land is owned by SCC. It is viewed as a natural extension to employment area to the north (Shrewsbury Business Park). In principle SCC would develop the land for employment, however it may take a view on other potential uses. There are believed to be no major constraints to development (apart from the pond which will likely form a landscape element), although no formal surveys/investigations have been done.

- 7.10 The site is designated as countryside in the Local Plan. There are no other specific policies attached to it.

Oteley Road

- 7.11 First City, Wolverhampton is representing a consortium of landowners on the development of this site. Various surveys have been done – noise and air quality (revised); topographical survey; landscape and visual impact assessment – that have been sent to SABC. Although no ground investigations done, no abnormal issues

are expected as the site is farmland. There will be a need to look at servicing issues, particularly drainage, which is likely to need reinforcing.

- 7.12 A number of masterplans have been provided to SABC however they are indicative only – and for example the amount of land for employment use can be increased. Furthermore the land suggested for a new school may not actually be needed – and this could provide further space for alternative forms of development.
- 7.13 Given the scale of the site First City expect a 5-6 year build programme. The 52.5 ha development is residential-led. Current designs show an employment area of 4-9 ha only.
- 7.14 The site is designated as countryside in the Local Plan. There are no other specific policies attached to it.

Meole Brace

- 7.15 The Meole Brace site is owned by Diageo. It is proposed to be developed by their partner Mercian Developments, that are represented by DPP in Cardiff. A mixed-use scheme is proposed comprising offices, hotel, crèche and retail/leisure uses.
- 7.16 It is assumed that there are no abnormal development constraints. However the developers expect to build a new highways access onto Hereford Road.
- 7.17 The site is designated as countryside in the Local Plan. There are no other specific policies attached to it.

Oxon/Churncote/Bicton Heath

- 7.18 Mosaic Estates are representing the landowners (Onslow Estate and SCC) in promoting this land for development. In turn Mosaic are represented by RPS, Birmingham. The land being promoted extends from the western boundary of Oxon Business Park to the A5 within the boundary of the proposed North West Relief Road, north of Welshpool Road.
- 7.19 RPS has provided an indicative development layout to SABC. However the site boundaries, uses and layout are not fixed at this stage, and are open to discussion. The initial proposal is for 34 ha of land in a mixed use scheme – some 8-9 ha B1-led

employment as an extension to Oxon Business Park; along with housing (18 ha), public open space and a neighbourhood centre.

- 7.20 The developers acknowledge a number of technical studies will need to be carried out, but as yet they have not been done. However they would expect to use information from surveys done to assess the route of the North West Relief Road (where possible). But at this stage, they do not see there being any abnormal development constraints, e.g. flooding, contamination, and the land has no real significance in terms of planning/environmental/agricultural issues.
- 7.21 One benefit they see of the area is the potential to contribute to the cost of the North West Relief Road, as a result in uplift in land values that would be generated by the development.
- 7.22 The site is designated as countryside in the Local Plan. There are no other specific policies attached to it.

Ellesmere Road

- 7.23 There is no formal development consortium taking this site forward. It is owned by a number of parties, including Severn Trent Water. The water company's agent, Nathaniel Lichfield & Partners, has made a representation that it should be considered for its development potential. However no masterplan proposals have been put forward at this stage.
- 7.24 However if the site is linked to the new North West Relief Road it is considered to be a viable employment area, being of a scale to offer critical mass, support other forms of development and enable landscaping and buffering to neighbouring residential areas.
- 7.25 The site is designated as countryside in the Local Plan. There are no other specific policies attached to it. Although the development of area may impinge of the adjoining Hencott Pool RAMSAR site, requiring an appropriate assessment to be carried out.

Atcham Industrial Estate

- 7.26 Atcham Industrial Estate is owned and operated by Hereford Storage, Weobley. The company has been looking to buy additional piece of land to expand (slightly) the

estate. All the land around the Estate is owned by The National Trust.

- 7.27 The land in this general area has been identified as investment land, i.e. can be sold off to raise funds, by The National Trust.
- 7.28 Although The National Trust agreed in principle to sell land to Hereford Storage, this has since been rescinded on the grounds of poor sustainability. The National Trust do not want to be seen to promoting unsightly rural development or encouraging traffic. However the decision and policy is being questioned within The National Trust. In the future land may well be available for sale in this general area.
- 7.29 As the land is farmland there are believed to be no abnormal development constraints linked to it.
- 7.30 The site is designated as countryside in the Local Plan. There are no other specific policies attached to it.

Leebotwood

- 7.31 The land at Leebotwood is owned by SCC. There are no current proposals to develop it. There are no surveys, etc, but no development constraints are envisaged. SCC's first thought would be to develop for housing at the appropriate time. However employment use would be considered if an appropriate rationale could be provided.
- 7.32 The site is designated as countryside in the Local Plan. There are no other specific policies attached to it.

Summary

- 7.33 All the urban sites have owners looking to develop and promote them. The two rural sites are more uncertain.

8.0 SHORTLISTED SITES – GROUND CONDITIONS

Introduction

- 8.1 An assessment of the ground conditions affecting the shortlisted urban sites has been undertaken in order to identify potential constraints to proposed development.
- 8.2 This assessment has been undertaken with reference to the following sources of information:
- British Geological Survey (1959) Sheet number 152, Shrewsbury, Solid and Drift Edition, 1:50,000
 - British Geological Survey (1995), Sheet 21, Groundwater Vulnerability Map of West Shropshire, 1:100,000
 - Environment Agency
 - Multi-Agency Geographic Information for the Countryside
 - Shrewsbury and Atcham Borough Council (2004) Environmental Health Memorandum
 - Site walkovers.

West of Battlefield Road

Table 12 – Potential Constraints and Recommendations

Potential Constraints	Details	Recommendations
Contamination	Unknown historical use, and unknown contamination status of the site. However, it is situated adjoining industrial property, indicating that it may have historically comprised industrial land. The site is raised in comparison to the surrounding area, suggesting that Made Ground may be present. Therefore there is moderate potential for encountering elevated levels of heavy metals and organics, which could pose a risk to human health and Controlled Waters.	Obtain historical maps and Envirocheck for the site and undertake a detailed desk study to assess the potential for contamination. If potential contamination is identified, undertake a ground investigation to assess the extent of this.
Ground Gas	Unknown ground gas regime. However, moderate potential for encountering elevated levels of carbon dioxide and methane associated with the possible presence of Made Ground, which	Obtain historical maps and Envirocheck for the site and undertake a detailed desk study to assess the potential for ground gas.

Potential Constraints	Details	Recommendations
	could pose a risk to human health.	If the potential for ground gas is identified, undertake ground gas monitoring to determine the ground gas regime.
Geotechnical	Actual ground conditions are unknown. However, the published geological map indicates that Glacial Till is likely to be present. There is also the potential for encountering Made Ground. Therefore, there is low to moderate potential of compressibility, shrinkage and settlement hazards associated with the potential presence of Made Ground and Glacial Till.	Undertake a ground investigation to assess ground conditions.
Ecology	Several large mature trees in the centre of the site, indicating that there may be the potential for nesting birds and bats. The site is in a Nitrate Vulnerable Zone. Therefore, there is low to moderate potential of the development impacting upon the local ecology.	Undertake a Phase One Habitat Survey to assess the ecological status. Determine whether Tree Preservation Orders are present.
Flooding	The southern end and north eastern tip are at risk of flooding. Therefore, there is high potential for flooding, a high water table, waterlogging, poorly drained ground and standing water in the southern end and north eastern tip.	Undertake a Flood Risk Assessment.

Shrewsbury Business Park South

Table 13 – Potential Constraints and Recommendations

Potential Constraints	Details	Recommendations
Contamination	Unknown historical use, and unknown contamination status of the site. Although, the site appears to have been historically used for agricultural purposes and the Weeping Cross landfill is 150m to the west. Therefore there is moderate potential for encountering elevated levels of heavy metals and organics associated with the landfill, which could pose a risk to human health	Obtain historical maps and Envirocheck for the site and undertake a detailed desk study to assess the potential for contamination. If potential contamination is identified, undertake a ground investigation to assess this.

Potential Constraints	Details	Recommendations
	and Controlled Waters.	
Ground Gas	Unknown ground gas regime. However, there is moderate potential for encountering elevated levels of carbon dioxide and methane associated with the adjacent landfills and the presence of Coal Measures, which could pose a risk to human health.	Undertake ground gas monitoring to determine the ground gas regime.
Geotechnical	Actual ground conditions are unknown. However, the published geological map indicates that Glacial Till and Coal Measures are likely to be present. Therefore, there is moderate potential of compressibility, shrinkage, mining and settlement hazards.	Order a Coal Mining Report to assess the potential presence of coal mining. Undertake a ground investigation to assess the ground conditions.
Ecology	A pond and several large mature trees on the western edge of the site, indicating that there may be the potential for aquatic life, nesting birds and bats. Therefore, there is moderate potential of the development impacting upon the local ecology.	Undertake a Phase One Habitat Survey to assess the ecological status. Determine whether Tree Preservation Orders are present.
Flooding	Although the site is not identified as being at risk from flooding, the area 200m to the north east is at risk of flooding. Therefore, there is moderate potential for flooding, a high water table, waterlogging, poorly drained ground and standing water in the north east of the site.	Undertake a Flood Risk Assessment.

Oteley Road

Table 14 – Potential Constraints and Recommendations

Potential Constraints	Details	Recommendations
Contamination	Unknown historical use, and unknown contamination status of the site. However, three landfills are on the south and south eastern edges of the site. Therefore there is high potential for encountering elevated levels of heavy metals and organics associated with the landfill, which could pose a risk to	Obtain historical maps and Envirocheck for the site and undertake a detailed desk study. Undertake a ground investigation to assess the contamination status of the site, particularly the landfill material.

Potential Constraints	Details	Recommendations
	human health and Controlled Waters.	
Ground Gas	Unknown ground gas regime at the site. However, there is high potential for encountering elevated levels of carbon dioxide and methane at the edges of the site associated with the landfills and the presence of Coal Measures, which could pose a risk to human health.	Undertake ground gas monitoring to determine the ground gas regime.
Geotechnical	Actual ground conditions are unknown. However, the published geological map indicates that River Terrace deposits (Sands and Gravels), Glacial Till and Coal Measures are likely to be present. There is also the potential to encounter Made Ground and unknown fill material associated with the landfills. Therefore, there is high potential of compressibility, shrinkage, mining and settlement hazards.	Order a Coal Mining Report to assess the potential presence of coal mining. Undertake a ground investigation to assess the ground conditions.
Quarrying	Bayston Hill Quarry is approximately 700m to the south. The SABC EH Memorandum highlighted that noise or other nuisances associated with the quarry may impact on proposed developments. Therefore, there is moderate potential of the quarry impacting upon development.	Undertake a noise assessment.
Ecology	Several large mature trees are present, indicating that there may be the potential for nesting birds and bats. Therefore, there is low to moderate potential of the development impacting upon the local ecology.	Undertake a Phase One Habitat Survey to assess the ecological status. Determine whether Tree Preservation Orders are present.
Flooding	The western end of the site is at risk of flooding. Therefore, there is high potential for flooding, a high water table, waterlogging, poorly drained ground and standing water in the western end of the site.	Undertake a Flood Risk Assessment.

Meole Brace

Table 15 – Potential Constraints and Recommendations

Potential Constraints	Details	Recommendations
Contamination	The site appears to have been used historically used for agricultural purposes and part of the site as a colliery. Therefore, there is high potential for encountering elevated levels of heavy metals and organics, which could pose a risk to human health and Controlled Waters.	Obtain historical maps and Envirocheck and undertake a detailed desk study to assess this. If potential contamination is identified, undertake a ground investigation to assess this.
Ground Gas	Unknown ground gas regime. However, there is moderate potential for encountering elevated levels of carbon dioxide and methane associated with the presence of Coal Measures, which could pose a risk to human health.	Undertake ground gas monitoring to determine the ground gas regime.
Geotechnical	Actual ground conditions at the site are unknown. However, the published geological map indicates that River Terrace deposits and Coal Measures are likely to be present. Reference to the SABC EH Memorandum indicates that the Meole Brace Colliery is on part of the site and was historically mined for coal. Therefore, there is moderate to high potential of compressibility, shrinkage, mining and settlement hazards at the site.	Order a Coal Mining Report for the site to assess the location of shafts and depths of mining. Undertake a ground investigation to assess the ground conditions.
Ecology	The Rea Brook Valley Nature Reserve is 300m to the north west. Therefore, there is low potential of the development impacting upon the local ecology.	Undertake a Phase One Habitat Survey to assess the ecological status at the site and to assess the potential impacts of the development on the adjacent Nature Reserve.
Flooding	Although the site is not identified as being at risk from flooding, the area along the northern boundary is at risk. Therefore, there is moderate to high potential for flooding, a high water table, waterlogging, poorly drained ground and standing water in the north of the site.	Undertake a Flood Risk Assessment.

Churncote/Oxon and Bicton Heath

Table 16 – Potential Constraints and Recommendations

Potential Constraints	Details	Recommendations
Contamination	Unknown historical use, and unknown contamination status of the site. Although it appears to have been used historically for agricultural purposes, the Junction Thorns Grove landfill is on the southern boundary. The site is also above a sensitive groundwater source. Therefore, there is high potential for encountering elevated levels of heavy metals and organics associated with the landfill, which could pose a risk to human health and Controlled Waters.	<p>It is understood that an Environmental Impact Assessment is currently being undertaken in this area in relation to the North West Relief Road. It is recommended that a copy of the Environmental Impact Assessment is obtained.</p> <p>If there is insufficient information in the Environmental Impact Assessment, obtain historical maps and Envirocheck for the site and undertake a detailed desk study.</p> <p>Undertake a ground investigation to assess this, particularly the landfill material.</p>
Ground Gas	Unknown ground gas regime. However, there is high potential for encountering elevated levels of carbon dioxide and methane associated with the Junction Thorns Grove landfill on the southern boundary, which could pose a risk to human health.	Undertake ground gas monitoring to determine the ground gas regime.
Geotechnical	Actual ground conditions are unknown. However, the published geological map indicates that Glacial Till is likely to be present. There is also the potential to encounter Made Ground and unknown fill material associated with the landfill on the southern boundary. Therefore, there is high potential of compressibility, shrinkage and settlement hazards associated with the potential presence of Made Ground and Glacial Till.	Undertake a ground investigation to assess the ground conditions.
Ecology	Several large mature trees are present, indicating that there may be the potential for nesting birds and bats. Therefore, there is low to moderate potential of the development impacting upon the local ecology.	<p>Undertake a Phase One Habitat Survey to assess the ecological status.</p> <p>Determine whether Tree Preservation Orders are present.</p>

Potential Constraints	Details	Recommendations
Flooding	<p>Although the site is not identified as being at risk from flooding, the area 250m to the east is in an area which has a significant chance of flooding each year.</p> <p>Therefore, there is low potential for flooding, a high water table, waterlogging, poorly drained ground and standing water in the east of the site.</p>	Undertake a Flood Risk Assessment.

Ellesmere Road

Table 17 – Potential Constraints and Recommendations

Potential Constraints	Details	Recommendations
Contamination	Unknown historical use, and unknown contamination status of the site. However, it appears to have been historically used for agriculture. Therefore, there is low to moderate potential for encountering elevated levels of heavy metals and organics, which could pose a risk to human health and Controlled Waters.	<p>Obtain historical maps and Envirocheck for the site and undertake a detailed desk study to assess this.</p> <p>If potential contamination is identified, undertake a ground investigation to assess this.</p>
Ground Gas	Unknown ground gas regime. However, it appears to have been used historically used for agriculture. Therefore, there is low potential for encountering elevated levels of carbon dioxide and methane.	<p>Obtain historical maps and Envirocheck for the site and undertake a detailed desk study to assess the potential for ground gas.</p> <p>If the potential for ground gas is identified, undertake monitoring to determine the ground gas regime.</p>
Geotechnical	Actual ground conditions are unknown. However, the published geological map indicates that Glacial Till, Sands and Gravel and Alluvium are likely to be present. Reference to the SABC EH Memorandum indicates that Greenfield Nurseries, a former gravel pit, is on the southern boundary. Therefore, there is moderate potential of compressibility, shrinkage and settlement hazards associated with the Glacial Till and Alluvium.	<p>Undertake a ground investigation to assess the ground conditions, particularly the former gravel pit adjacent to the southern boundary.</p> <p>Undertake a topographic survey.</p>

Potential Constraints	Details	Recommendations
	The site is steeply sloping land, which may need re-grading prior to development.	
Ecology	The development may impact on the Hencott Pool SSSI and the Old River Bed SSSI. Therefore, there is moderate to high potential of the development impacting upon the local ecology.	Undertake a Phase One Habitat Survey to assess the ecological status and to assess the potential impacts of the development on the SSSIs and Ramsar site (if pursued, requiring appropriate assessment).
Flooding	The southern tip and north eastern end are at risk of flooding. Therefore, there is high potential for flooding, a high water table, waterlogging, poorly drained ground and standing water in the southern tip and north eastern end.	Undertake a Flood Risk Assessment.

Summary

- 8.3 The initial assessment of the ground conditions of the sites has highlighted a number of potential geo-environmental development constraints. However, suitable mitigation measures can be employed to enable their development. Further assessment may determine whether or not these potential constraints pose a risk to the proposed developments and their relative magnitude of risk.
- 8.4 Therefore, in order to assess the potential extent of constraints upon the proposed developments, and the necessary mitigation measures, and to comply with current legislation and best practices, it is recommended that the following sequence of studies and investigations are undertaken.

Detailed Desk Study

- 8.5 Obtain Envirochecks, historical maps, geological maps, coal mining reports and other relevant information, in order to undertake detailed desk studies to further assess the potential for contamination and geotechnical hazards at the sites. The desk studies may be used to support the planning process.
- 8.6 Undertake high level Flood Risk Assessments to assess the potential for flooding and waterlogging at the sites. Undertake Phase One Ecological Surveys to assess the ecological status of the sites and to assess the potential impacts of the proposed developments on adjacent sensitive land uses. Also determine whether Tree Preservation Orders are present.

Preliminary Ground Investigation

- 8.7 If potential contamination is identified by the detailed desk studies, undertake preliminary ground investigations to assess ground conditions, including contamination and geotechnical hazards. Undertake ground gas monitoring to determine the ground gas regime at the sites.
- 8.8 If flooding risks and ecological potential are identified, undertake more detailed Flood Risk Assessments and Ecological Surveys.

Full Ground Investigation

- 8.9 Once the proposed layout and landform of the developments have been finalised, undertake more detailed ground investigation to provide information for detailed design. If flooding risks have been identified, undertake a full Flood Risk Assessment to identify potential mitigation measures for the proposed developments.

9.0 SHORTLISTED SITES – UTILITIES

Introduction

- 9.1 An assessment of the utilities infrastructure in, and to, the shortlisted sites has been undertaken in order to identify potential constraints to development.

Methodology

- 9.2 Within the study remit the following methodology was chosen. Contacted the utility companies to secure the location of existing infrastructure in relation to the proposed sites and details of any planned works and pre-existing problems with their infrastructure. This approach was in the main unsuccessful, primarily due to the reluctance of the utility companies to provide this information and secondly the difficulty of making the right contacts, either due to annual leave or people not being available.
- 9.3 In an attempt to ascertain this information, then wrote to the utility companies. These included National Grid Gas (formerly Transco), BT, National Grid Electricity, e-on Central Networks and Severn Trent Water. It has been obtained with differing levels of success. To date, National Grid Electricity, e-on Central Networks and Severn Trent Water have responded. However, information to a suitable level has only been obtained from e-on Central Networks.
- 9.4 BT and Severn Trent Water require the completion of a '*developer enquiry form*' in order for them to undertake an assessment which will provide the following information:
- Confirmation of apparatus affected by the proposals
 - Information about the ability to supply the site
 - Details of off-site work including details of works to provide an optimal solution.
- 9.4 These companies make a charge for this service, e.g. £325 per site for Severn Trent Water to provide information for water supply and sewerage combined.
- 9.5 In order to undertake these site assessments, the companies require information on loadings, for example, peak flow of water. We would be able to calculate approximate loadings for the utilities based upon the assumed uses of the sites and

densities of development, however, this is outside the scope of this commission. The local authority is understood to have commissioned Halcrow to undertake an assessment of water services and infrastructure to inform scale and location of development separate to this report.

National Grid Electricity

- 9.6 Information received on all six urban sites identifies the 'proximity and sensitivity of the network to the developments sites to be negligible' in terms of risk. Our enquiries confirmed that none of the sites were near to the gas or electricity transmission networks. However subsequent discussions with SABC highlight that land West of Battlefield Road may be close enough to be affected by the National Grid. This would need to be checked in more depth if and when the site were taken forward.

e-on Central Networks

- 9.7 Copies of the drawings received from e-on Central Networks have not been issued with the report, but are available if required by SABC.
- 9.8 Overhead and underground transmission lines have been found on most of the sites. e-on have restrictions on the proximity of development to these lines and should overhead lines remain there will be restriction on the location of development. e-on recommend a minimum distance to development from overhead cable as follows:
- 132kV/33kV on towers – 15 metres
 - 132kV/33kV, 11kV, 6.6kV, LV on poles – 9 metres.
- 9.9 Alternatively if these cables conflict with the development proposals, it may be possible to agree an alternate route or it may be possible to bury them. Underground cables have the following restrictions regarding the minimum distances for development:
- 132kV– 5 metres
 - 33kV– 3 metres.
- 9.10 Detailed review of the e-on Central Network 1:500 scale drawings are outlined below.

West of Battlefield Road

- 9.11 A 11kV/6.6kV overhead cable runs through the site on its eastern edge about 30 to 40m from the boundary and deviating across it at the northern edge.

- 9.12 At the southern end, in the vicinity of the access off Whitchurch Road, an underground 11kV/6.6kV cable running beneath Whitchurch Road changes to a 11kV/6.6kV overhead cable, which runs east-west across the southern end of the site. Additionally, in a similar location, running north-south a private overhead service serves Lion Coppice. Discussion with SABC highlighted the potential proximity of National Grid infrastructure and this would need to be investigated further should the site be progressed.

Shrewsbury Business Park South

- 9.13 To the east, a 33kV overhead cable runs in a roughly north-south direction across the site adjacent to the roundabout, at the junction of London Road and the A5.
- 9.14 To the west, adjacent to the A458, an 11kV overhead cable runs in a roughly east-west direction from the south to a point just to the south of the property named Stonecroft, where it turns north towards Thieves Lane.
- 9.15 Also at the south east corner, a number of services supplying properties criss-cross the site.

Oteley Road

- 9.16 An underground 11kV/6.6kV cable runs along the east side of the railway line to the west of the site.
- 9.17 An overhead 11kV/6.6kV cable runs roughly north-south across it, half way along it in line with Melrose Drive.
- 9.18 Just to the east of the group of houses on Oteley Road, near Blueline Aquatics, an 11kV/6.6kV overhead cable runs across the site from north west to south east.
- 9.19 11kV/6.6kV underground cables also run in the footways each side of Oteley Road and it is likely that these will require diverting/lowering in the vicinity of any proposed access to the site.

Meole Brace

- 9.20 A local service connection supplying the admin office for the park and ride facility runs along the access road in a north-south direction across the site. This also supplies the street lighting.

Ellesmere Road

- 9.21 A 33kV overhead cable runs east-west across the site from the junction of Ellesmere Road with Harlscott Lane to a point 200mm from the railway line where it turns in a southerly direction to a point opposite Hencott Wood and from there crosses the railway line.
- 9.22 An 11kV overhead cable runs from the south of the site in an approximately north-south direction terminating just south of Hencott Wood.

Churncote, Oxon and Bicton Heath

- 9.23 Unfortunately the drawings sent were incomplete and only included information on the north east corner of the site adjacent to Hollyhead Road (B4380). Here a 33kV overhead cable crosses the site in an east-west direction. There are also a number of 11Kv overhead cables criss-crossing the site.

Summary

- 9.24 In light of the poor level of information readily available, further actions would be recommended.
- 9.25 Completion of the utilities enquiries to secure existing information. Although this is only valid for a period of six months following receipt, it is believed that this information is essential to understanding the impact of development on existing infrastructure.
- 9.26 Calculation of anticipated loadings based upon agreed uses and development densities for each site.
- 9.27 Further enquiries of the utility companies, with instructions for them to undertake a site assessment to identify any significant impact of development on the utility infrastructure.
- 9.28 Review of information received following the site assessments and further discussions and enquiries to optimise the schemes proposed.
- 9.29 Make further attempts to contact the utility companies to seek details of their planned improvement works.

10.0 PREFERRED SITES

Introduction

10.1 This final section draws all the information on the shortlist of sites together.

Summary Matrix

10.2 Table 18 summaries all the shortlisted sites information together. The eight sites provide up to (indicatively) 67 ha of employment land. But this is flexible and could be increased or decreased to suit needs. It is evenly split between industrial and office uses. Some 6 ha is rural. There are (at this stage) no irrecoverable constraints affecting any of them. A number expand and consolidate existing employment areas, i.e. Shrewsbury Business Park South; Oxon Business Park Extension (dependent on the new North West Relief Road); West of Battlefield Road; Meole Brace and Atcham Industrial Estate.

10.3 The assessment of the sites is to some degree constrained, given the study budget and remit. In many cases it is also too early in the development cycle to ascertain definitive information on their feasibility. More detailed investigations will have to be undertaken in the future with regards to services, infrastructure, remediation and overcoming other constraints in order to develop.

10.4 The preferred sites form a sound basis for generating a portfolio of employment land to meet the target set by the Regional Spatial Strategy. According to Regional Spatial Strategy guidance and the existing land supply a further 50 ha is needed (although 52.5 ha could be needed based on historic land take-up). So there is plenty here to offer range and choice and meet any contingencies e.g. higher demand/take-up or lower initial land supply position.

10.5 This new portfolio of sites meets national, regional and local planning policy providing a good quality range of options. They will prove attractive to modern, expanding companies in a range of high growth sectors, offer local firms expansion options and prove attractive to inward investment. They are well related to areas of housing and employment and are focussed in Shrewsbury, where development in the Borough should be concentrated.

10.6 The sites have been market tested and will prove attractive to private sector occupiers and developers. There is a mix of industrial and office land. The portfolio

limits the need to break into 'new' areas of the Borough – it consolidates and reinforces existing business locations.

- 10.7 The sites also meet the acceptability criteria set by the strategic transport overview. This is also the case in terms of their landscape character (most have a medium/medium-low sensitivity) and potential risk from flooding (again generally low).
- 10.8 Many of the sites preferred have owners open to realise their potential from development. In some cases potential schemes are in the process of being planned. However it should be said that some of the schemes, especially the larger ones, are mixed-use, rather than just being employment in nature.
- 10.9 The ground conditions analysis has identified some issues, further work is recommended (where appropriate); detailed case studies, preliminary ground investigations and full ground investigations.

Table 18 – Preferred Sites Summary Matrix

Site	Total Approx. Size, ha	Indicative Employment Size, ha	Office Area, ha	Industrial Area, ha	Urban/Rural	Sustainable (inc Transport Assessment)	Other Major Constraints	Score	Reinforces Existing Employment Area
Oteley Road	63.5	20	10	10	Urban	Yes	No	57	No
Shrewsbury Business Park South	10.0	10	10	0	Urban	Yes	No	55	Yes
Ellesmere Road	46.8	10	5	5	Urban	Yes	Dependant on North West Relief Road RAMSAR site	48	Partially
West of Battlefield Road	7.8	7	0	7	Urban	Yes	No	46	Yes
Oxon Business Park Extension	38.9 (part)	12	6	6	Urban	Yes	Dependant on North West Relief Road	32	Yes
Meole Brace	5.8	2	2	0	Urban	Yes	No	39	Yes
Atcham Industrial Estate	5.0	5	0	5	Rural	Yes	No	-	Yes
Leebotwood	1.0	1	0.5	0.5	Rural	Yes	No	-	Partially
Total	178.8	67	33.5	33.5					

Note: Faber Maunsell's later more detailed Transport Strategy Report found that upon greater investigation, the Ellesmere Road site would require a new access junction and link road from the NWRR in order to be viable. Since this would dramatically reduce the effectiveness of the route as a quick means of travelling between north and west Shrewsbury, the site was deemed to be inappropriate for large scale development. For this reason, the site is not proposed for employment/mixed-use development in the Transport Strategy Report.

Appendix 1

Site Plans

Appendix 2

Sites Scoring

Site	M54 Proximity	Prominence	Orientation	Road Accessibility	Environmental Setting	Flexibility	Total
West of Battlefield Road	5	8	10	10	6	7	46
A53/A49 Junction	6	10	10	10	9	4	49
Adj 320 Monkmoor Road	5	0	10	3	3	3	24
Shrewsbury Business Park South	8	10	10	10	10	7	55
Land at Nobold & Mousecroft Lane	3	1	5	3	4	6	22
London Road/College Link	8	7	10	7	3	6	41
Oteley Road	7	10	10	10	10	10	57
Meole Brace	6	6	5	7	8	7	39
Mytton Oak Roundabout North	3	10	5	10	8	9	45
Mytton Oak Roundabout South	3	10	5	10	8	9	45
Hanwood Roundabout North	4	10	5	10	8	9	46
Hanwood Roundabout South	4	10	5	10	8	9	46
Oxon Business Park Extension	1	4	5	7	7	8	32
Oxon Park & Ride	1	1	5	7	6	4	24
Ellesmere Road	4	6	10	10	8	10	48
Churncote Roundabout North	2	6	5	7	8	7	35
Churncote Roundabout South	2	10	5	10	9	9	45

Appendix 3

Ground Conditions – Site Description & Environmental Setting

West of Battlefield Road

Site Information	Details
Current Site Use	<p>The site comprises gently sloping agricultural land. Several large mature trees are present in the centre. Overhead electricity cables run across the central and southern parts.</p> <p>Bounded to the north by the A5124 and A53, to the east by residential housing and the A5112, to the west by a railway and to the south by a stream/river and the Battlefield Industrial Estate.</p>
Site History	<p>No information was available on the history of the site or the vicinity. However, the site is on the edge of an industrial estate, indicating that it may have historically comprised industrial land. The site is raised in comparison to the surrounding area, suggesting that Made Ground may be present.</p>
Geology	<p>BGS map indicates that the superficial geology underlying the site comprises Glacial Till (Boulder Clay). The map indicates that the bedrock underlying the site consists of the Kinnerton Sandstone Formation (Lower Mottled Sandstone) of the Sherwood Sandstone Group.</p>
Hydrogeology	<p>Reference to the Environment Agency's Groundwater Vulnerability Map indicates that the site is underlain by a Major Aquifer (highly permeable). The soils overlying the aquifer have a high leaching potential.</p> <p>Reference to the Environment Agency's Groundwater Source Protection Zone Maps indicates that the site is in Zone III (Total Catchment) Groundwater Source Protection Zone.</p>
Hydrology	<p>The nearest significant watercourse is a river/stream running along the southern and eastern boundaries of the site.</p> <p>Reference to the Environment Agency's Flood Maps indicates that the southern end of the site is in an area which has a moderate (>0.5%, 1 in 200) chance of flooding each year. The north eastern tip is in an area which has a significant (>1.3%, 1 in 75) chance of flooding each year. The area to the west of the site is also at risk of flooding.</p>
Sensitive Land Uses	<p>Reference to the MAGIC Statutory Rural Designations Map indicates that the site is in a Nitrate Vulnerable Zone.</p>
Mining and Quarrying	<p>No information was available on potential mining and quarrying activities at the site.</p>
Landfills	<p>Reference to the Environment Agency's Waste Maps and the SABC EH Memorandum indicates that there are no landfills within 250m.</p>

Shrewsbury Business Park South

Site Information	Details
Current Site Use	<p>The site comprises fairly flat agricultural land. A pond surrounded by several mature trees is on the western edge of the site. A house is in the centre.</p> <p>The site is bounded to the north by Thieves Lane (B4380) and a business park, to the east by the junction between the B4380 and the A5064, to the south by the A5 and to the west by the A458.</p>
Site History	No information was available on the history of the site or the site vicinity. However, the site appears to have been used historically for agricultural purposes.
Geology	BGS map indicates that the superficial geology underlying the site mainly comprises Sand and Gravel. An area of Glacial Till (Boulder Clay) is indicated on the eastern edge. The map indicates that the bedrock consists of Halesowen Formation (Coed-yr-allt Beds) of the Upper Middle Coal Measures Group.
Hydrogeology	<p>Reference to the Environment Agency's Groundwater Vulnerability Map indicates that the majority of the site is underlain by a Minor Aquifer (variable permeable). The southern edge is underlain by a Major Aquifer (highly permeable). The soils overlying the aquifers have a high leaching potential.</p> <p>Reference to the Environment Agency's Groundwater Source Protection Zone Maps indicates that the site is not in a Groundwater Source Protection Zone.</p>
Hydrology	<p>The nearest significant water feature is an unnamed pond, on the western edge of the site. The River Severn is 200m to the east of the site.</p> <p>Reference to the Environment Agency's Flood Maps indicates that the site is not located in an area which may be affected by flooding. However, an area 200m to the north east of the site has a moderate (>0.5%, 1 in 200) chance of flooding each year.</p>
Sensitive Land Uses	Reference to the MAGIC Statutory Rural Designations Map indicates that there are no known sensitive land uses within 250m of the site.
Mining and Quarrying	No information was available on potential mining and quarrying activities.
Landfills	<p>Reference to the Environment Agency's Waste Maps and the SABC EH Memorandum indicates that the Weeping Cross landfill site is 150m to the west on the Oteley Road site and Fox Farm landfill is 300m to the south. The details of the landfills are as follows:</p> <ul style="list-style-type: none"> • Weeping Cross landfill – licensed from 1976 to 1978 for industrial waste. • Fox Farm landfill – licensed from 1971 to 1978 for inert, industrial, commercial, household and liquid/sludge wastes.

Oteley Road

Site Information	Details
Current Site Use	<p>The site comprises fairly flat agricultural land. Several mature trees are on the site. A stadium is to the north western edge of the site and several houses are on the western part of the site.</p> <p>Bounded to the north by Oteley Road (B4380), to the east by the A458, to the south by the A5 and to the west by a railway.</p>
Site History	No information was available on the history of the site or the site vicinity. However, the site appears to have been used historically for agricultural purposes and landfilling.
Geology	BGS map indicates that the superficial geology underlying the site comprises Third River Terrace deposits in the western part of the site; Sand and Gravel in the central western part; Glacial Till (Boulder Clay) in the central eastern part; and Sand and Gravel in the eastern edge. The map indicates that the bedrock consists of Halesowen Formation (Coed-yr-allt Beds) of the Upper Middle Coal Measures Group.
Hydrogeology	<p>Reference to the Environment Agency's Groundwater Vulnerability Map indicates that the majority of the site is underlain by a Minor Aquifer (variable permeable). The centre is underlain by a Non Aquifer (negligibly permeable). The soils overlying the Minor Aquifer mostly have a high leaching potential. The soils adjacent to the area of Non Aquifer in the centre of the site have a low leaching potential.</p> <p>Reference to the Environment Agency's Groundwater Source Protection Zone Maps indicates that the site is not in a Groundwater Source Protection Zone.</p>
Hydrology	<p>The nearest significant water feature is an unnamed pond on the Shrewsbury Business Park South site, 150m to the east of this site. Rea Brook is 200m to the north/north west and Mere Pool 200m to the north/north east.</p> <p>Reference to the Environment Agency's Flood Maps indicates that the south western edge of the site, adjacent to the A5, is in an area which has a low (0.5%, 1 in 75) chance of flooding each year. Part of the western boundary, adjacent to the railway is in an area which has a significant (>1.3%, 1 in 75) chance of flooding each year. The area to the west is also at risk of flooding.</p>
Sensitive Land Uses	Reference to the MAGIC Statutory Rural Designations Map indicates that there are no known sensitive land uses within 250m.
Mining and Quarrying	Reference to the SABC EH Memorandum indicates that the Bayston Hill Quarry is approximately 700m to the south. This is permitted to undertake minerals process (crushing and screening of aggregates) and cement and lime process (concrete batching).
Landfills	<p>Reference to the Environment Agency's Waste Maps and the SABC EH Memorandum indicates that there are three landfills on the south and south eastern edges of the site associated with the disused railway cutting at Weeping Cross. These include the following:</p> <ul style="list-style-type: none"> • Weeping Cross (Scott-Newman) – licensed from 1976 to 1978 for industrial waste.

Site Information	Details
	<ul style="list-style-type: none"><li data-bbox="512 264 1299 322">• Weeping Cross – licensed from 1976 to 1978 for industrial waste.<li data-bbox="512 342 1358 400">• Land south west of Weeping Cross/ Sutton Hall – licensed from 1991 to 1993 for inert waste. <p data-bbox="512 421 1350 479">Organic matter in the form of out-grade potatoes was deposited in one or more of the landfills.</p>

Meole Brace

Site Information	Details
Current Site Use	<p>The site comprises two fairly flat fields adjacent to the Meole Brace Park and Ride. The access road for this runs through the centre of the site, dividing the two fields.</p> <p>Bounded to the north by a retail park, to the south by the Meole Brace Park and Ride, to the east by a railway and to the west by the A5112.</p>
Site History	No information was available on the history of the site or the site vicinity. However, the site appears to have been used historically for agricultural purposes.
Geology	BGS map indicates that the superficial geology underlying the site comprises Third River Terrace deposits. The map indicates that the bedrock consists of Halesowen Formation (Coed-yr-allt Beds) of the Upper Middle Coal Measures Group.
Hydrogeology	<p>Reference to the Environment Agency's Groundwater Vulnerability Map indicates that the majority of the site is underlain by a Minor Aquifer (variable permeable). The soils overlying the aquifer have a high leaching potential.</p> <p>Reference to the Environment Agency's Groundwater Source Protection Zone Maps indicates that the site is not in a Groundwater Source Protection Zone.</p>
Hydrology	<p>The nearest significant watercourse is the Rea Brook, 200m to the west.</p> <p>Reference to the Environment Agency's Flood Maps indicates that the site is not in an area which may be affected by flooding. However, the northern boundary is adjacent to an area which has a significant (>1.3%, 1 in 75) chance of flooding each year.</p>
Sensitive Land Uses	Reference to the MAGIC Statutory Rural Designations Map indicates that Rea Brook Valley Nature Reserve is 300m to the north west.
Mining and Quarrying	Reference to the SABC EH Memorandum indicates that the Meole Brace Colliery was on part of the site and was historically mined for coal.
Landfills	Reference to the Environment Agency's Waste Maps and the SABC EH Memorandum indicates that there are no landfills within 250m.

Churncote/Oxon and Bicton Heath

Site Information	Details
Current Site Use	<p>The site comprises gently sloping agricultural land. Several trees and houses are present and a few minor roads run across the site.</p> <p>Bounded to the north by agricultural land, Oxon Pool and housing; to the east by housing, a water works and the junction between the A458 and B4380; to the south by the A458 and to the west by agricultural land, housing and the junction between the A5 and the A458.</p>
Site History	<p>No information was available on the history of the site or the site vicinity. However, it appears to have been used historically for agricultural purposes.</p>
Geology	<p>BGS map indicates that the superficial geology underlying the majority of the site comprises Glacial Till (Boulder Clay). A small area of Sand and Gravel is indicated in the centre. The map indicates that the bedrock consists of the Kinnerton Sandstone Formation (Lower Mottled Sandstone) of the Sherwood Sandstone Group.</p>
Hydrogeology	<p>Reference to the Environment Agency's Groundwater Vulnerability Map indicates that the majority of the site is underlain by a Major Aquifer (highly permeable). The soils overlying the aquifer have a low leaching potential.</p> <p>Reference to the Environment Agency's Groundwater Source Protection Zone Maps indicates that the north eastern half of the site, adjacent to the B4380, is in a Zone I (Inner Protection Zone) and the rest is in a Zone II (Outer Protection Zone).</p>
Hydrology	<p>The nearest significant water feature is Oxon Pool 150m to the north. The River Severn is 200m to the east.</p> <p>Reference to the Environment Agency's Flood Maps indicates that the site is not in an area which may be affected by flooding. However, the area 250m to the east is in an area which has a significant (>1.3%, 1 in 75) chance of flooding each year.</p>
Sensitive Land Uses	<p>Reference to the MAGIC Statutory Rural Designations Map indicates that there are no known sensitive land uses within 250m.</p>
Mining and Quarrying	<p>No information was available on potential mining and quarrying activities.</p>
Landfills	<p>Reference to the Environment Agency's Waste Maps and the SABC EH Memorandum indicates that the Junction Thorns Grove landfill is on the southern boundary of the site, on the A458. The license status of the landfill is unknown.</p>

Ellesmere Road

Site Information	Details
Current Site Use	<p>The site comprises steeply sloping agricultural land. Several houses and farms occupy the site and a few minor roads run across it.</p> <p>Bounded to the north by agricultural land, to the east by the A528, to the south by agricultural land and Bagley Brook and to the west by agricultural land and a railway.</p>
Site History	<p>No information was available on the history of the site or the site vicinity. However, it appears to have been used historically for agricultural purposes.</p>
Geology	<p>BGS map indicates that the superficial geology underlying the majority of the site comprises Glacial Till (Boulder Clay). Areas of Sand and Gravel are indicated in the north eastern and southern parts. An area of Alluvium is present along the southern edge. The map indicates that the bedrock consists of the Kinnerton Sandstone Formation (Lower Mottled Sandstone) of the Sherwood Sandstone Group.</p>
Hydrogeology	<p>Reference to the Environment Agency's Groundwater Vulnerability Map indicates that the site is underlain by a Major Aquifer (highly permeable). The soils overlying the aquifer have an intermediate leaching potential across the majority of the site and a low leaching in the southern tip.</p> <p>Reference to the Environment Agency's Groundwater Source Protection Zone Maps indicates that the western part of the site is in a Zone II (Outer Protection Zone) and the eastern part of the site in a Zone III (Total Catchment) Groundwater Source Protection Zone.</p>
Hydrology	<p>The nearest significant water feature is Hencott Pool, on the northern edge in Hencott Wood. An unnamed pool is on the south western edge and Bagley Brook is adjacent to the southern boundary. Alkmund Park Pool is located 200m to the north west.</p> <p>Reference to the Environment Agency's Flood Maps indicates that the north eastern part of the site is in an area which has a significant (>1.3%, 1 in 75) chance of flooding each year. The southern tip is in an area which has a low (0.5, 1 in 200 or less) chance of flooding each year. The areas to the east, south and west of the site are also at risk of flooding.</p>
Sensitive Land Uses	<p>Reference to the MAGIC Statutory Rural Designations Map indicates that the eastern edge is in a Nitrate Vulnerable Zone. Hencott Pool Site of Special Scientific Interest (SSSI) is on the northern edge in Hencott Wood. The Old River Bed SSSI is adjacent to the south eastern boundary.</p>
Mining and Quarrying	<p>Reference to the SABC EH Memorandum indicates that Greenfield Nurseries, a former gravel pit, is on the southern boundary.</p>
Landfills	<p>Reference to the Environment Agency's Waste Maps and the SABC EH Memorandum indicates that there are no landfills within 250m.</p>