



**LOCAL DEVELOPMENT FRAMEWORK
ENVIRONMENTAL EVIDENCE STUDY**

PART 2

**ENVIRONMENTAL
APPRAISAL**

July 2010



CONTENTS

1.0	INTRODUCTION	3
2.0	STUDY METHODOLOGY	5
	2.1 Introduction.....	5
	2.2 Assessment of Environmental Effects.....	7
3.0	ASSESSMENT OF IMPACTS	23
	3.1 Introduction.....	23
	3.2 Assessment Tables	25
4.0	SUMMARY OF ASSESSMENTS	73
5.0	CONCLUSIONS	93

DRAWINGS

APPENDICES

1.0 INTRODUCTION

- 1.1 This Environmental Evidence study has been prepared on behalf of the Manchester Airport Group (MAG) in support of their submissions to Manchester City Council (MCC) and Cheshire East Council (CEC) for the appropriate allocation of land and promotion of land use planning policies within the respective Local Development Frameworks (LDFs) to meet the Airport's future operational area needs.
- 1.2 The Manchester Airport Master Plan to 2030 (MAG, 2007) comprises a suite of documents that describe how MAG see their future development and land use requirements to meet national policy objectives as set out within the Air Transport White Paper (Department for Transport, 2003) and Air Transport White Paper Progress Report (Department for Transport, 2006).
- 1.3 The Land Use Plan (MAG, 2007), which forms part of the Master Plan, identified five extensions to the Airport's operational areas and additional land adjacent to the existing airport runway. Four of these extension sites had been previously identified for potential expansion by MAG in development strategies dating back to 1991. The selection of these sites followed the overall principles of sustainability appraisal to ensure the most efficient use of airport land. The information used to inform their selection and potential future use was drawn, in part, from an environmental assessment undertaken by Chris Blandford Associates in 2000 and later extended to include the Roundthorn Industrial Estate at Wythenshawe (AXIS, 2006).
- 1.4 The Environmental Evidence study updates the above studies to reflect changes to the extension site boundaries and to the environment. The purpose of the study is to understand, at a strategic level, the potential environmental consequences of the Airport's expansion and assist in the process of future decision making on the most appropriate use of developable land.
- 1.5 The study was been divided into two parts:

- Part 1 - Environmental Baseline – described the existing environmental conditions present at each of the identified sites under a series of themed headings; and
- Part 2 - Environmental Appraisal (this report) – describes the findings from the strategic assessment of potential environmental effects arising from the implementation of the identified development scenario as appropriate to each of the extension sites.

1.6 This study was undertaken by AXIS, supported by ecological consultants The Environment Partnership (TEP), in accordance with the Project Brief (MAG, 23 February 2009), the Proposal and Fee Estimate (AXIS, 6 March 2009) and subsequent discussions with MAG (30 October 2009).

2.0 STUDY METHODOLOGY

2.1 Introduction

- 2.1.1 This section describes the scope and methodology of the environmental assessment.
- 2.1.2 In principle, the study updated the ‘Specialist Environmental Studies Associated with Future Airport Development’ (Chris Blandford Associates, September 2000) and the ‘Addendum Report for Land to the South of Roundthorn Industrial Estate, Wythenshawe’ (AXIS, April 2006).
- 2.1.3 The Land Use Plan (MAG, 2007) identified five proposed extensions to the Airport’s Operational Area plus additional land identified adjacent to the existing airport runway (see Drawing 916-01/001). For the purposes of this study the sites are referred to as:
- A Land to East of A538 (Cloughbank Farm);
 - B Land to North of Ringway Road;
 - C Land within, and adjacent to, Junction 5 of the M56;
 - D Land to South of Ringway Road, between Tedder Drive and Styal Road;
 - E Land to West of A538 (Oak Farm); and
 - F Parallel Taxi-way.
- 2.1.4 The range of environmental themes assessed comprise:
- Landscape and Visual (including landscape character assessment);
 - Ecology and Nature Conservation (including Phase 1 habitat survey);
 - Historic Environment; and
 - Land Use and Recreation (including agricultural land use and Public Rights of Way).
- 2.1.5 These environmental themes are not exhaustive. The scope of study excluded the themes of: Traffic and Transportation; Noise and Vibration; Air Quality; Socio-Economic; Water Quality and Geology, Hydrology and Hydrogeology, commonly included within Environmental Impact Assessments and generally more applicable to the assessment of detailed development proposals. This assessment has been undertaken at a strategic level and may ultimately lead to refined proposals being advanced

whose potential effects would need to be evaluated at a greater level of detail.

2.1.6 The development scenarios were provided by MAG as a series of illustrative layout plans and accompanying text (see Appendix A). In summary these comprise:

- Site A - Combination of airfield, aircraft maintenance, operational land and Cargo land use. Includes for the retention of the site of Ringway Chapel and churchyard (now office) with landscape mitigation, Cotteril Clough SSSI and safeguarded corridor for future Western Rail route that passes through northern section of site. Provides aircraft access to areas of land on site E;
- Site B - Phased implementation of surface car parking with new vehicle access to Ringway Road and Styal Road. Includes for landscape mitigation, most significantly to the south adjacent to Ringway Road, the retention of runway approach lighting and safeguarded corridor for future development of metrolink route that passes to the west of the site;
- Site C - Commercial development including airline offices, hotel, cargo / freight with new vehicle accesses to Thorley Lane, directly from land to the east of the M56 spur and via a bridge from the land to west of M56 spur (through land outside of the site near Haletop Farm). Proposals also includes for landscape mitigation and retention of allotments or their retention until latter phases of the site's development when they would be relocated;
- Site D - Commercial development primarily offices, hotels and other related facilities with new vehicle access to Styal Road. Includes for landscape mitigation and excludes land within the central-east area currently occupied by United Utilities and safeguards corridor for SEMMMS that passes through the central-west area and to the south of the eastern area;
- Site E - Combination of operational land, cargo and car parking. Includes for the relocation of junction 6 of the M56 to the west of the existing and the realignment of the A538 Old Wilmslow Road. Safeguards corridor for future Western Rail route that passes through the centre of the site and includes for the provision of landscape mitigation to the west, including the majority of land occupied by Sunbank Wood/clough and forming a buffer to the south adjacent to Cotteril Clough SSSI; and
- Site F - Airfield. Includes for retention of landscaping forming part of the Runway 2 Landscape Habitat Management Area over an extensive area of land surrounding the runway.

2.1.7 It should be noted that the layouts and accompanying text are for illustrative purposes only, providing the principles of development and potential spatial distribution to enable a realistic assessment of potential environmental effects. In the event that development is brought forward detailed proposals would be prepared and assessed.

2.2 Assessment of Environmental Effects

2.2.1 The assessment of potential impacts generally adopted the assessment method from the CBA (2000) and AXIS (2006) studies, and is in accordance with principles of established professional assessment standards. Bespoke methods, based on best practice and professional experience, were established for those environmental themes where no standard assessment method exists.

2.2.2 In principle, the assessment considered both the value of the environmental resource as identified during Environmental Baseline (see Part 1 of the Environmental Evidence Base study) and the magnitude of change that is most likely (not worst case) as a result of the development scenario (see Appendix A), and subsequently derives a significance rating.

2.2.3 The environmental assessment focuses on the long-term operational effects and not those impacts associated with the relatively short-term construction programme or the effect of phased implementation of development across the sites. It is assumed that the principles of good design and industry best practice would be adopted during detailed design and construction.

2.2.4 The assessment was undertaken in two stages:

- Stage 1 – Assessed the potential environmental effects arising from implementation of the development scenario as shown in the illustrative layout plan and accompanying text, including any mitigation as detailed, with the allocation of a significance rating; and
- Stage 2 – Identified potential additional mitigation measures that may be implemented to reduce adverse environmental effects with subsequent assessment and allocation of significance rating.

2.2.5 The significance rating has been assigned to the identified effects at both stages to simplify, and provide consistency and visibility to presentation of the assessment outcome. This comprised a 7- point scale developed for each of the environmental themes with consideration given to duration, likelihood and magnitude of change from the baseline environment, both positive and negative. The scale is as follows:

- Substantial adverse;

- Moderate adverse;
- Slight adverse;
- Negligible / Neutral;
- Slight beneficial effect;
- Moderate beneficial effect; and
- Substantial beneficial effect.

2.2.6 An assessment of the development scenarios was undertaken for each of the environment themes with significance rated according to the thresholds given in the tables below.

Landscape & Visual

2.2.7 Typically when undertaking a landscape and visual assessment, the significance of effect/impact is determined by considering the sensitivity of the receptor (landscape or visual) together with the magnitude of change upon said receptor that would result from the proposal.

2.2.8 However, as the various development scenarios assessed as part of this study are by their nature generic and lack detail, it is not possible to determine the magnitude of change that would result with any useful level of accuracy.

2.2.9 As such, significance of effect on the landscape and visual amenity has been determined by reference to tables 2.1 and 2.2 respectively.

Table 2.1 – Landscape Effects Significance Threshold

Significance	Criteria
Substantial Adverse	<p>Proposals:</p> <ul style="list-style-type: none"> • Result in a fundamental change in the make-up and balance of landscape characteristics over an extensive area. • Are at considerable variance with the landform, scale and pattern of the landscape. • Are visually intrusive and would disrupt fine and valued views of the area. • Are likely to degrade, diminish or even destroy the integrity of a range of characteristic features and elements and their setting. • Will be substantially damaging to a high quality or highly vulnerable landscape, causing it to change and be considerably diminished in quality. • Cannot be adequately mitigated for.

Significance	Criteria
	<ul style="list-style-type: none"> • Are in serious conflict with government policy for the protection of nationally recognised countryside as set out in PPS7.
Moderate Adverse	<p>Proposals:</p> <ul style="list-style-type: none"> • Result in a notable change which may affect the balance of landscape characteristics over a wide area, or particularly intensive change over a more limited area. • Be out of scale with the landscape, or at odds with the local pattern and landform. • Visually intrusive and will adversely impact on the landscape. • Not possible to fully mitigate for, that is, mitigation will not prevent the scheme from causing longer-term impacts upon the landscape as some of the features of interest will be partly destroyed or their setting reduced or removed. • Will have an adverse impact on a landscape of recognised quality or on vulnerable and important characteristic features or elements. • In conflict with local and national policies to protect open land and nationally recognised countryside as set out in PPS7.
Slight Adverse	<p>Proposals:</p> <ul style="list-style-type: none"> • Result in a limited change in component characteristics of the wider landscape character. • Do not quite fit the landform and scale of the landscape. • Although not very visually intrusive, will impact on certain views into and across the area. • Cannot be completely mitigated for because of the nature of the proposal itself or the character of the landscape in which it is set. • Affect an area of recognised landscape quality. • Conflict with local authority policies for protecting the local character of the countryside.
Neutral / Negligible	<p>Proposals:</p> <ul style="list-style-type: none"> • Result in little change in landscape character, with the balance of landscape characteristics unaffected. • Complement the scale, landform and pattern of the landscape. • Incorporate measures for mitigation to ensure that the scheme will blend in well with surrounding landscape features and landscape elements. • Avoid being visually intrusive nor have an adverse effect on the current level of tranquillity of the landscape. • Maintain existing landscape character in an area which is not designed landscape, that is, neither national or local high quality, nor is it vulnerable to change. • Avoid conflict with government policy towards protect of the countryside.
Slight Beneficial	<p>Proposals:</p> <ul style="list-style-type: none"> • Result in a limited change in component characteristics of the wider landscape character. • Fit well with the scale, landform and pattern of the landscape. • Incorporate measures for mitigation to ensure they will blend in well with surrounding landscape. • Will enable some sense of place and scale to be restored

Significance	Criteria
	<p>through well-designed planting and mitigation measures.</p> <ul style="list-style-type: none"> • Maintain or enhance existing landscape; character in an area which is not a designated landscape, nor vulnerable to change. • Avoid conflict with government policy towards protection of the countryside.
Moderate Beneficial	<p>Proposals:</p> <ul style="list-style-type: none"> • They would result in a notable change which may affect the balance of landscape characteristics over a wide area, or particularly intensive change over a more limited area. • They fit very well with the scale, landform and pattern of the landscape. • There is potential, through mitigation, to enable the restoration of characteristic features, partially lost or diminished as the result of changes resulting from intensive farming or inappropriate development. • They will enable a sense of place and scale to be restored through well-designed planting and mitigation measures, that is, characteristic features are enhanced through the use of local materials and species used to fit the proposals into the landscape. • They enable some sense of quality to be restored or enhanced through beneficial landscaping and sensitive design in a landscape which is not of any formally recognised quality. • They further government objectives to regenerate degraded countryside.
Substantial Beneficial	<p>Proposal:</p> <ul style="list-style-type: none"> • Result in a fundamental change in the make-up and balance of landscape characteristics over an extensive area. • Result in widespread restoration/ reinstatement of characteristic features. • Removal of adverse land uses/ processes detrimental to the landscape. • Result in a greatly increased sense of quality, place and scale within the landscape through high-quality design/ restoration particularly appropriate to the setting. • Fully accord with policy initiatives. • Very few if any development proposals are likely to merit this score.

Table 2.2 – Visual Effects Significance Threshold

Significance	Criteria
Substantial adverse	<ul style="list-style-type: none"> • Fundamental changes in the nature and quality of view experienced by highly sensitive receptors, the effects of which cannot be appropriately screened or mitigated.
Moderate adverse	<ul style="list-style-type: none"> • Significant and notable changes in the nature and quality of view experienced by highly sensitive receptors, but which are not fundamentally unpleasant and have been partially mitigated. • Fundamental changes in views of medium sensitive receptors.
Slight adverse	<ul style="list-style-type: none"> • Modest changes in the nature and quality of views experienced by highly sensitive receptors which may have been significantly screened or mitigated. • Notable changes in the nature and quality of views

Significance	Criteria
	<p>experienced by medium sensitive receptors.</p> <ul style="list-style-type: none"> Fundamental changes in views experienced by low sensitive receptors.
Neutral / Negligible	<ul style="list-style-type: none"> Little material change in the nature of a view experienced by a high or medium sensitive receptor. Notable changes in view experienced by a low sensitive receptor.
Slight beneficial	<ul style="list-style-type: none"> Visual context of any receptor is slightly improved by either the implementation of high quality design or appropriate mitigation measures.
Moderate Beneficial	<ul style="list-style-type: none"> Visual context of any receptor is moderately improved by the implementation of new development.
Substantial Beneficial	<ul style="list-style-type: none"> Visual context of any receptor is significantly improved by the implementation of new development.

Ecology & Nature Conservation

2.2.10 Sites, habitats and species can be of importance for nature conservation. While recognised nature conservation sites often contain a wide range of species, there are species, protected by law, which also occur outside designated sites. In addition many scarce and declining species have only slight or no protection. Such species are of nature conservation importance (also referred to as “biodiversity priority”) but, because of their dispersed nature of populations and/or seasonal mobility, their well-being cannot be safeguarded by protection afforded to fixed sites. Some types of habitat are of biodiversity priority and are frequently found outside recognised nature conservation sites.

2.2.11 Respecting the strategic level of this study, the assessment was undertaken broadly in compliance with the Institute of Ecology and Environmental Management (IEEM) guidance for ecological impact assessment (version 7 - 2006). This guidance is designed for detailed assessment of specific projects for which mitigation measures are known, so a modified approach has been taken for the purposes of this strategic assessment.

2.2.12 The steps of assessment are as follows:

- Step 1: Determining the value of the ecological receptors within each site;
- Step 2: Characterising the ecological impact of the proposed development on the receptors; and
- Step 3: Assessing the significance of the impact.

Step 1: Determining Value

2.2.13 The relative value and importance of ecological receptors are determined in accordance to a geographical frame of reference to provide consistency.

Ecological receptors are considered on the following scale:

- International;
- UK;
- Regional (North West);
- County (Greater Manchester/Cheshire);
- District (Unitary Authority, City or Borough);
- Local (defined here as the extent of land owned by Manchester Airport and a 1km buffer – broadly the area shown on Axis drawing 916-01/001)
- Within immediate zone of influence only (ie, within the study site boundary only); or
- Negligible.

2.2.14 In the case of some habitats, for example reedbeds, field boundaries and urban grasslands, which are prioritised in the UK and Greater Manchester/Cheshire Biodiversity Action Plans (BAPs), it is inappropriate to mechanistically assign them a national or county value. This is because these habitat types may exist in small, fragmented, atypical and/or unfavourable conservation condition – hence their relative importance may be low. The appearance of these habitat types in a BAP is to guide conservation action and is not intended to imply importance of the habitat.

2.2.15 When assigning value to species, biodiversity value must be considered alongside legal status. Species can be of BAP priority and/or enjoy statutory protection. Such species are assigned value according to characteristics that include distribution, status, rarity, population size, species assemblage, mobility, local distinctiveness, vulnerability. Value of the species is described at the level of the BAP in question (eg, great crested newts at the Airport area are part of a Greater Manchester-wide species hotspot, and are considered as being of “County” value).

2.2.16 Table 2.3 sets out a framework for determining the value of receptors in the context of this assessment. It is descriptive and aims to cover a wide range

of receptors, but inevitably it requires professional interpretation in respect of the particular sites.

2.2.17 Some sites have a range of receptors of varying level of importance.

Table 2.3 - Ecology & Nature Conservation Value Criteria

Value	Criteria
International	<ul style="list-style-type: none"> • Internationally designated or candidate sites, ie either Ramsar, Special Protection Areas (SPA) or Special Areas of Conservation (SAC); or • Viable area of habitat of a type listed in Annex I of the Habitats Directive, or small areas of such habitat which are essential to maintain the viability of a larger whole; or • Sites with regularly occurring population of internationally important species, threatened or rare, in the UK as identified within the UK Red Data Book species categories 1 & 2 of UK Biodiversity Action Plan (UK BAP).
National	<ul style="list-style-type: none"> • Sites of Special Scientific Interest (SSSI); • National Nature Reserve (NNR); • Discrete area which would meet published selection criteria for national designation; • Viable area of priority habitat specifically named in the UK BAP or smaller areas of such habitat essential to maintain a wider whole; • Sites with regularly occurring and nationally-significant numbers of nationally important species, threatened or rare, as identified through the UK Biodiversity Action Plan (UK BAP).
Regional	<ul style="list-style-type: none"> • Viable areas of key habitat specifically named in the Regional BAP or small areas of habitat essential to maintain wider viability. • Sites with regularly occurring and regionally-significant numbers of important species, threatened or rare, in the region, as identified in the NW Biodiversity Audit
County	<ul style="list-style-type: none"> • Sites of Biological Importance (Grade A in Greater Manchester) • Sites with regularly occurring populations of species prioritised in the Greater Manchester or Cheshire BAPs (with the population levels in the largest size categories where appropriate) • Sites which contribute to “species hotspots” in the GM Ecological Framework • Viable and sustainable area of a habitat prioritised in the Greater Manchester or Cheshire BAP, including Core Areas and Habitat Mosaics of the GM Ecological Framework
District	<ul style="list-style-type: none"> • Grade B Sites of Biological Importance (SBI), registered with the Greater Manchester Ecology Unit; • Local Nature Reserves (LNR). • Viable and sustainable areas and/or populations of Local Biodiversity Action Plan (LBAP) priority species or habitats.

Value	Criteria
Local	<ul style="list-style-type: none"> • Grade C Sites of Biological Importance (SBI), registered with the Greater Manchester Ecology Unit; • Areas that enrich the local habitat resource, ie, contain features with some biodiversity or earth heritage interest, but of insufficient interest to warrant inclusion in a higher category. For example, a grassland might be a seasonal home to a Red List bird species such as reed bunting which remains widespread in the region, although less common than formerly or to a county BAP species such as skylark which remains common in suitable habitats although these are less extensive than formerly. • Small fragments of valuable habitats such as ancient woodlands or species- rich grasslands which are too small to have achieved SBI status. • Populations of BAP priority species that are in moderate size classes (where appropriate) • Areas or corridors that contribute to viability of such priority species
Immediate Zone of Influence	<ul style="list-style-type: none"> • Small fragments of habitats prioritised in BAPs • Populations of BAP priority species that are in low size classes (where appropriate)

Step 2: Characterising Impact

2.2.18 IEEM guidance defines a ‘significant impact’ as *“an impact (adverse or positive) on the integrity of a defined site or ecosystem(s) and/or the conservation status of habitats or species within a given geographical area, including cumulative impacts.”*

2.2.19 The Government Circular ODPM 2005/06 defines site integrity as *“the coherence of its ecological structure and function, across its whole area, that enables it to sustain the habitat, complex of habitats and/or the levels of populations of species for which it was classified”*.

2.2.20 IEEM guidance does not allow for gradations of significance – an impact is adverse or it is not. This usually means that mitigation must be considered carefully – if a development would cause a negative impact which is fully capable of mitigation, then the residual impact is predicted to be neutral. If mitigation is uncertain, then the impact must be predicted as “adverse”.

2.2.21 If the development does not affect integrity, it is predicted to be of negligible impact.

- 2.2.22 If development could result in an improvement of integrity, then it is considered to be beneficial. In some cases, a mitigation scheme can result in a net beneficial impact on integrity for some receptors.
- 2.2.23 For this strategic assessment, assumptions are made as to the effectiveness of mitigation. For example, development of some sites might affect great crested newts. However, the Airport has demonstrated that it can mitigate for most negative effects on newts, so the impact can confidently be assessed as “neutral”.
- 2.2.24 Obviously an adverse impact on a nationally-important receptor is of greater concern than an adverse impact on a locally-important receptor. The assessment of significance is discussed below.

Step 3: Assessing Significance of Impact

- 2.2.25 The value of the ecological receptor, the nature of the impact arising from development and the probability of mitigation were further assessed using a matrix to derive a measure of significance consistent with other assessments made in this study as set out within Table 2.4.
- 2.2.26 Some sites have several receptors. The assessment describes the probable impact on the different receptors, but for the overall summary, the worst-case impact is noted. For example, development adversely affecting an SSSI (nationally important) and a water vole ditch (important in the immediate zone only) would be classed as “Substantial Adverse”.

Table 2.4 – Ecology & Nature Conservation Significance Matrix

Value	Adverse	Adverse but mitigable	Neutral/Negligible	Positive
International	Substantial Adverse	Moderate Adverse	Negligible	Moderate Beneficial
National	Substantial Adverse	Moderate Adverse	Negligible	Moderate Beneficial
Regional	Substantial Adverse	Moderate Adverse	Negligible	Slight Beneficial
County	Substantial Adverse	Slight Adverse	Negligible	Slight Beneficial
Authority	Moderate Adverse	Slight Adverse	Negligible	Slight Beneficial
Local	Slight Adverse	Negligible	Negligible	Slight Beneficial
Other Lesser	Slight Adverse	Negligible	Negligible	Negligible

- 2.2.27 In some instances further survey work would be required and/or more defined development proposals required enabling a more definitive assessment. As an example, the loss of ponds would, in its own right, generally lead to a slight adverse significance of impact as the resource is locally important. However, if the pond contained great crested newts, or another protected species, the significance of impact would be more substantial, as the resource would be of national importance.
- 2.2.28 The approach that has been adopted for this assessment is that where protected species are known to have occurred, through identification by previous surveys, they are deemed to be currently present and the assessment weighted accordingly. Where potential habitat exists and there is no known evidence of the presence of a protected species in the wider area it has been judged not be present. This approach is justified by the strategic level of the assessment, the relatively high level of previous surveys that have been undertaken around the airport and by the range of proven mitigation measures (eg, translocation) available to safeguard a range of protected species. However, translocation has its own effects relating to timescales required to complete the process.

Historic Environment

- 2.2.29 The effects on the historic environment were assessed according to a 3-stage process, broadly based on the Design Manual for Roads and Bridges (DMRB) Manual (Volume 11, Section 3, Part 2, August 2007).

2.2.30 Respecting the strategic level of this study, the assessment was undertaken on existing available data as identified within the desk-based baseline study and on features identified as being either on-site or those off-site within a 500m buffer zone and of greater than local importance and potentially affected (see Appendix B) . The assessment considered the interest feature, its setting and amenity.

2.2.31 The steps of assessment are as follows:

- Step 1: Determining the value of the historic environment features within each site and its immediate vicinity according to the criteria set out in Table 2.5;
- Step 2: Characterising the magnitude of change / impact to the historic interest features as a consequence of the proposed development according to the criteria set out in Table 2.6 and includes for the implementation of mitigation; and
- Step 3: Assessing the significance of the impact using the matrix set out in Table 2.7.

Table 2.5 – Historic Environment Value

Value	Criteria
Very High	<ul style="list-style-type: none"> • Structures of international importance, eg World Heritage Sites (WHS), including nominated sites • Other archaeological interest features/buildings recognised as being of international importance • Interest features that can contribute significantly to acknowledged international research • Extremely well preserved historic landscapes with exceptional coherence, time-depth or other critical factor
High	<ul style="list-style-type: none"> • Scheduled Ancient Monuments (SAMs) with standing remains, including nominated sites • Listed Buildings classified as Grade I or II* • Other Listed Buildings that can be shown to have exceptional qualities in their fabric or historical associations not adequately reflected in the listing grade • Conservation Areas containing very important buildings • Undesignated structures of clear national importance and/or schedulable quality and importance • Interest features that can contribute significantly to acknowledged national research • Designated/undesignated historic landscape of outstanding interest • Undesignated historic landscape of high quality and importance and of demonstrable national value • Well preserved historic landscape, exhibiting considerable coherence, time-depth or other critical factor(s)

Value	Criteria
Medium	<ul style="list-style-type: none"> Listed Buildings classified as Grade II Unlisted buildings that can be shown to have exceptional qualities in their fabric or historical association Conservation Areas containing buildings that contribute significantly to its historic character Historic townscape or built up area with important historic integrity in their buildings, or built settings (including street furniture and other structures) Designated or undesignated interest features that contribute to regional research objectives Designated special historic landscape Undesignated historic landscape that would justify special historical landscape designation Averagely well-preserved historic landscape with reasonable coherence, time-depth or other critical factor(s)
Low	<ul style="list-style-type: none"> Locally Listed Buildings Unlisted historic buildings of modest quality in their fabric or historical association Historic townscape or built up area of limited historic integrity in their buildings, or built settings (including street furniture and other structures) Designated or undesignated interest features of local importance Assets compromised by poor preservation and/or poor survival of contextual associations Assets of limited value, but potential to contribute to research objectives Robust undesignated historic landscapes. Historic landscapes with importance to local interest groups. Historic landscapes whose value is limited by poor preservation and/or poor survival of contextual associations.
Negligible	<ul style="list-style-type: none"> Buildings of no architectural or historic note; buildings of an intrusive character Assets with very little or no surviving archaeological interest Landscapes with little or no significant historical interest.
Unknown	<ul style="list-style-type: none"> Buildings with some hidden (ie, inaccessible) potential for historic significance The importance of the resource has not been ascertained

Table 2.6 – Historic Environment Magnitude/Impact of Change

Magnitude/Impact	Criteria
Major	<ul style="list-style-type: none"> Change to key historic building elements/most or all of all key archaeological materials, such that the resource is totally altered Comprehensive change to setting Change to most or all key historic landscape elements, parcels or components; extreme visual effects; gross change of noise or change to sound quality; fundamental changes to use or access; resulting in total change to historic landscape character unit.

Magnitude/Impact	Criteria
Moderate	<ul style="list-style-type: none"> Change to many key historic building elements/key archaeological materials, such that the resource is significantly and clearly modified Changes to the setting of an historic building/archaeological asset, such that it is significantly modified Changes to many key historic landscape elements, parcels or components, visual change to many key aspects of the historic landscape, noticeable differences in noise or sound quality, considerable changes to use or access; resulting in moderate changes to historic landscape character.
Minor	<ul style="list-style-type: none"> Change to key historic building elements/archaeological materials, such that the asset is slightly different Change to the setting of an historic building, such that it is noticeably changed Slight changes to setting of archaeological remains Changes to few key historic landscape elements, parcels or components, slight visual changes to few key aspects of historic landscape, limited changes to noise levels or sound quality; slight changes to use or access: resulting in limited changes to historic landscape character.
Negligible	<ul style="list-style-type: none"> Slight changes to historic building elements or setting that hardly affect it Very minor changes to archaeological materials or setting Very minor changes to key historic landscape elements, parcels or components, virtually unchanged visual effects, very slight changes in noise levels or or sound quality; very slight changes to use or access; resulting in a very small change to historic landscape character.
No Change	<ul style="list-style-type: none"> No change to fabric or setting No change to elements, parcels or components; no visual or audible changes; no changes arising from in amenity or community factors.

2.2.32 In order to be consistent with the significance criteria adopted throughout the study, the significance matrix as used in DMRB has been modified, taking a precautionary approach, ie, where DMRB identified a 'neutral/slight' significance, the adopted significance assigned below is 'slight'.

Table 2.7 – Historic Environment Significance Matrix

		Magnitude/Impact of Change				
		No Change	Negligible	Minor	Moderate	Major
Value	Very High	Negligible	Slight	Moderate	Substantial	Substantial
	High	Negligible	Slight	Moderate	Moderate	Substantial
	Medium	Negligible	Slight	Slight	Moderate	Moderate
	Low	Negligible	Slight	Slight	Slight	Moderate
	Negligible	Negligible	Negligible	Slight	Slight	Slight

Land Use

2.2.33 There being no commonly applied significance threshold criteria for matters of land use, bespoke criteria were developed based on the extent and duration of land use change, as given in Table 2.8.

Table 2.8 – Land Use Threshold Significance of Impact

Significance	Criteria
Substantial Adverse	<ul style="list-style-type: none"> • Loss of substantial numbers of residential properties (total/significant proportion of site), requiring relocation of residents off-site. • Loss of substantial numbers of commercial / industrial (total/significant proportion of site) properties, requiring relocation of businesses off-site. • Substantial area(s) 'best and most versatile' agricultural land (total/significant proportion of site sufficient to comprise several workable field units) taken out of use and/or soil resource severely damaged. • Significant affect on the operation and/or amenity of neighbouring land uses (ie, loss of access, continual nuisance in the long term).
Moderate Adverse	<ul style="list-style-type: none"> • Loss of residential properties (small proportion of site/single dwelling), requiring relocation of residents off-site or loss of land affecting use/amenity of property. • Loss of commercial / industrial (small proportion of site) properties, requiring relocation of businesses off-site or significant adaptation to continue existing land use. • 'Best and most versatile' agricultural land sufficient to comprise workable field unit taken out of use and/or soil resource severely damaged. • Moderately large areas of land taken out of agricultural use (regardless of agricultural classification) and/or soil resource damaged. • Moderate affect on the operation and/or amenity of neighbouring land use (ie, disruption to access, occasional/periodic nuisance over long-term).
Slight Adverse	<ul style="list-style-type: none"> • Small area/proportion of site affected, temporarily inhibiting existing land use or permanent change of land use that would restrict but not prevent/unduly affect existing land use continuing. • Loss of small area(s) of agricultural land that would not significantly affect agricultural use. • Effects on the income to the farm business are insignificant.
Neutral / Negligible	<ul style="list-style-type: none"> • No noticeable/barely perceptible change. • Only moderate or worse quality land. • Non-agricultural land alone is taken for development. • There is no change to farm income caused by the development.
Slight Beneficial	<ul style="list-style-type: none"> • Land quality is improved by use of the soil resource from those parts of the site to be developed. • Soils removed from site are beneficially used elsewhere. • Enhancement of the remaining soil resource results in

Significance	Criteria
	<ul style="list-style-type: none"> increased farm income on the smaller land area. Enhancement to commercial/industrial amenity (ie, reduced nuisance, provision of improved access).
Moderate Beneficial	<ul style="list-style-type: none"> Enhancement to residential amenity (ie, reduced nuisance, provision of improved access).
Substantial Beneficial	<ul style="list-style-type: none"> None

Recreation

2.2.34 There are no clear significance threshold criteria commonly applied to matters of recreation. Consequently, criteria were developed based on the extent and duration of change, as given in Table 2.9 below.

Table 2.9 – Recreation Threshold Significance of Impact

Significance	Criteria
Substantial Adverse	<ul style="list-style-type: none"> Loss of recreational resource of national value or significant change as to severely adversely affect the character and/or use of national resource. Loss or significant diversion of national or regional footpath or cycleway.
Moderate Adverse	<ul style="list-style-type: none"> Adverse effect on use and/or area of land available for existing recreational resource of national value or loss of recreation resource of regional value. Short diversion to national or regional footpath or cycleway. Loss or significant diversion of local or discretionary footpath or cycleway.
Slight Adverse	<ul style="list-style-type: none"> Adverse effect on use and/or area of land available for existing recreational resource of regional value or loss of recreation resource of local value. Short diversion of local or discretionary footpath or cycleway.
Neutral / Negligible	<ul style="list-style-type: none"> No noticeable/barely perceptible change.
Slight Beneficial	<ul style="list-style-type: none"> Improvement to amenity of footpath or cycleway (ie, improved accessibility and/or amenity)
Moderate Beneficial	<ul style="list-style-type: none"> Supports provision of new/improved local or discretionary footpath or cycleway. Provides new recreational route for mobility impaired.
Substantial Beneficial	<ul style="list-style-type: none"> Supports provision of new / improved national recreational routes.

3.0 ASSESSMENT OF IMPACTS

3.1 Introduction

3.1.1 This section sets out the findings of the assessment of effects that may occur to the environmental baseline (see Part 1 of the Environmental Evidence Base study) from the implementation of the development scenarios (see Appendix A) and subsequent significance rating for both the interim and subsequent to mitigation stages.

3.1.2 The assessments are set out within a series of tables below:

A - Land to East of A538 (Cloughbank Farm)

B - Land to North of Ringway Road

C - Land within, and adjacent to, Junction 5 of the M56

D - Land to South of Ringway Road, between Tedder Drive and Styal Road

E - Land to West of A538 (Oak Farm)

F - Parallel Taxi-way

3.2 Assessment Tables

SITE	A – LAND TO EAST OF A538 (CLOUGHBANK FARM)			
DEVELOPMENT SCENARIO	Comprises combination of Airfield, Aircraft Maintenance, Operational land and Cargo. Includes for retention of Ringway Chapel/churchyard with landscape mitigation and Cotteril Clough SSSI and safeguarded corridor for future Western Rail route that passes through northern section of site.			
TOPIC	ASSESSMENT	SIGNIFICANCE	RECOMMENDED MITIGATION	SIGNIFICANCE
Landscape	<ul style="list-style-type: none"> • Ancient Woodland/SSSI to be retained as part of the development and surrounded by a landscape mitigation buffer. • Key existing vegetation cover to be retained where possible. • Landscape character is intimate and enclosed – a high sensitivity to the development proposed. • Existing vegetation would be replaced with predominantly hardstanding. • Existing planting along A538 corridor provides screening in views from south and west – likely to be wholly or partially removed as part of the development. This would mostly affect the boundary with Area E so of less importance than would otherwise be the case. • High level mast lighting (25m) is potentially intrusive but would be in the context of existing airport and highway lighting. • Whilst internally the character of the area would be notably affected, there would be little impact upon surrounding land. • Existing large buildings at the Aviation Viewing Park – other buildings small in scale (one/two storeys). • Notable change in landscape character – due to vegetation loss and replacement with hardstanding, and the introduction of large buildings into what is presently a well-enclosed 	Moderate Adverse	<ul style="list-style-type: none"> • Structure planting to be implemented along site perimeter where security concerns allow. • Cut-off lighting to be installed where possible. • Site layout and alignment of buildings could be designed to minimise any visual intrusion subject to operational requirements. • Mitigation would soften the effects of the development without reducing the overall impact. 	Moderate Adverse

SITE	A – LAND TO EAST OF A538 (CLOUGHBANK FARM)			
DEVELOPMENT SCENARIO	Comprises combination of Airfield, Aircraft Maintenance, Operational land and Cargo. Includes for retention of Ringway Chapel/churchyard with landscape mitigation and Cotteril Clough SSSI and safeguarded corridor for future Western Rail route that passes through northern section of site.			
TOPIC	ASSESSMENT	SIGNIFICANCE	RECOMMENDED MITIGATION	SIGNIFICANCE
Visual Amenity	landscape. <ul style="list-style-type: none"> Residential properties within Area boundary all to be demolished. Impacts beyond the area boundary would be minimal – possible views of buildings from Hale to north-west 	Slight Adverse	<ul style="list-style-type: none"> Little/no scope to mitigate effects and little need to do this given the lack of receptors in the vicinity. Site layout and alignment of buildings could be designed to minimise any visual intrusion subject to operational requirements. 	Slight Adverse
Ecology and Nature Conservation	<ul style="list-style-type: none"> Cotteril Clough SSSI is of national importance. Proposals show retention and of buffering to the SSSI. Cotteril Clough is also ancient woodland and SBI, part of which extends northwards beyond the SSSI designation. A northern section of ancient woodland/SBI, north of Cloughbank Farm, is shown to be lost to development footprint (aircraft maintenance). Habitat loss in Cotteril Clough woodland also includes the northern extent of Cotteril Clough Brook, which flows through the central section of the ancient woodland/SBI compartment that will be lost. The Ponds at Manchester Airport SBI is of Local importance. Proposals show partial loss of this SBI. The southern extent of the SBI (marshy grassland, neutral grassland and potentially one pond) is shown to be lost to development footprint (airfield). Substantial grassland (predominantly improved with some marshy / neutral grasslands), hedge and pond habitats would be lost under the 	Moderate adverse	<ul style="list-style-type: none"> Realignment of Wilmslow Road shall avoid any impingement upon the SSSI from road or development footprints or working areas. A full arboricultural survey will identify appropriate protection measures, but minimum standoff of 15m should be provided to the SSSI and all retained ancient woodland areas. Potential tree failure should also be accounted for when considering stand off distances. Road realignment and edge development works shall ensure no indirect impact on the SSSI (dust, run-off, debris, accidental spillages, soil/landslip etc). It is not possible to mitigate for the loss of ancient woodland at Cloughbank Farm (in a reasonable time frame). Partial mitigation could be achieved through replacement tree planting in combination with 	Potentially reduced to slight adverse in medium term (10+ years) and to negligible in long-term (50+years) <i>assumes full scope of mitigation opportunities can be delivered and managed in the long-term</i>

SITE	A – LAND TO EAST OF A538 (CLOUGHBANK FARM)			
DEVELOPMENT SCENARIO	Comprises combination of Airfield, Aircraft Maintenance, Operational land and Cargo. Includes for retention of Ringway Chapel/churchyard with landscape mitigation and Cotteril Clough SSSI and safeguarded corridor for future Western Rail route that passes through northern section of site.			
TOPIC	ASSESSMENT	SIGNIFICANCE	RECOMMENDED MITIGATION	SIGNIFICANCE
	<p>proposals. The grassland habitats are generally botanically impoverished, but their general extent and association with hedgerows, ponds and other landscape features means they are likely to be of value to farmland birds, amphibians, mammals such as bat and badgers and reptiles. The majority of hedgerows are likely to be UKBAP priority habitats. At least two of the ponds are UKBAP priority habitats by merit of supporting a UKBAP species (great crested newt). The other ponds may be UKBAP habitat, if they support common toad (also a UKBAP priority species).</p> <ul style="list-style-type: none"> • Buildings at Cloughbank Farm and trees within Cotteril Clough may have potential to support roosting bats and nesting birds. 		<p>translocation of soils from the ancient woodland area to be lost. Translocation and creation measures should follow general principals outlined in the Manchester Airport Second Runway Landscape and Management Plan, but site specific method statements and management plans should be prepared prior to onset of works.</p> <ul style="list-style-type: none"> • Loss of brook habitat within Cotteril Clough may impact otter and water vole. There is potential for off-site mitigation, through enhancement of retained watercourse(s) and creation of new watercourse(s) or wetland habitats. Connectivity with existing features will be vital to the success of any mitigation for these species. • No mitigation is possible for the net loss of SBI footprint; the Council is responsible for designations of such sites. However, provision of similar habitats to those lost within the SBI may be feasible within the landscape buffer or off-site. • Hedgerow loss can be offset by replacement planting. This could be achieved in part within the landscape buffer, but to ensure no net loss, offsite planting will be required. Native planting of at least seven 	

SITE	A – LAND TO EAST OF A538 (CLOUGHBANK FARM)			
DEVELOPMENT SCENARIO	Comprises combination of Airfield, Aircraft Maintenance, Operational land and Cargo. Includes for retention of Ringway Chapel/churchyard with landscape mitigation and Cotteril Clough SSSI and safeguarded corridor for future Western Rail route that passes through northern section of site.			
TOPIC	ASSESSMENT	SIGNIFICANCE	RECOMMENDED MITIGATION	SIGNIFICANCE
			<p>different woody species should be included in the hedgerow replacement.</p> <ul style="list-style-type: none"> All tree, hedgerow and scrub removal should be timed to avoid the bird nesting season (March – August inclusive). If this is not possible, these features should be netted in the winter period prior to their removal, to ensure nesting birds are not affected. Replacement planting discussed elsewhere will maintain net nesting habitats. Pond loss can be mitigated through offsite replacement. At least two of the ponds to be lost support great crested newts. A licence from Natural England will be required and an amphibian translocation scheme implemented. Full pond survey will be required prior to the licence application to identify population size, distribution and mitigation measures. All great crested newt ponds will require replacement on a 2 for 1 basis. Other ponds will require like for like replacement. Receptor areas for pond replacement must be connected to existing pond networks and greenspaces to avoid fragmentation or isolation. The receptor site will need to be dedicated for nature 	

SITE	A – LAND TO EAST OF A538 (CLOUGHBANK FARM)			
DEVELOPMENT SCENARIO	Comprises combination of Airfield, Aircraft Maintenance, Operational land and Cargo. Includes for retention of Ringway Chapel/churchyard with landscape mitigation and Cotteril Clough SSSI and safeguarded corridor for future Western Rail route that passes through northern section of site.			
TOPIC	ASSESSMENT	SIGNIFICANCE	RECOMMENDED MITIGATION	SIGNIFICANCE
			<p>conservation and a clear long-term management plan established.</p> <ul style="list-style-type: none"> It is unlikely that the full extent of grassland loss, which may affect species such as farmland birds, reptiles and badgers, could be mitigated for. Survey for these species will be required to determine the importance of the site and appropriate species specific mitigation. Partial offsetting may be achieved through identification of areas within the landscape buffer and in offsite habitats that can be enhanced/managed specifically for those species affected by the grassland loss. However, any enhancement or change in management of grasslands within the landscape buffer should ensure no detrimental impact upon the retained SBI (Ponds at Manchester Airport) or other retained features of interest. Bat survey will be required to established presence of roosts and importance of habitats for commuting/foraging. Replacement bat roost and bird nest habitat provision could be accommodated within new building design, either as an integral part of the building, or through external features such as nest/roost 	

SITE	A – LAND TO EAST OF A538 (CLOUGHBANK FARM)			
DEVELOPMENT SCENARIO	Comprises combination of Airfield, Aircraft Maintenance, Operational land and Cargo. Includes for retention of Ringway Chapel/churchyard with landscape mitigation and Cotteril Clough SSSI and safeguarded corridor for future Western Rail route that passes through northern section of site.			
TOPIC	ASSESSMENT	SIGNIFICANCE	RECOMMENDED MITIGATION	SIGNIFICANCE
			<p>units or boxes. Alternatively, offsite dedicated habitat features could be constructed. Any replacement bat roost habitat would require management and maintenance arrangements to be secured for the long-term. A Natural England licence will also be required, if bats are present, and a roost mitigation scheme implemented. The receptor site will need to be dedicated for nature conservation and a clear long-term management plan established.</p> <ul style="list-style-type: none"> • Receptor site(s) for habitat replacement/enhancement should be selected carefully to maintain connectivity and deliver a contiguous and holistic approach to large scale habitat creation schemes. • Introduction of lighting into previously unlit areas would impact on bat and possibly bird behaviour. A sensitive lighting scheme will need to be designed to avoid light spillage upon the mature woodland canopies, to reduce light spillage in retained open landscape areas and to create darkened corridors through/across the site to maintain connectivity. 	

SITE	A – LAND TO EAST OF A538 (CLOUGHBANK FARM)			
DEVELOPMENT SCENARIO	Comprises combination of Airfield, Aircraft Maintenance, Operational land and Cargo. Includes for retention of Ringway Chapel/churchyard with landscape mitigation and Cotteril Clough SSSI and safeguarded corridor for future Western Rail route that passes through northern section of site.			
TOPIC	ASSESSMENT	SIGNIFICANCE	RECOMMENDED MITIGATION	SIGNIFICANCE
Historic Environment	<ul style="list-style-type: none"> No international or national historic interest features. Demolition of Grade II listed building, Site of Cloughbank Farm, located almost centrally within the site on land identified for aircraft maintenance. Listing identifies that site as being 17th century building that has been largely re-built and added to within late 18th and early C19th century, however, some features remain. The immediate surroundings have previously been developed for office/compound and off-site car parking. Listed Building consent would be required for demolition. (Moderate Adverse) Site of Ringway Chapel (site recorded on HER) excluded from the developable footprint with landscape mitigation to be provided. Noted that the site is located adjacent to existing airport-related industrial development, although presently screened. Proposed landscape buffer would serve to protect immediate setting and remains below ground. In wider context site would become isolated from similar scale development and set within industrial context comprising large-scale hangers/buildings and hardstandings, with mast lighting, perimeter fencing in operation 24hrs/day 365 days/year. (Negligible) The Romper PH (not recorded on HER but of local interest, although unlikely to meet criteria for listing) to be demolished (Moderate Adverse) 	Moderate Adverse	<ul style="list-style-type: none"> If feasible, revise design to exclude Listed Building from developable footprint. However, this would fragment proposed aircraft maintenance development. Re-appraisal therefore assumes avoidance not feasible and demolition of Listed Building. Undertake detailed appraisal and recording of site of Cloughbank Farm and, if deemed necessary (liaison with GMAU), The Romper PH, to assess quality and condition of historic features. Support application for Listed Building consent for demolition and provides mitigation by recording. Detailed design to retain as many historic landscape features where possible. However, opportunity limited by nature of development. Desk base study to assess need for further investigations / field work into potential archaeological remains throughout site. 	Moderate Adverse

SITE	A – LAND TO EAST OF A538 (CLOUGHBANK FARM)			
DEVELOPMENT SCENARIO	Comprises combination of Airfield, Aircraft Maintenance, Operational land and Cargo. Includes for retention of Ringway Chapel/churchyard with landscape mitigation and Cotteril Clough SSSI and safeguarded corridor for future Western Rail route that passes through northern section of site.			
TOPIC	ASSESSMENT	SIGNIFICANCE	RECOMMENDED MITIGATION	SIGNIFICANCE
	<ul style="list-style-type: none"> • Potential impact on historic landscape through loss of landscape features (Slight Adverse) • No effect on Style Estate / Conservation Area approx 800m to SE of site. (Negligible) • Development would require ground intrusion with potential for disturbance to unknown sub-surface features of archaeological interest. 			
Land Use	<ul style="list-style-type: none"> • Loss of residential properties on Sunbank Lane and southern extent of Wilmslow Old Road. • Loss of residential property at Cloughbank Farm, also used as commercial property (Bed and Breakfast) providing off-site airport parking. • Loss of commercial property (The Romper Public House). However, noted that implementation of Western Rail along identified safeguarded route would also result in the loss of this property. • Loss of land in commercial use by Costain (vicinity of Cloughbank Farm) for office/compound. Assumed that this land use is temporary. • Retention of commercial (office) property at site of Ringway Chapel with landscape mitigation to be provided. Office would become isolated from similar scale development and set within industrial context comprising large-scale hangers/buildings and hardstandings, with mast lighting and perimeter fencing and in operation 24hrs/day 365 days/year. Potential disruption to business operations, ie noise, vibration and loss of setting. 	Moderate Adverse	<ul style="list-style-type: none"> • None 	Moderate Adverse

SITE	A – LAND TO EAST OF A538 (CLOUGHBANK FARM)			
DEVELOPMENT SCENARIO	Comprises combination of Airfield, Aircraft Maintenance, Operational land and Cargo. Includes for retention of Ringway Chapel/churchyard with landscape mitigation and Cotteril Clough SSSI and safeguarded corridor for future Western Rail route that passes through northern section of site.			
TOPIC	ASSESSMENT	SIGNIFICANCE	RECOMMENDED MITIGATION	SIGNIFICANCE
	<ul style="list-style-type: none"> Proposals include for realignment of A538 Wilmslow Road with potential realignment/loss of Sunbank Lane. Access to office may become compromised. Development within the River Bollin valley. Loss of high proportion of agricultural land (considered to be grade 3b – moderate quality). 			
Recreation	<ul style="list-style-type: none"> Loss of Aviation Viewing Park. Loss and/or diversion of footpaths to north of site (not public rights of way). Potential loss of connectivity to Pinfold Lane (presently through locked vehicle access gate from Sunbank Lane), provides foot/cycle access. Loss of connectivity with MAG Runway 2 trail – no longer required as loss of Aviation Viewing Park. The Sustrans route 85 (Manchester Airport Orbital cycleway)/Major Recreational Route that passes alongside the A538 Wilmslow Road would need to be diverted. 	Moderate Adverse	<ul style="list-style-type: none"> Relocate Aviation Viewing Park off-site. Provide alternative foot/cycle paths and enhance connectivity, including mobility improvements and landscape enhancement. 	Slight Adverse

SITE	B – LAND TO NORTH OF RINGWAY ROAD			
DEVELOPMENT SCENARIO	Comprises phased surface car parking with access to Ringway Road and Styal Road. Includes for landscape mitigation, most significantly to the south adjacent to Ringway Road, retention of runway approach lights and safeguarded corridor for future metrolink route that passes to the west of the site.			
TOPIC	ASSESSMENT	SIGNIFICANCE	RECOMMENDED MITIGATION	SIGNIFICANCE
Landscape	<ul style="list-style-type: none"> • Landscape character is open and unenclosed but surrounded by housing – medium sensitivity to the development type proposed. • Development would replace existing grassland with predominantly hardstanding. • Boundary fencing and lighting would represent new vertical structures, but would not be wholly out of character in urban fringe location. • Development likely to be intrusive upon views from surrounding properties. • Green Belt would remain open, albeit with extensive vegetation loss. • Visual intrusion upon some properties. • Change in balance of landscape characteristics – hardstanding would predominate following development. • Landscape mitigation to comprise planting, especially close to residential properties and be consistent with security and amenity requirements 	Slight Adverse	<ul style="list-style-type: none"> • Layout of development to retain and reinforce existing trees and hedges where feasible and appropriate. • Fast growing tree belt (e.g. hybrid poplars) to be planted along western perimeter (between development and Metrolink). • Denser and more species diverse belts of structure planting along other boundaries. • Use of planted bunding to be considered if surplus soil balance presents resulting from development. • Hard and soft landscaping to create an attractive setting for the development and break up and add variety to the experience of large expanses of car parking thereby diversifying the characteristics of the development. 	Slight Adverse

SITE	B – LAND TO NORTH OF RINGWAY ROAD			
DEVELOPMENT SCENARIO	Comprises phased surface car parking with access to Ringway Road and Styal Road. Includes for landscape mitigation, most significantly to the south adjacent to Ringway Road, retention of runway approach lights and safeguarded corridor for future metrolink route that passes to the west of the site.			
TOPIC	ASSESSMENT	SIGNIFICANCE	RECOMMENDED MITIGATION	SIGNIFICANCE
Visual Amenity	<ul style="list-style-type: none"> • All properties are of high sensitivity. • Residential properties to the west along Shadowmoss Road would overlook the development with little existing screening. • Properties to the south and east would be less impacted due to more extensive tree cover at garden boundaries. • Landscape mitigation to comprise planting, especially close to residential properties and be consistent with security and amenity requirements 	Slight Adverse	<ul style="list-style-type: none"> • Fast growing tree belt (e.g. hybrid poplars) to be planted along western perimeter (between development and Metrolink) would provide screening from properties on Shadowmoss Road. • Denser and more species diverse belts of structure planting along other boundaries would screen views from properties in these direction. • Planting on bunds (subject to soil surplus) would make screening more effective. • Hard and soft landscaping to create an attractive setting and context for the development and break up and add variety to the experience of large expanses of car parking thereby enhancing visual amenity. 	Slight Adverse
Ecology and Nature Conservation	<ul style="list-style-type: none"> • Development would result in the loss of existing pond habitats which may be used by great crested newts. However, pond quality is low and replacement habitat could be provided elsewhere onsite. • The ponds may be UKBAP habitat, if they support either great crested newt or common toad (also a UKBAP priority species). • Substantial open grassland (improved) and hedgerows will be lost to the footprint of the car parking. The grassland habitats are generally botanically impoverished, but their general extent and association with hedgerows, ponds 	Slight adverse <i>assumes existing hedgerow network cannot be retained in situ</i>	<ul style="list-style-type: none"> • Survey for great crested newts will be required of all ponds to be lost. Pond replacement will be required. Like for like is the minimum replacement ratio, unless great crested newts are present, in which case the replacement ratio increases to 2 for 1. Receptor areas for pond replacement must be connected to existing pond networks and greenspaces to avoid fragmentation or isolation. If gcn are present, a Natural England licence will be required and an amphibian 	Negligible <i>assumes full scope of mitigation opportunities can be delivered and managed in the long-term</i>

SITE	B – LAND TO NORTH OF RINGWAY ROAD			
DEVELOPMENT SCENARIO	Comprises phased surface car parking with access to Ringway Road and Styal Road. Includes for landscape mitigation, most significantly to the south adjacent to Ringway Road, retention of runway approach lights and safeguarded corridor for future metrolink route that passes to the west of the site.			
TOPIC	ASSESSMENT	SIGNIFICANCE	RECOMMENDED MITIGATION	SIGNIFICANCE
	<p>and other landscape features means they are likely to be of value to farmland birds, amphibians, mammals such as bats and potentially badgers. However, semi-improved grassland (more species diverse) will be retained under proposals.</p> <ul style="list-style-type: none"> • The majority of hedgerows are likely to be UKBAP priority habitats. • Proposals will also result in the loss of broad-leaved plantation, which offers potential for bat and bird roosting/nesting and foraging. • Currently the site is a large area of open unlit habitat suitable for foraging and commuting bat species. Lighting of the car park area could potentially have significant impact on bat species dispersals and community composition. 		<p>translocation scheme implemented. The receptor site will need to be dedicated for nature conservation and a clear long-term management plan established.</p> <ul style="list-style-type: none"> • Layout of car parking plots could seek to retain existing hedgerow network, at least in part, or could accommodate new hedgerows between the plots. Retained or new hedgerows should be provided with 1m grass strip on both sides. New planting could provide biodiversity enhancement by using greater mix of native woody species. • Replacement planting of species rich (at least seven different woody species) native hedgerows and woodland plantation should be implemented to ensure no net loss of hedgerow length or woodland cover in local area. This could be achieved in part within the landscape buffer, but to ensure no net loss, offsite planting will be required. • All tree, hedgerow and scrub removal should be timed to avoid the bird nesting season (March – August inclusive). If this is not possible, these features should be netted in the winter period prior to their removal, to ensure nesting birds are not affected. Replacement planting discussed 	

SITE	B – LAND TO NORTH OF RINGWAY ROAD			
DEVELOPMENT SCENARIO	Comprises phased surface car parking with access to Ringway Road and Styal Road. Includes for landscape mitigation, most significantly to the south adjacent to Ringway Road, retention of runway approach lights and safeguarded corridor for future metrolink route that passes to the west of the site.			
TOPIC	ASSESSMENT	SIGNIFICANCE	RECOMMENDED MITIGATION	SIGNIFICANCE
			<p>elsewhere will maintain net nesting habitats.</p> <ul style="list-style-type: none"> • It is unlikely that the full extent of grassland loss, which may affect species such as farmland birds, reptiles and badgers, could be mitigated for. Survey for these species will be required to determine the importance of the site and appropriate species specific mitigation. Partial offsetting may be achieved through identification of offsite habitats that can be enhanced/managed specifically for those species affected by the grassland loss. • Bat survey will be required to established presence of bat roosts (trees in hedgerows/plantation) and importance of the site for foraging/commuting. Loss of potential bat roost habitat (trees/hedgerows) can be offset by provision of roost/nest boxes on suitable retained trees in the local landscape or offsite in habitat receptor sites. A Natural England licence would be required to remove any trees or other features confirmed to support bat roosts. • A sensitive lighting plan should be implemented employing low level lighting (in terms of both light intensity and light column height). Lighting 	

SITE	B – LAND TO NORTH OF RINGWAY ROAD			
DEVELOPMENT SCENARIO	Comprises phased surface car parking with access to Ringway Road and Styal Road. Includes for landscape mitigation, most significantly to the south adjacent to Ringway Road, retention of runway approach lights and safeguarded corridor for future metrolink route that passes to the west of the site.			
TOPIC	ASSESSMENT	SIGNIFICANCE	RECOMMENDED MITIGATION	SIGNIFICANCE
			should also suitably shielded / directional to avoid light spillage on surrounding retained landscape buffers and any retained or new hedgerow network within the site. <ul style="list-style-type: none"> • Receptor site(s) for habitat replacement/enhancement should be selected to maintain connectivity and deliver a contiguous and holistic approach to large scale habitat creation schemes. 	
Historic Environment	<ul style="list-style-type: none"> • No international or national historic interest features. • Site of Moss Nook (recorded on HER as monument) located to south-west corner of site. Excluded from developable footprint and set within residential/urban setting. Proposed landscaping may have positive affect on setting. (Slight / potentially positive) • Tatton Arms Public House (recorded on HER as building) located to south-west corner of site at the junction of Ringway Road and Styal Road. Operational as Public House. Excluded from developable footprint and set within residential/urban setting. Proposed landscaping may have positive affect on setting. (Slight / potentially positive) • Key interest features nearby (Chamber Hall, Chamber Hall Barn Listed Buildings) generally intervened by existing development and/or landscaping. Proposed landscaping may have 	Negligible / Slight Positive	<ul style="list-style-type: none"> • Desk base study to assess need for further investigations / field work into potential archaeological remains throughout site. 	Negligible / Slight Positive

SITE	B – LAND TO NORTH OF RINGWAY ROAD			
DEVELOPMENT SCENARIO	Comprises phased surface car parking with access to Ringway Road and Styal Road. Includes for landscape mitigation, most significantly to the south adjacent to Ringway Road, retention of runway approach lights and safeguarded corridor for future metrolink route that passes to the west of the site.			
TOPIC	ASSESSMENT	SIGNIFICANCE	RECOMMENDED MITIGATION	SIGNIFICANCE
	<p>positive affect on setting of identified Listed Buildings in vicinity (Slight / potentially positive)</p> <ul style="list-style-type: none"> • Development unlikely to require significant ground intrusion, thereby reducing potential for disturbance to unknown sub-surface features of archaeological interest. 			
Land Use	<ul style="list-style-type: none"> • Developable footprint excludes all existing residential/commercial properties along the southern and eastern boundaries of the site (Ringway Road and Trenchard Drive). • Development constraints allow for a landscaping mitigation buffer zone between retained properties and development footprint. • Loss of site's agricultural land (classified as urban). • Airport Air Quality Monitoring building / former middle-marker navigational aid assumed to be retained within landscape mitigation buffer. • Neighbouring land uses (residential and commercial properties on Ringway Road, Trenchard Drive and Shadowmoss Road) may be affected by localised increases in traffic and associated degradation in air and/or noise quality and night-time arrivals/ departures in vehicles/pedestrians. However, site is set within context of urban area and the runway flight path. Noted that implementation of Metrolink Phase 3b and SEMMS along identified safeguarded route may also give rise to increases in disturbance to properties on Ringway Road and Shadowmoss Road. 	Slight Adverse	<ul style="list-style-type: none"> • None 	Slight Adverse

SITE	B – LAND TO NORTH OF RINGWAY ROAD			
DEVELOPMENT SCENARIO	Comprises phased surface car parking with access to Ringway Road and Styal Road. Includes for landscape mitigation, most significantly to the south adjacent to Ringway Road, retention of runway approach lights and safeguarded corridor for future metrolink route that passes to the west of the site.			
TOPIC	ASSESSMENT	SIGNIFICANCE	RECOMMENDED MITIGATION	SIGNIFICANCE
	<p>Furthermore, it is a characteristic of airport surface car parking is that there is no peak time for traffic flow, reducing potential for traffic conflicts.</p> <ul style="list-style-type: none"> Land safeguarded for future Metrolink Phase 3b extension to west and for SEMMS road scheme to the south of the site excluded from the developable footprint. Western part of site along with neighbouring housing estate identified as Major Urban Regeneration Area. 			
Recreation	<ul style="list-style-type: none"> There are no recreational designations or PRow within the site. Sustrans route 85 (Manchester Airport Orbital cycleway)/Major Recreational Route passes to the east of site along Styal Route. The route would not be directly affected. Potential effect to the visual amenity of link. However, proposals include landscape mitigation buffer along this boundary, thereby reducing its effect. Furthermore, route is set within the context of existing urban area, including industrial estate, and highway network. 	Negligible	<ul style="list-style-type: none"> None 	Negligible

SITE	C – LAND WITHIN, AND ADJACENT TO, JUNCTION 5 OF THE M56			
DEVELOPMENT SCENARIO	Comprises commercial development including airline offices, hotel and cargo/freight with new access to Thorley Lane, direct from land to east of the M56 spur and via bridge link from land to west of M56 spur through land outside of the site near Haletop Farm. Includes for landscape mitigation and retention of allotments on-site or their retention until latter phases of the site's development.			
TOPIC	ASSESSMENT	SIGNIFICANCE	RECOMMENDED MITIGATION	SIGNIFICANCE
Landscape	<ul style="list-style-type: none"> • Landscape character is enclosed, and defined in part by public access – medium/high sensitivity depending upon the size/scale of the development. • Development would result in loss of publicly accessible land –between allotments and Painswick Park, and potentially the allotments themselves. • Development would result in some loss of existing landscape features. • Development to maximise retention of existing vegetation cover and incorporate this into the site design where feasible. • Access to part of the development would be over the motorway slip road and would appear as part of the surrounding highway infrastructure – not uncharacteristic. • Visual intrusion upon flats to the north – impact level dependent upon size and scale of development. Potential for overshadowing. • Intensive change in landscape character – effects dependent upon size and scale of development in area to north of junction. 	Moderate Adverse	<ul style="list-style-type: none"> • Existing planting along motorways to be retained to maximise screening of views to motorway. • Potential for screening would depend upon the height of the development proposed. The taller the buildings, the less effective any screen planting would be. • Structure planting to be developed as part of a masterplan for the area and to help to define the individual development plots and break up areas of built development. • Hard and soft landscaping to create an attractive setting and context for the development. 	Moderate Adverse (at worst)

SITE	C – LAND WITHIN, AND ADJACENT TO, JUNCTION 5 OF THE M56			
DEVELOPMENT SCENARIO	Comprises commercial development including airline offices, hotel and cargo/freight with new access to Thorley Lane, direct from land to east of the M56 spur and via bridge link from land to west of M56 spur through land outside of the site near Haletop Farm. Includes for landscape mitigation and retention of allotments on-site or their retention until latter phases of the site's development.			
TOPIC	ASSESSMENT	SIGNIFICANCE	RECOMMENDED MITIGATION	SIGNIFICANCE
Visual Amenity	<ul style="list-style-type: none"> • Notable change in view from flats (high sensitivity) to north of area. • Development to maximise retention of existing vegetation cover and incorporate this into the site design where feasible. 	Substantial Adverse	<ul style="list-style-type: none"> • Existing planting along motorways to be retained to maximise screening of views to motorway. • Potential for screening would depend upon the height of the development proposed. The taller the buildings, the less effective any screen planting would be. • Structure planting to be developed as part of a masterplan for the area and to help to define the individual development plots and break up areas of built development. • Hard and soft landscaping to create an attractive setting and context for the development. 	Moderate Adverse
Ecology and Nature Conservation	<ul style="list-style-type: none"> • Currently plots 3-5 indicate loss of broad-leaved woodland (and pond). This woodland is potentially a UKBAP priority habitat and is also a local BAP priority habitat. • There will also need to be large-scale removal of plantation and neutral grassland habitats under the proposed layout. • Small scale hedgerow loss is anticipated. The hedgerow is a UKBAP priority habitat. • It is likely that both ponds will be lost (or as a minimum further isolated) with this scenario. The ponds may be UKBAP habitat, if they support either great crested newt or common toad (also a UKBAP priority species). 	Slight adverse <i>assumes loss of broadleaved woodland and plantation</i>	<ul style="list-style-type: none"> • Small scale retention of woodland and hedgerow habitats may be possible within plots 1, 2 and 3. Also replacement of existing hedgerows and new woodland planting could be possible around the boundaries of the development plots • Net loss of woodland/plantation canopy and hedgerow should be replaced offsite using appropriate mixes of native species. • Survey for badgers and birds will be required to determine the importance of the site for these species and to identify appropriate species specific 	Negligible <i>assumes full scope of mitigation opportunities can be delivered and managed in the long-term</i>

SITE	C – LAND WITHIN, AND ADJACENT TO, JUNCTION 5 OF THE M56			
DEVELOPMENT SCENARIO	Comprises commercial development including airline offices, hotel and cargo/freight with new access to Thorley Lane, direct from land to east of the M56 spur and via bridge link from land to west of M56 spur through land outside of the site near Haletop Farm. Includes for landscape mitigation and retention of allotments on-site or their retention until latter phases of the site's development.			
TOPIC	ASSESSMENT	SIGNIFICANCE	RECOMMENDED MITIGATION	SIGNIFICANCE
	<ul style="list-style-type: none"> Allotment gardens may be retained or would, in the final phase of development be relocated off-site, resulting in the loss of rough grass/scrubland, habitats which can support reptile species such as slow worm. All UK reptiles are statutorily protected. Buildings at Little Flyers in plot 3 may have potential to support roosting bats and nesting birds. 		<p>mitigation.</p> <ul style="list-style-type: none"> All tree, hedgerow and scrub removal should be timed to avoid the bird nesting season (March – August inclusive). If this is not possible, these features should be netted in the winter period prior to their removal, to ensure nesting birds are not affected. Replacement planting discussed elsewhere will maintain net nesting habitats. Offsite pond replacement should be considered on a like for like basis. Even if ponds could be retained within the site, they will become isolated and associated losses of surrounding terrestrial habitats would result in significant reduction of ecological function and value of the ponds. A reptile survey will be required and a mitigation scheme implemented, if reptiles were shown to be present within the allotment gardens and surrounding habitats. A receptor area and appropriate habitat creation/enhancement would be required prior to translocation of reptiles from the site. Reptile translocation commonly requires a full season of capture works (April – September inclusive) as a minimum effort. 	

SITE	C – LAND WITHIN, AND ADJACENT TO, JUNCTION 5 OF THE M56			
DEVELOPMENT SCENARIO	Comprises commercial development including airline offices, hotel and cargo/freight with new access to Thorley Lane, direct from land to east of the M56 spur and via bridge link from land to west of M56 spur through land outside of the site near Haletop Farm. Includes for landscape mitigation and retention of allotments on-site or their retention until latter phases of the site's development.			
TOPIC	ASSESSMENT	SIGNIFICANCE	RECOMMENDED MITIGATION	SIGNIFICANCE
			<ul style="list-style-type: none"> • Bat survey will be required to established presence of bat roosts (trees/buildings). Replacement bat roost and bird nest habitat provision (for loss of buildings at Little Flyers and trees in woodland/plantation) may be required. Mitigation could be accommodated within building design, either as an integral part of the new building(s), or through external features such as nest/roost units or boxes. Alternatively, offsite dedicated habitat features could be constructed. Any replacement bat roost habitat would require management and maintenance arrangements to be secured for the long-term. A Natural England licence will also be required, if bats are present, and a roost mitigation scheme implemented. The receptor site will need to be dedicated for nature conservation and a clear long-term management plan established. • Receptor site(s) should be selected to maintain connectivity and deliver a contiguous and holistic approach to large scale habitat creation schemes. • Additional mitigation/enhancement opportunity could be available if building design incorporated green (or brown) roofs, even in part. 	

SITE	C – LAND WITHIN, AND ADJACENT TO, JUNCTION 5 OF THE M56			
DEVELOPMENT SCENARIO	Comprises commercial development including airline offices, hotel and cargo/freight with new access to Thorley Lane, direct from land to east of the M56 spur and via bridge link from land to west of M56 spur through land outside of the site near Haletop Farm. Includes for landscape mitigation and retention of allotments on-site or their retention until latter phases of the site's development.			
TOPIC	ASSESSMENT	SIGNIFICANCE	RECOMMENDED MITIGATION	SIGNIFICANCE
Historic Environment	<ul style="list-style-type: none"> No international or national historic environment interest features. No historic environment interest features present on site. Key historic environment interest features in near vicinity (include Davenport Green Hall, 1 & 2 Thorley Lane/Haletop Farm, and Etrop Grange Listed Buildings) located within either existing Airport Operational boundary or to the north, and/or separated by the M56. Proposed landscaping may have positive affect on setting of identified Listed Buildings in vicinity (Slight / potentially positive) Development would require ground intrusion with potential for disturbance to unknown sub-surface features of archaeological interest. 	Negligible / Slight Positive	<ul style="list-style-type: none"> Desk base study to assess need for further investigations / field work into potential archaeological remains throughout site. 	Negligible / Slight Positive
Land Use	<ul style="list-style-type: none"> Land to the west of the site is presently unmanaged woodland/scrub/rough grassland and accepting any ecological and nature conservation value (see above) has no 'use'. Proposals would result in bringing this land into a 'use'. Loss of informal open scrub/grassland used for recreation to east of M56 spur. Eventual loss of allotments (worst case, assuming retention only until latter phases of site's development) located within informal open scrub/grassland to east of M56 spur, accessed via Maismore Road. Loss of site's agricultural land (classified Grade 3b) – however, land in non-intensive use and 	Moderate Adverse	<ul style="list-style-type: none"> Relocation of the Little Flyers Nursery off-site Retention of allotments on-site or relocation off-site (would need to consider timing to achieve least effect on growing season to reduce impacts on existing allotment holders and proximity of alternative site to reduce travel and inconvenience). Consider provision of enhancements to services/facilities provision to alternative sites. 	Slight Adverse

SITE	C – LAND WITHIN, AND ADJACENT TO, JUNCTION 5 OF THE M56			
DEVELOPMENT SCENARIO	Comprises commercial development including airline offices, hotel and cargo/freight with new access to Thorley Lane, direct from land to east of the M56 spur and via bridge link from land to west of M56 spur through land outside of the site near Haletop Farm. Includes for landscape mitigation and retention of allotments on-site or their retention until latter phases of the site's development.			
TOPIC	ASSESSMENT	SIGNIFICANCE	RECOMMENDED MITIGATION	SIGNIFICANCE
	<p>generally used for grazing.</p> <ul style="list-style-type: none"> • Loss of community facility (Little Flyers nursery). • Neighbouring land uses (primarily residential and recreation) may be affected by localised increases in traffic and associated degradation in air and/or noise quality. However, proposals include for landscape mitigation buffer, including to north adjacent to residential properties on Maismore Road and Bleasdale Road to reduce disturbance/nuisance. • Nuisance may be caused by increased vehicle movements. However, site is set within context of adjacent highway network and proximity to Airport runway. • Council road scheme identified connecting Runger lane to Thorley Lane through site (status unknown). • Land to east of M56 spur and neighbouring housing estate identified as Major Urban Regeneration Area. 			

SITE	C – LAND WITHIN, AND ADJACENT TO, JUNCTION 5 OF THE M56			
DEVELOPMENT SCENARIO	Comprises commercial development including airline offices, hotel and cargo/freight with new access to Thorley Lane, direct from land to east of the M56 spur and via bridge link from land to west of M56 spur through land outside of the site near Haletop Farm. Includes for landscape mitigation and retention of allotments on-site or their retention until latter phases of the site's development.			
TOPIC	ASSESSMENT	SIGNIFICANCE	RECOMMENDED MITIGATION	SIGNIFICANCE
Recreation	<ul style="list-style-type: none"> • There are no PRow within the site. • Manchester City Council Unitary Development Plan identifies Major Recreational Route passing through site to east of M56 spur although not visible on the ground. Loss of opportunity to deliver route as shown on UDP. • An informal path (established through use) runs along the eastern boundary of the eastern area (outside the site's boundary) and should not therefore be directly affected. Effect on visual amenity of route would be largely mitigated through proposed landscape mitigation buffer. • Sustrans route 85 (Manchester Airport Orbital cycleway) passes to the south of site. Potential effect to the visual amenity of link. However, this is set within the context of existing urban area, including highway network. • Land to east of M56 spur is identified as public open space including the allotments, along with neighbouring Painswick Park playing fields. • Loss of informal open scrub/grassland used for recreation to east of M56 spur. However, recreational uses (informal paths across scrubland) are not managed public space and significant areas of recreational land (parkland) exist immediately to the east (Painswick Park). • Loss of allotments located within informal open scrub/grassland to east of M56 spur, accessed via Maismore Road. However, allotment gardens may be retained or only developed during the final phases of development, 	Moderate Adverse	<ul style="list-style-type: none"> • Loss of allotments could be mitigated through provision of alternative facilities elsewhere (as land use mitigation above). • Provision of major recreational route on new alignment to be agreed with Manchester City Council – enhancement through delivery of aspirational route. Could provide for foot/cycle and mobility impaired access. • Provision of network of new foot/cycle paths to accommodate development feasible within context of development scenario. Could provide for foot/cycle and mobility impaired access – not presently provided for on site. • Provision of enhancement to foot/cycle path provision considered to balance out relocation of allotments (no net loss) and loss of informal space (in light of substantial provision of recreation space in immediate vicinity). 	Slight Adverse

SITE	D – LAND TO SOUTH OF RINGWAY ROAD BETWEEN TEDDER DRIVE AND STYAL ROAD			
DEVELOPMENT SCENARIO	Comprises commercial development primarily offices, hotels and other commercial facilities with new access to Styal Road. Includes for landscape mitigation and excludes land within the central-east area currently occupied by United Utilities and safeguards corridor for SEMMMS passing through the central-west area and to the south of the eastern area.			
TOPIC	ASSESSMENT	SIGNIFICANCE	RECOMMENDED MITIGATION	SIGNIFICANCE
Landscape	<ul style="list-style-type: none"> • Landscape character is fragmented into smaller parcels and defined by multiple land uses – sensitivity would vary depending upon the size/scale of the development proposed. • Spatial arrangement of area may preclude larger development types. • Urban fringe location has considerable capacity to accommodate smaller-scale development. • Some potential for visual intrusion upon properties to north and south. • Retention of existing landscape features where feasible. • Hard and soft landscaping to create an attractive setting and context for the development. • Notable change in landscape characteristics would result depending upon size and scale of development. 	Slight Adverse (at worst)	<ul style="list-style-type: none"> • Perimeter tree planting to add context to development, create an attractive boundary/frontage and provide screening at ground level. • Overall site design/masterplan (including landscape proposals) to have regard to maintaining the visual amenity and openness of the Green Belt. • Masterplan and individual plot landscape works to integrate development with surrounding urban fringe. 	Slight Adverse (at worst)

SITE	D – LAND TO SOUTH OF RINGWAY ROAD BETWEEN TEDDER DRIVE AND STYAL ROAD			
DEVELOPMENT SCENARIO	Comprises commercial development primarily offices, hotels and other commercial facilities with new access to Styal Road. Includes for landscape mitigation and excludes land within the central-east area currently occupied by United Utilities and safeguards corridor for SEMMMS passing through the central-west area and to the south of the eastern area.			
TOPIC	ASSESSMENT	SIGNIFICANCE	RECOMMENDED MITIGATION	SIGNIFICANCE
Visual Amenity	<ul style="list-style-type: none"> Some modest change in the nature of views from residential properties to north and south (medium/high sensitivity depending upon orientation of individual properties) and from public rights of way (medium sensitivity). Properties to south along Styal Road most adversely affected due to orientation of properties – facing development with limited existing screening. Hard and soft landscaping to create an attractive setting and context for the development 	Slight Adverse (at worst)	<ul style="list-style-type: none"> Perimeter tree planting to add context to development, create an attractive boundary/frontage and provide screening at ground level. Overall site design/masterplan (including landscape proposals) to have regard to maintaining the visual amenity and openness of Green Belt. 	Slight Adverse (at worst)
Ecology and Nature Conservation	<ul style="list-style-type: none"> The linear woodland edging the railway line will be retained within the proposals. Most of the neutral grassland will also be retained in the east of the site. There will need to be small-scale removal of plantation, grassland and hedgerow habitats under the proposed layout. The hedgerow is a UKBAP priority habitat. Trees may have potential to support roosting bats; hedgerows will support nesting and foraging bird species and foraging and commuting bat species. However, the habitats on site are generally not extensive and are found elsewhere in the local area. It is unlikely that the railway cuttings will be affected, and buffer planting could also be used. Therefore wildlife corridors and some habitat will be retained. 	Negligible	<ul style="list-style-type: none"> Net loss of woodland/plantation canopy and hedgerow should be replaced offsite using appropriate mixes of native species. Receptor site(s) should be selected to maintain connectivity and deliver a contiguous and holistic approach to large scale habitat creation schemes. All tree, hedgerow and scrub removal should be timed to avoid the bird nesting season (March – August inclusive). If this is not possible, these features should be netted in the winter period prior to their removal, to ensure nesting birds are not affected. Replacement planting discussed elsewhere will maintain net nesting habitats. Bat survey will be required to 	Negligible <i>Potentially positive depending on building/layout design</i>

SITE	D – LAND TO SOUTH OF RINGWAY ROAD BETWEEN TEDDER DRIVE AND STYAL ROAD			
DEVELOPMENT SCENARIO	Comprises commercial development primarily offices, hotels and other commercial facilities with new access to Styal Road. Includes for landscape mitigation and excludes land within the central-east area currently occupied by United Utilities and safeguards corridor for SEMMMS passing through the central-west area and to the south of the eastern area.			
TOPIC	ASSESSMENT	SIGNIFICANCE	RECOMMENDED MITIGATION	SIGNIFICANCE
	<ul style="list-style-type: none"> Farm buildings at Smithy Farm in plot 1 may have potential to support roosting bats and nesting birds. 		<p>established presence of bat roosts (trees/buildings). Replacement bat roost habitat provision could be accommodated within building design, either as an integral part of the building, or through external features such as roost units or boxes, depending on survey findings. Alternatively, offsite dedicated habitat features could be constructed, such as a bat barn. Any replacement bat roost would require management and maintenance arrangements to be secured for the long-term. A Natural England licence will also be required, if bats are present, and a roost mitigation scheme implemented. The receptor site will need to be dedicated for nature conservation and a clear long-term management plan established.</p> <ul style="list-style-type: none"> Survey for badgers and birds will be required to determine the importance of the site for these species and to identify appropriate species specific mitigation. Additional mitigation/enhancement opportunity could be available if building design incorporated green (or brown) roofs, even in part. 	

SITE	D – LAND TO SOUTH OF RINGWAY ROAD BETWEEN TEDDER DRIVE AND STYAL ROAD			
DEVELOPMENT SCENARIO	Comprises commercial development primarily offices, hotels and other commercial facilities with new access to Styal Road. Includes for landscape mitigation and excludes land within the central-east area currently occupied by United Utilities and safeguards corridor for SEMMMS passing through the central-west area and to the south of the eastern area.			
TOPIC	ASSESSMENT	SIGNIFICANCE	RECOMMENDED MITIGATION	SIGNIFICANCE
Historic Environment	<ul style="list-style-type: none"> No international or national historic environment interest features. Demolition of Smithy Farm (recorded as Building on HER) on Tedder Drive. (Moderate Adverse) Site of structures (recorded as Monument on HER) beneath Styal Road and identified as destroyed. (Negligible) Historic environment interest features located off-site in vicinity, primarily located on site B (including Tatton Arms and Moss Nook), to the east (separated by the railway line) or within existing Airport Operational boundary. Development would require ground intrusion with potential for disturbance to unknown sub-surface features of archaeological interest. 	Moderate Adverse	<ul style="list-style-type: none"> Undertake detailed appraisal and recording of site of Smithy Farm to assess quality and condition of historic features. Mitigation by recording. However, would result in loss of historic feature. Desk base study to assess need for further investigations / field work into potential archaeological remains throughout site. 	Moderate Adverse
Land Use	<ul style="list-style-type: none"> Loss of residential / commercial properties in western area (bounded by Tedder Drive, Ringway Road and Styal Road) comprising farmstead (Smithy Farm) and associated fields, and Petrol Station. Loss of residential properties in south-east area (Styal Road). Loss of rough grassland in north-east area. Whilst the area appears to be open space (no fencing barring access) this area does not appear to be significantly used. Loss of agricultural land in south-east area. Agricultural land is classified Grade 3b/urban – identified at boundary. Represents relatively 	Moderate Adverse	<ul style="list-style-type: none"> None 	Moderate Adverse

SITE	D – LAND TO SOUTH OF RINGWAY ROAD BETWEEN TEDDER DRIVE AND STYAL ROAD			
DEVELOPMENT SCENARIO	Comprises commercial development primarily offices, hotels and other commercial facilities with new access to Styal Road. Includes for landscape mitigation and excludes land within the central-east area currently occupied by United Utilities and safeguards corridor for SEMMMS passing through the central-west area and to the south of the eastern area.			
TOPIC	ASSESSMENT	SIGNIFICANCE	RECOMMENDED MITIGATION	SIGNIFICANCE
	<p>small parcel of agricultural land.</p> <ul style="list-style-type: none"> • Development proposals safeguard land for the implementation of the SEMMMS road scheme. • Safeguarded land for provision of rail network improvements follows line of existing southern spur railway line and would not therefore be affected. • Development proposals exclude the central-east area, currently occupied by United Utilities electricity sub-station from the developable footprint. • Access to central-east area may be disrupted. • Neighbouring residential properties (on Ringway Road to the north of the western area and Styal Road to the west of the south-east area) may be affected by localised increases in traffic and associated degradation in air and/or noise quality. However, proposals include for landscape mitigation buffer reduce disturbance /nuisance and set within urban context in proximity to airport runway. 			

SITE	D – LAND TO SOUTH OF RINGWAY ROAD BETWEEN TEDDER DRIVE AND STYAL ROAD			
DEVELOPMENT SCENARIO	Comprises commercial development primarily offices, hotels and other commercial facilities with new access to Styal Road. Includes for landscape mitigation and excludes land within the central-east area currently occupied by United Utilities and safeguards corridor for SEMMMS passing through the central-west area and to the south of the eastern area.			
TOPIC	ASSESSMENT	SIGNIFICANCE	RECOMMENDED MITIGATION	SIGNIFICANCE
Recreation	<ul style="list-style-type: none"> • There are no recreational designations. • Loss of PRow between Tedder Drive and Styal Road in the western area. However, this path does not appear to be significantly used. • Loss of PRow between Styal Road and Heald Green along the north-east and central-east border (crossing between the two areas). This path does not appear to be significantly used. • Sustrans route 85 (Manchester Airport Orbital cycleway)/Major Recreational Route passes through the site along Styal Road. However, it is not proposed to alter the public highway and therefore the route would be retained. Given the urban nature of the route it is not considered that development on either side would significantly affect the amenity of the route through this site. 	Moderate Adverse	<ul style="list-style-type: none"> • Retention and/or localised diversion in part of footpath between Styal Road and Heald Green to maintain connectivity. Carry out enhancements to existing path (presently undulating track of varying widths) to improve accessibility. • Diversion of footpath between Tedder Drive and Styal Road. However, given the low use of the footpath and nature of development proposals, an alternative footpath may not serve any purpose or be feasible in the context of the development. Re-appraisal assumes diversion of path not feasible. 	Slight Adverse

SITE	E – LAND TO WEST OF A538 (OAK FARM)			
DEVELOPMENT SCENARIO	Comprises combination of operational land, cargo and car parking. Includes for the construction of a new junction with the M56 (junction 6) to the west of existing, the realignment of the A538 Old Wilmslow Road, safeguarded corridor for future Western Rail route that passes through the centre of the site, and the provision of landscape mitigation to the west, including the majority of land occupied by Sunbank Wood/clough and forming a buffer to the south adjacent to Cotteril Clough SSSI.			
TOPIC	ASSESSMENT	SIGNIFICANCE	RECOMMENDED MITIGATION	SIGNIFICANCE
Landscape	<ul style="list-style-type: none"> • Landscape character is largely open and influenced by adjacent transport infrastructure to north and west – medium sensitivity to the development type proposed. • Key existing vegetation cover to be retained where possible. • Ancient Woodland/SSSI is a high sensitivity feature that follows the Sunbank Wood Clough to be retained as part of the development and surrounded by a landscape mitigation buffer. • Development would require significant highway works – realignment of A538 and J6 M56 – potential loss of highway tree cover. • The realignment of the A538 would cut through the northern edge of Sunbank Wood, resulting in the loss of a small area of ancient woodland. • Development would replace areas of grassland with hardstanding. • Introduction of lighting into previously unlit area – but already very influenced by existing airport and highway lighting and unlikely to be notably distinct from this (although columns taller than majority of surrounding tree cover). • Notable change in landscape character with little potential to mitigate adverse impact. • Potential for perceived ‘urban sprawl’ – perceived extension of airport into undeveloped countryside. 	Moderate Adverse	<ul style="list-style-type: none"> • Detailed design of the A538 realignment to avoid removal of ancient woodland at Sunbank Wood. • Retention of tree cover along existing A538 to be maximised. • Structure planting along south-western boundary – a dense tree belt to reinforce wooded character and link adjacent ancient woodlands and to provide additional screening from the south. This to have regard to the safeguarded rail route. This would give a clear boundary between development and the rural area beyond. • Cut-off lighting to be installed where possible. • Site layout and alignment of buildings could be designed to minimise any visual intrusion subject to operational requirements. 	Slight Adverse

SITE	E – LAND TO WEST OF A538 (OAK FARM)			
DEVELOPMENT SCENARIO	Comprises combination of operational land, cargo and car parking. Includes for the construction of a new junction with the M56 (junction 6) to the west of existing, the realignment of the A538 Old Wilmslow Road, safeguarded corridor for future Western Rail route that passes through the centre of the site, and the provision of landscape mitigation to the west, including the majority of land occupied by Sunbank Wood/clough and forming a buffer to the south adjacent to Cotteril Clough SSSI.			
TOPIC	ASSESSMENT	SIGNIFICANCE	RECOMMENDED MITIGATION	SIGNIFICANCE
Visual Amenity	<ul style="list-style-type: none"> Residential properties within Area boundary all to be demolished. Impacts beyond the area boundary would be limited – views of buildings from Hale to north-west (in context of existing views of airport and motorway) and from occasional scattered properties to south. Development visible from public rights of way (medium sensitivity) – potential to provide some screening – either by new planting or fencing. Routes may well require diversion. Views of development from south and north-west would be available, but unlikely to be of significance. 	Slight Adverse	<ul style="list-style-type: none"> Structure planting along south-western boundary – to provide additional screening from the south. Cut-off lighting to be installed where possible. Site layout and alignment of buildings could be designed to minimise any visual intrusion subject to operational requirements. Only limited scope to mitigate effects and limited need to do this given the lack of receptors in the vicinity and the context of surrounding development. 	Slight Adverse
Ecology and Nature Conservation	<ul style="list-style-type: none"> Part of Sunbank Wood may be lost to allow realignment of Wilmslow Road which could also impact otter and water vole populations as there are watercourses running through the woodland. However, proposals show retention of a landscape mitigation zone around the woodland so it is likely that most if not all the woodland will be retained. Development will result in the loss of north-western projection of Sunbank Woods SBI, located to the south of Keepers Cottage. This area of broad-leaved woodland is not included within the extent of ancient woodland. All other areas of the SBI and ancient woodland which encroach into the site will be retained. 	Moderate adverse	<ul style="list-style-type: none"> No mitigation is possible for the net loss of SBI footprint; the Council is responsible for designations of such sites. However, provision of similar habitats to those lost within the SBI, may be feasible within the landscape buffer and/or off-site. Realignment of Wilmslow Road shall avoid any impingement upon the SBI/ancient woodland from road or development footprints or working areas. A full arboricultural survey will identify appropriate protection measures, but minimum standoff of 15m should be 	Negligible <i>assumes full scope of mitigation opportunities can be delivered and managed in the long-term</i>

SITE	E – LAND TO WEST OF A538 (OAK FARM)			
DEVELOPMENT SCENARIO	Comprises combination of operational land, cargo and car parking. Includes for the construction of a new junction with the M56 (junction 6) to the west of existing, the realignment of the A538 Old Wilmslow Road, safeguarded corridor for future Western Rail route that passes through the centre of the site, and the provision of landscape mitigation to the west, including the majority of land occupied by Sunbank Wood/clough and forming a buffer to the south adjacent to Cotteril Clough SSSI.			
TOPIC	ASSESSMENT	SIGNIFICANCE	RECOMMENDED MITIGATION	SIGNIFICANCE
	<ul style="list-style-type: none"> • The broad-leaved woodland south of Oak Cottage is outside the extent of the SBI and is not identified within the extent of registered ancient woodland, but is potential UKBAP priority habitat and local BAP priority habitat. • The area of Sunbank Wood that may be lost includes a section of brook, which may support water vole or other important riverine species. • Up to 15 ponds will be lost, all of which may be UKBAP priority habitat if they support great crested newt or common toad. • Small scale loss of the brook and ditch will result from the proposals. • Development will result in the loss of the extensive network of hedgerows (UKBAP priority habitat) and significant areas of open grassland. The grassland habitats are generally botanically impoverished, but their general extent and association with hedgerows, ponds and other landscape features means they are likely to be of value to farmland birds, amphibians, mammals such as bat and badgers and reptiles. • Buildings at Oak Cottages and Keepers Cottages and Oak Farm may have potential to support roosting bats and nesting birds. • Introduction of lighting into previously unlit area would affect bat and possibly bird behaviour. 		<ul style="list-style-type: none"> • provided to all retained ancient woodland areas. Potential tree failure should also be accounted for when considering stand off distances. • Road realignment and edge development works shall ensure no indirect impact on the ancient woodland/SBI (dust, run-off, debris, accidental spillages, soil/landslip etc). • Net loss of woodland/plantation should be replaced offsite using appropriate mixes of native species. • Replacement hedgerow planting should ensure no net loss and should include at least seven native woody species. • Replacement woodland/hedgerow planting could be achieved in part within the landscape buffer, but to ensure no net loss, offsite planting will be required. • All tree, hedgerow and scrub removal should be timed to avoid the bird nesting season (March – August inclusive). If this is not possible, these features should be netted in the winter period prior to their removal, to ensure nesting birds are not affected. Replacement planting discussed elsewhere will maintain net nesting 	

SITE	E – LAND TO WEST OF A538 (OAK FARM)			
DEVELOPMENT SCENARIO	Comprises combination of operational land, cargo and car parking. Includes for the construction of a new junction with the M56 (junction 6) to the west of existing, the realignment of the A538 Old Wilmslow Road, safeguarded corridor for future Western Rail route that passes through the centre of the site, and the provision of landscape mitigation to the west, including the majority of land occupied by Sunbank Wood/clough and forming a buffer to the south adjacent to Cotteril Clough SSSI.			
TOPIC	ASSESSMENT	SIGNIFICANCE	RECOMMENDED MITIGATION	SIGNIFICANCE
			<p>habitats.</p> <ul style="list-style-type: none"> • Survey of all watercourses to be lost will be required to determine presence or otherwise of water vole and other important riverine species, including invertebrates. Diversion of the watercourse within the landscape buffer may be achievable, or offsite compensation would be required. Connectivity with existing features will be vital to the success of any mitigation for riverine species. • Pond survey will be required to determine if great crested newts are present. Survey will inform mitigation proposals. Large scale pond replacement would be required; as a minimum, ponds should be replaced on a like for like basis if no gcn are present. If gcn are present, each gcn pond would require replacement on a 2 for 1 ratio. A Natural England licence will also be required, if gcn are present, and an amphibian translocation scheme implemented. Receptor areas for pond replacement must be connected to existing pond networks and greenspaces to avoid fragmentation or isolation. The receptor site will need to be dedicated 	

SITE	E – LAND TO WEST OF A538 (OAK FARM)			
DEVELOPMENT SCENARIO	Comprises combination of operational land, cargo and car parking. Includes for the construction of a new junction with the M56 (junction 6) to the west of existing, the realignment of the A538 Old Wilmslow Road, safeguarded corridor for future Western Rail route that passes through the centre of the site, and the provision of landscape mitigation to the west, including the majority of land occupied by Sunbank Wood/clough and forming a buffer to the south adjacent to Cotteril Clough SSSI.			
TOPIC	ASSESSMENT	SIGNIFICANCE	RECOMMENDED MITIGATION	SIGNIFICANCE
			<p>for nature conservation and a clear long-term management plan established.</p> <ul style="list-style-type: none"> • Bat survey will be required to established presence of roosts and importance of habitats for commuting/foraging. Replacement bat roost habitat provision could be accommodated within building design, either as an integral part of the building, or through external features such as roost units or boxes. Alternatively, offsite dedicated habitat features could be constructed. Any replacement bat roost habitat would require management and maintenance arrangements to be secured for the long-term. A Natural England licence will also be required, if bats are present, and a roost mitigation scheme implemented. The receptor site will need to be dedicated for nature conservation and a clear long-term management plan established. • It is unlikely that the full extent of grassland loss, which may affect species such as farmland birds, amphibians and badgers, could be mitigated for. Survey for these 	

SITE	E – LAND TO WEST OF A538 (OAK FARM)			
DEVELOPMENT SCENARIO	Comprises combination of operational land, cargo and car parking. Includes for the construction of a new junction with the M56 (junction 6) to the west of existing, the realignment of the A538 Old Wilmslow Road, safeguarded corridor for future Western Rail route that passes through the centre of the site, and the provision of landscape mitigation to the west, including the majority of land occupied by Sunbank Wood/clough and forming a buffer to the south adjacent to Cotteril Clough SSSI.			
TOPIC	ASSESSMENT	SIGNIFICANCE	RECOMMENDED MITIGATION	SIGNIFICANCE
			<p>species will be required to determine the importance of the site and appropriate species specific mitigation. Partial offsetting may be achieved through identification of offsite habitats that can be enhanced/managed specifically for those species affected by the grassland loss.</p> <ul style="list-style-type: none"> • Receptor site(s) should be selected to maintain connectivity and deliver a contiguous and holistic approach to large scale habitat creation schemes. • Retention or replacement of open running water features such as brooks/ditches could possibly be achieved through a Sustainable Urban Drainage System. This may also allow some retention of ponds within the site and would enable connectivity of any retained habitats to be maintained. • Additional mitigation/enhancement opportunity could be available if building design incorporated green (or brown) roofs, even in part. 	

SITE	E – LAND TO WEST OF A538 (OAK FARM)			
DEVELOPMENT SCENARIO	Comprises combination of operational land, cargo and car parking. Includes for the construction of a new junction with the M56 (junction 6) to the west of existing, the realignment of the A538 Old Wilmslow Road, safeguarded corridor for future Western Rail route that passes through the centre of the site, and the provision of landscape mitigation to the west, including the majority of land occupied by Sunbank Wood/clough and forming a buffer to the south adjacent to Cotteril Clough SSSI.			
TOPIC	ASSESSMENT	SIGNIFICANCE	RECOMMENDED MITIGATION	SIGNIFICANCE
Historic Environment	<ul style="list-style-type: none"> No international or national historic environment interest features on site. Demolition of Site of Broad Oak Farm (former farmstead) (recorded as monument on HER). Record identifies that the site as being destroyed. (Negligible) Key historic environment interest features located off-site in vicinity (Rose cottage, Site of Cloughbank Farm and Bucknall Farm Listed Buildings) generally screened by existing landscaping supported by proposed landscape mitigation, and within context of motorway infrastructure and/or airport operations. (Negligible) Yewtree House Listed Building to west of site, where potential for limited views during winter and additional lighting. (Slight Adverse). Potential impact on historic landscape through loss of landscape features (Slight Adverse) No effect on Style Estate / Conservation Area approx 1.1km to SE of site. (Negligible) Development would require ground intrusion with potential for disturbance to unknown sub-surface features of archaeological interest. 	Slight Adverse	<ul style="list-style-type: none"> Detailed design to retain as many historic landscape features where possible. However, opportunity limited by nature of development. Desk base study to assess need for further investigations / field work into potential archaeological remains throughout site. 	Slight Adverse
Land Use	<ul style="list-style-type: none"> Development would achieve connectivity with apron/taxiway as a consequence of the realigned A538 Old Wilmslow Road. Proposals maintain fixed point of Old Wilmslow Tunnel to south. Realignment of A538 would generally 	Moderate Adverse	<ul style="list-style-type: none"> Detailed design of the A538 realignment to avoid partial removal of Sunbank Wood to provide additional screening from noise/light disturbance. 	Moderate Adverse

SITE	E – LAND TO WEST OF A538 (OAK FARM)			
DEVELOPMENT SCENARIO	Comprises combination of operational land, cargo and car parking. Includes for the construction of a new junction with the M56 (junction 6) to the west of existing, the realignment of the A538 Old Wilmslow Road, safeguarded corridor for future Western Rail route that passes through the centre of the site, and the provision of landscape mitigation to the west, including the majority of land occupied by Sunbank Wood/clough and forming a buffer to the south adjacent to Cotteril Clough SSSI.			
TOPIC	ASSESSMENT	SIGNIFICANCE	RECOMMENDED MITIGATION	SIGNIFICANCE
	<p>form new boundary of airport operational land to west, before cutting through the area identified for cargo development to the north.</p> <ul style="list-style-type: none"> • Loss of agricultural land (considered to be grade 3b – moderate quality) for developable footprint representing majority of site. • Loss of residential properties off Sunbank Lane, comprising Keepers Cottage and Oak Cottages. • Loss of Oak Farm situated to north of site. Farm tenancy would be terminated. • Loss of depot on land north of the site, bounded by the M56 sliproads and Ringway Road. • Diversion of Sunbank Lane which passes through the centre of the site. This highway is included within the developable footprint and is therefore likely to be the subject of a permanent diversion to accommodate the new junction, realignment of the A538 and implementation of car parking as part of the development scenario (potential closure given the relatively few properties served at Halebank and existing alternative access). • Nearby properties to the west are unlikely to be significantly affected by the intrusion of noise/light arising from the proposed development given the retention of the majority of Sunbank Wood/clough and provision of landscaping buffer. 			

SITE	E – LAND TO WEST OF A538 (OAK FARM)			
DEVELOPMENT SCENARIO	Comprises combination of operational land, cargo and car parking. Includes for the construction of a new junction with the M56 (junction 6) to the west of existing, the realignment of the A538 Old Wilmslow Road, safeguarded corridor for future Western Rail route that passes through the centre of the site, and the provision of landscape mitigation to the west, including the majority of land occupied by Sunbank Wood/clough and forming a buffer to the south adjacent to Cotteril Clough SSSI.			
TOPIC	ASSESSMENT	SIGNIFICANCE	RECOMMENDED MITIGATION	SIGNIFICANCE
	<ul style="list-style-type: none"> Nearby properties to west may be affected by changes to road infrastructure resulting in disruption to traffic flow. Nearby properties to west may be affected by degradation in noise/air quality arising from the relocation of Junction 6 of the M56. However, whilst the new junction location would be closer, given the context of the existing M56 motorway to the north and that this represents a relatively minor relocation, the overall levels are unlikely to be significantly affected. Development within the River Bollin valley. 			
Recreation	<ul style="list-style-type: none"> There are no recreational designations. The 4 PRoWs that pass through the site (one to the northern boarder passing through the relocated Junction 6) would need to be closed or diverted. The Sustrans route 85 (Manchester Airport Orbital cycleway)/Major Recreational route that passes alongside the A538 Old Wilmslow Road would need to be diverted. 	Moderate Adverse	<ul style="list-style-type: none"> Provide alternative foot/cycle paths and enhance connectivity, including mobility improvements and landscape enhancement. 	Slight Adverse

SITE	F – PARALLEL TAXIWAY			
DEVELOPMENT SCENARIO	Comprises airfield. Includes for retention of landscaping forming part of the Runway 2 Landscape Habitat Management Area over an extensive area of land surrounding the runway.			
TOPIC	ASSESSMENT	SIGNIFICANCE	RECOMMENDED MITIGATION	SIGNIFICANCE
Landscape	<ul style="list-style-type: none"> • Landscape character is defined by proximity to airport runway, by agricultural land to west and by small areas of tree and shrub planting – medium sensitivity to the development type proposed. • Development would result in removal of existing landscape features at the airport perimeter, including woodland planting in the Bollin Valley. • Whilst most/all of the area would become hardstanding, this in itself is unlikely to be significant – the real issue is impact upon adjacent areas. • Loss of boundary vegetation would increase the visual influence of the airport upon the area to the west – however this influence is already considerable. • Little overall change upon the balance of landscape characteristics in the wider area. 	Slight adverse (at worst)	<ul style="list-style-type: none"> • Adequate replacement landscaping to be provided off-site. • Boundary landscaping to provide differentiation between airport and adjacent land where feasible – limit influence of runway upon surrounding character. • Boundary planting to soften the effects of the development and integrate with adjacent land. • Off-site replacement landscaping to complement MAG Landscape Habitat Management Plan and enhance surrounding landscape character. 	Negligible
Visual Amenity	<ul style="list-style-type: none"> • It is assumed that the existing property at Wycot would be demolished to accommodate the development. • Development would lead to change in view from Stock-in-Hey Farm (high sensitivity) and public rights of way (medium sensitivity) to north-west – principally via the removal of existing vegetation. • Level of impact would be minor. • Development would move the airport slightly closer to receptors. 	Slight adverse (at worst)	<ul style="list-style-type: none"> • Boundary landscaping to provide differentiation between airport and adjacent land where feasible. • Boundary planting to soften the effects of the development and provide screening. 	Negligible

SITE	F – PARALLEL TAXIWAY			
DEVELOPMENT SCENARIO	Comprises airfield. Includes for retention of landscaping forming part of the Runway 2 Landscape Habitat Management Area over an extensive area of land surrounding the runway.			
TOPIC	ASSESSMENT	SIGNIFICANCE	RECOMMENDED MITIGATION	SIGNIFICANCE
Ecology and Nature Conservation	<ul style="list-style-type: none"> • Development would result in partial loss of both the East Woodend Wood SBI and the Woodend-Lady Lane SBI. • Development would result in the loss of an important network of great crested newt ponds and associated terrestrial habitat, although it would be possible to provide offsite mitigation. • Development will also result in the loss of the Woodend bat barn. This was established as previous mitigation for earlier phases of airport development – Natural England will require strong evidence that there is no satisfactory alternative to the loss of the bat barn (and surrounding connecting habitats). • Loss of habitat along the River Bollin (by culverting) may have a localised impact on bats, otter and water vole. Possible additional impacts on riverine invertebrate communities. • Loss of grasslands/scrub/plantation may affect species such as nesting birds and badgers. • Development in this area is unlikely to further fragment the wider habitats and corridors. 	Moderate adverse	<ul style="list-style-type: none"> • No mitigation is possible for the net loss of SBI footprint; the Council or Wildlife Trust is responsible for designation of such sites. However, provision of similar habitats to those lost within the SBI, may be feasible off-site. Receptor area should be connected to retained areas of SBI. • Pond survey will be required to determine great crested newt distribution and population size and to inform detailed mitigation design and the Natural England licence application. Ponds should be replaced on a like for like basis if no gcn are present. All gcn ponds would require replacement on a 2 for 1 ratio. A Natural England licence will also be required for an amphibian translocation and mitigation scheme. Offsite mitigation will be required. Receptor areas for pond replacement must be connected to existing pond networks and greenspaces to avoid fragmentation or isolation. The receptor site will need to be dedicated for nature conservation and a clear long-term management plan established. • Replacement or relocation of the Woodend bat barn will be required. A licence from Natural England will be 	<p>Negligible</p> <p><i>assumes full scope of mitigation opportunities can be delivered and managed in the long-term</i></p>

SITE	F – PARALLEL TAXIWAY			
DEVELOPMENT SCENARIO	Comprises airfield. Includes for retention of landscaping forming part of the Runway 2 Landscape Habitat Management Area over an extensive area of land surrounding the runway.			
TOPIC	ASSESSMENT	SIGNIFICANCE	RECOMMENDED MITIGATION	SIGNIFICANCE
			required and a roost mitigation scheme implemented. The receptor site will need to be dedicated for nature conservation and a clear long-term management plan established. <ul style="list-style-type: none"> • Impacts on riverine species that may use the River Bollin section requiring culverting can potentially be mitigated for to maintain connectivity along the river. Survey for important riverine species, including mammals and invertebrates, will be required. • Survey for badgers and birds will be required to determine the importance of the site for these species and to identify appropriate species specific mitigation. 	
Historic Environment	<ul style="list-style-type: none"> • No international or national historic environment interest features on site. • No historic environment interest features present on site • 3 Listed Buildings identified within 500m buffer (potential for omissions arising from local authority boundaries). All three sites are for listed buildings that have subsequently been demolished during the development of the Manchester Airport 2nd runway. (Negligible) • Development would require ground intrusion with potential for disturbance to unknown sub-surface features of archaeological interest. 	Negligible	<ul style="list-style-type: none"> • Desk base study to assess need for further investigations / field work into potential archaeological remains throughout site. 	Negligible

SITE	F – PARALLEL TAXIWAY			
DEVELOPMENT SCENARIO	Comprises airfield. Includes for retention of landscaping forming part of the Runway 2 Landscape Habitat Management Area over an extensive area of land surrounding the runway.			
TOPIC	ASSESSMENT	SIGNIFICANCE	RECOMMENDED MITIGATION	SIGNIFICANCE
Land Use	<ul style="list-style-type: none"> Residential property (Wycot) is included within the developable footprint and it is therefore assumed that this property would be demolished. Loss of agricultural land and ponds. The area of agricultural land within the site is relatively small and would not represent a significant loss to the viability of the farm. The site's agricultural land is taken to be grade 3b – moderate quality. Diversion/closure of Wood Lane which serves as access to Stock-In-Hey farm (outside developable footprint and therefore assumed to be retained) and Wycot (within the developable footprint – assumed to be demolished) as well as access to airport infrastructure and agricultural fields, cutting through the site to the west. It is assumed that this is an unadopted highway, given that this is a gated road and subject to closure at specific times of the day. Assumed that runway surface water lagoons shown as outside the site boundary would be either relocated off-site or below ground. Neighbouring land uses are primarily associated with the existing operation of the Airport or agricultural. These are unlikely to be affected. Development within the River Bollin valley. Identified as indicative flood risk associated with the River Bollin. 	Moderate Adverse	<ul style="list-style-type: none"> Diversion/provide alternative vehicle access to retained properties. 	Moderate Adverse
Recreation	<ul style="list-style-type: none"> Loss of woodland adjacent to river corridor 	Slight Adverse	<ul style="list-style-type: none"> Diversion of PRowS to maintain 	Slight Adverse

SITE	F – PARALLEL TAXIWAY			
DEVELOPMENT SCENARIO	Comprises airfield. Includes for retention of landscaping forming part of the Runway 2 Landscape Habitat Management Area over an extensive area of land surrounding the runway.			
TOPIC	ASSESSMENT	SIGNIFICANCE	RECOMMENDED MITIGATION	SIGNIFICANCE
	<p>(River Bollin) at its northern extent. This area forms a recreational resource. Significant new planting has been undertaken in the recent past. However, notwithstanding any ecological/nature conservation impacts (see above) or development constraints associated with the steep sided nature of the river valley, the area is included within the developable footprint and it is therefore assumed that this resource would be lost.</p> <ul style="list-style-type: none"> • Localised diversion of PRowS that passes through the site along Wood Lane. • Partial closure (truncation) of PRow from Wood Lane heading north. • Assumed diversion (through extended tunnel) of MAG Runway 2 trail to maintain connectivity adjacent to the River Bollin. Whilst it is proposed that the river corridor would be subject to development, given that the existing Bollin Tunnel provides for the connectivity of recreational routes, it is assumed that connectivity would be maintained. • Further development of airport runway would degrade the visual amenity of existing paths, specifically the Runway 2 Trail. 		connectivity.	

4.0 SUMMARY OF ASSESSMENTS

Site A - Land to East of A538 (Cloughbank Farm)

- 4.1 Site A occupies approximately 36.5 ha of land immediately to the west of the existing Airport Operational Area with the airport runway situated directly to the south and airport facilities (cargo, maintenance and freight) to the east. The site is primarily occupied by agricultural land (classified grade 3b) with two linear wooded cloughs (Cotteril Clough), isolated residential properties (Cloughbank Farm, properties on Old Wilmslow Road and Sunbank Lane), an office (Sunbank Lane) and a public house (The Romper), as well as a construction site compound, off-site airport surface car parking and Aviation Viewing Park. Sunbank Lane passes through the north of the site. There is also a radar mast and isolated outbuildings associated with existing airport operations.
- 4.2 The site is characterised by open countryside. Key nature conservation features include Cotteril Clough SSSI (identified as being of unfavourable status), and the Cotteril Clough SBI (Grade A) and ancient woodland that extend beyond the SSSI boundary, and the Ponds Near Runway SBI (Grade C). Potential protected species include: great crested newts, common toad, breeding birds, bats, otter, water vole and adder, as well as native bluebell. Cloughbank Farm, a Grade II Listed Building, is located centrally within the site and is currently occupied as a residential property/bed and breakfast. To the north is the 'Site of Ringway Chapel' a historic interest feature listed on the HER but with no statutory protection, that is used as an office. The Sustrans cycleway (route 85), a locally designated 'major recreational route' forming part of the Airport Orbital Cycleway, passes along the A538 Wilmslow Road to the west of the site. The airport's Aviation Viewing Park with Concorde Hanger is located to the south and forms a tourist attraction with discretionary public access. The site is within an area designated as Green Belt.
- 4.3 The proposed development comprises a combination of extended airfield (taxiway and apron) with aircraft maintenance, (ie, maintenance and support, flight catering and fuel farm) and cargo (ie transit sheds, freight forwarding sheds) facilities, requiring direct connectivity with the airfield. A

few staff parking bays would be assigned to each of the operational buildings.

- 4.4 The extended airfield operations would typically require broadly flat hard-standings with minimal boundary/landscaping treatment. Boundary fencing would be to a maximum of 3.6m height with additional noise attenuation barriers to a maximum of 5m height where deemed necessary. Lighting of the taxiway would be at ground level; lighting of the apron would be high-mast (approximately 30m height); both would be required during hours of darkness or poor visibility. The extended airfield would be operational 24 hours a day/365 days a year.
- 4.5 Operational and cargo facilities would typically include industrial-type hangers to a maximum height of approximately 45m from ground level and hard-standing at a ratio of approximately 60 / 40. These facilities would also require boundary fencing to a maximum of 3.6m height and perimeter high-mast (approximately 25m high) lighting; the facilities would be operational 24 hours a day/365 days a year.
- 4.6 The proposals include for the retention of Cotteril Clough SSSI and the site of the Ringway Chapel (listed on the HER) with landscape buffer zones to protect their settings. The corridor for the future provision of the Western Rail route would also be safeguarded.
- 4.7 The development proposals seek to retain key landscape features including the majority of the ancient woodland and Cotteril Clough, and provide for the implementation of landscape mitigation scheme, most significantly to the south, adjacent to Site E and to a lesser degree surrounding the 'site of Ringway Chapel' to the north in order to protect its setting. However, there would be a notable change in landscape character due to the loss of vegetation and its replacement with hard-standing and the extension of buildings of an industrial-type from the east into what is presently an intimate and enclosed landscape. The introduction of high level mast lighting, whilst intrusive, would be within the context of existing airport operations and have little impact on surrounding land. The significance of effect on landscape character is assessed as being **moderate adverse**. Additional mitigation, such as the implementation of structure planting along the site's perimeter

where security allows, use of cut-off lighting to deflect light-pollution and careful site layout and alignment of buildings to minimise visual intrusion would minimise the adverse effects of development but would not be sufficient to reduce the overall level of significance in the medium of long term.

- 4.8 Residential properties within the site boundary would be demolished as part of the development proposals and consequently visual impacts would be limited to properties in Halebank to the north-west, the significance of which is identified as **slight adverse**. Additional mitigation in the form of careful site layout and alignment of buildings would serve to reduce the effects, but not sufficiently to reduce the overall significance.
- 4.9 The retention of the nationally important Cotteril Clough SSSI and, in part, the Cotteril Clough SBI (of local importance) and ancient woodland would reduce adverse impacts on ecological interest features. However, there would be a loss/degradation of habitat including woodland, Cotteril Clough watercourse, marshy/neutral grassland, hedgerow and ponds, and partial loss of the Ponds Near Manchester Airport SBI (marshy grassland, neutral grassland and potentially one pond), with potential effects on protected species such as bat, badgers, reptiles, great crested newts and birds. On balance, the proposals would result in a **moderate adverse** effect on ecology and nature conservation features. However, the full implementation of additional mitigation including appropriate survey (arboricultural, ponds, farmland birds, reptiles, badgers and bats) and subsequent implementation of identified measures, the creation of new habitat through translocation of ancient woodland soils, watercourse enhancement, replacement planting of woodland and hedgerow, pond creation and the installation of bat roost and bird nest habitat, accompanied with careful lighting design and control over construction would serve to reduce these effects to **slight adverse** in the medium term and **negligible** in the long-term (+ 50 years).
- 4.10 Whilst the proposals seek to protect the Site of Ringway Chapel and its setting, the demolition of the statutorily protected Cloughbank Farm (Grade II Listed Building) results in a historic environment significance of **moderate adverse**. Mitigation, in the form of desk based investigations and site based

recording accompanied by documentary research, would serve to reduce the impacts, although the overall significance of effect remains unchanged.

- 4.11 Development of the site would result in a substantial change from the existing land use, most notably the loss of residential dwellings, The Romper PH and agricultural land. The retention of the Ringway Chapel, used as office, within the context of airport operational land may give rise to disruption in operations such as noise, vibration and isolation. However, few properties would be affected and agricultural land is classified as only grade 3b and therefore not considered to be particularly valuable. Consequently, the proposed land use change is considered to be of a **moderate adverse** significance. It is not considered feasible within the context of the overall development proposals for the retention of properties and/or agricultural land and therefore no further mitigation has been considered.
- 4.12 In addition to the above land use change, the proposals would result in the loss of the Aviation Viewing Park (regional tourist facility) and some loss in connectivity of existing public routes (though no PRoW) within/through the site, resulting in a **moderate adverse** significance. Mitigation in the form of relocating the Aviation Viewing Park and the provision of alternative and/or enhanced foot and cycle paths within the vicinity would serve to reduce this to **slight adverse**.

Site B - Land to North of Ringway Road

- 4.13 Site B occupies approximately 31.7ha to the north-east of the Airport's Operational Area at the northern end of the airport runways. The site is occupied by agricultural land (although classified as urban) with two stands of trees situated around hardstandings to the centre-north of the site and the airport's Air Quality Monitoring and former middle-marker navigational aid building with access track along the northern boundary. Included within the site boundary, but excluded from the development footprint, are residential properties to the south and south-east on Styal Road and Trenchard Drive, and The Tatton Arms public house. To the west of the site are residential properties associated with the Woodhouse Park area and immediately to the north is the Ringway Trading Estate. The site is also occupied by airport

runway approach lighting and falls within the airport's Public Safety Zone and Obstacle Limitation Surface zone.

- 4.14 The site has no statutory ecological or historic environment designations. Potential protected species include great crested newts, bats, common toad and breeding birds. There are two sites listed within the HER; however, both are situated outside the developable footprint. Land to the west, along the site boundary, is safeguarded for the future expansion of the Metrolink. The Sustrans cycleway (route 85), a locally designated 'major recreational route' forming part of the Airport Orbital Cycleway, passes along the eastern boundary on Styal Road. The western half of the site is designated a 'major urban regeneration' area within the MCC UDP which seeks renewal and regeneration of an area by providing employment opportunity, quality housing and supporting facilities with improved environment. The site is within an area designated as Green Belt (MCC).
- 4.15 The proposed development comprises the phased implementation of surface car parking with new vehicle access formed to both Ringway Road and Styal Road. Such additional parking is required to accommodate spaces displaced by extensions to the airport apron development and long-term growth, in accordance with the Airport's Ground Transport Plan and the wider strategy to contain growth in airport related road traffic. It is expected that access would also be provided to the SEMMMS road scheme proposed to the south.
- 4.16 The majority of the site would comprise hard-standing for parking (at approximately 300 spaces /ha) and internal access roads, pedestrian walkways, bus pick-up areas with peripheral and boundary (around individual phases) landscaping. Landscaping to the south/south east, adjacent to the residential areas would be designed to meet both site security and residential amenity needs. The airport runway lights would be retained and incorporated into the surface car parking scheme, and land to the west safeguarded for the future provision of the Metrolink extension. Each car parking phase would include low level lighting, site security fencing and barrier controls; facilities would be operational 24 hours a day/365 days a year.

- 4.17 The proposed development would replace the existing grassland with predominantly hard-standing. However, with the exception of the landscaping mitigation scheme and the introduction of boundary fencing and lighting that would result in new vertical structures, the proposed development would not be wholly out of character with existing urban fringe context. The development would represent an intrusion to views from surrounding properties. The effect on the landscape is considered to be of **slight adverse** significance. Additional mitigation including careful layout to retain and reinforce existing trees and hedges where feasible, the planting of a fast-growing tree belt along the western perimeter, denser and more diverse structure planting, and landscape scheme combining hard and soft landscaping to create an attractive setting and add variety across the large expanse of car parking would serve to improve the developed landscape, although would not reduce the significance.
- 4.18 Residential properties surrounding the site, specifically to the west along Shadowmoss Road, but also to the south (Ringway Road) and east (Trenchard Drive) are highly sensitive to changes of visual amenity. However, the proposed inclusion of a landscape scheme with significant belts of planting between the site and residential properties would mitigate the effects of the development to a **slight adverse** significance. Additional mitigation as identified above would further reduce the impacts, although not sufficiently to reduce the significance.
- 4.19 The site has little ecological or nature conservation interest. Consequently, whilst the development would result in the loss of some existing pond habitat with potential to support great crested newt or common toad, open (improved) grassland, hedgerow a small area of broad-leaved plantation with potential to support farmland birds, amphibians, bats and badger, the effect of this loss is considered to be of only **slight adverse** significance. The full implementation of mitigation in the form of appropriate protected species survey, provision of replacement pond habitat, the retention of existing hedgerow where feasible, replacement planting of species rich hedgerow and woodland, the enhancement of similar habitats off-site accompanied by careful design of the lighting scheme would reduce this effect to **negligible**.

- 4.20 The only sites of historic interest identified at the site are located outside the developable footprint and therefore protected from direct effects. The implementation of a landscape scheme which includes significant planting in the intervening land would mitigate any adverse effects / improve the effects on their setting. Consequently, the significance of effect on the historic environment is **negligible/slight positive** with no further mitigation required.
- 4.21 Development of the site would result in a wholesale change from the existing land use, primarily agricultural (although classified as urban)/open grassland to car parking. Key existing land uses, ie, residential properties, and airport infrastructure, and future uses, ie, the Metrolink to the west and SEMMMS road link to the south are all outside the development footprint and therefore protected. There may be some scope for noise, air and light nuisance to residential properties; however, as the site is set within the urban context and includes an extensive intervening landscape scheme, the significance of effects on land use have been assessed as **slight adverse**. No additional mitigation is proposed.
- 4.22 There being no recreational facilities or PRow within the site and no effect on obstruction to use of the adjacent Sustrans cycleway along the eastern boundary (with the exception of cars accessing the site via a new highway access) and with the cycleway already being within an urban context, the significance of effect on recreation is assessed as being **negligible** with no further mitigation necessary.

Site C - Land within, and adjacent to, Junction 5 of the M56

- 4.23 Site C occupies approximately 18.2 ha of land to the north west of the existing Airport Operational Area, in close proximity to the Airport's Terminal 2, car parking and service roads. The site comprises two distinct areas (east and west) divided by the M56 spur (airport-bound). To the west, the site comprises rough unmanaged scrub/grass and woodland bounded by the M56/M56 spur roads (both airport- and motorway-bound). To the east, the site comprises rough unmanaged grassland and trees used as informal recreation, with some agricultural (grazing) land (classified as grade 3b), allotments and airport crèche (Little Flyers). The remainder of the site is occupied by highway and associated embankments and infrastructure.

- 4.24 The site has no statutory ecological or historic environment designations and no sites listed within the HER. Potential protected species include great crested newts, bats, badger, common toad and breeding birds as well as native bluebell. The MCC UDP identifies a safeguarded corridor for the future implementation of road improvements between Thorley Lane and Runger Lane. The UDP also identifies a 'major recreational route' as passing through the centre of the site to the east; however, this is not discernable on the ground and therefore assumed to be aspirational. The Manchester Airport Orbital Cycleway passes along the Thorley Road to the south, outside the site boundary. Whilst no PRowS pass through the site, there are several paths formed by footfall identifiable within the site, which is used as public open space, and notably along the site's eastern boundary. Land to the east of the M56 spur forms part of a major urban regeneration area. The site is within an area designated as Green Belt (MCC).
- 4.25 The development proposals for Site C comprise commercial development ie, airline ancillary and related commercial facilities, and a new hotel together with some provision for cargo/freight facilities. The heights of buildings would generally be limited to 45m above ground level and have regard to the surrounding landform. Each of the identified development footprints would form an independent land parcel with associated staff and visitor car parking, landscaping scheme, boundary fencing and vehicle access. It is proposed land to the west (within the M56/M56 spur road) be accessed via a new bridge link to Thorley Lane, crossing land outside the identified site boundary. It is proposed that the land currently occupied for allotments either be retained or be developed as part of the latter phases.
- 4.26 A high quality landscaping scheme would be implemented, reflecting its location at the gateway to the Airport, the retention of embankment planting adjacent to the M56 and its spur roads and ecological and landscape features where feasible, and site security. To the east the landscape scheme would be designed to ensure the residential amenity of properties located within Woodhouse Park to the north.
- 4.27 The proposed development would result in a fundamental change in the landscape character from enclosed sites with the loss of public access, the

allotments and connectivity with Painswick Park to the east. Consequently, despite the proposed landscape mitigation including retention of existing features where they can be incorporated into the design, the significance of effects is assessed as being **moderate adverse**, taking a worst case scenario. Additional mitigation in the form of retaining existing planting that screens views to the motorway, the inclusion of structure planting and a combination of hard and soft landscaping to create an attractive setting and context to the development would reduce the effects to **moderate adverse** (worst case).

- 4.28 The proposed development would, despite the inclusion of landscape mitigation, result in a notable change to visual amenity, most significantly from the flats to the north of the site, resulting in a **substantial adverse** significance. The implementation of landscape mitigation as identified above would serve to reduce this to **moderate adverse**.
- 4.29 Despite the undeveloped nature of the site and proposed loss of broad-leaved woodland, pond, plantation, neutral grassland and hedgerow habitats, the proposed development is assessed as having only a **slight adverse** significance of effect on the ecology and nature conservation interest of the site. Assuming the implementation in full of additional mitigation measures such as retention of key ecological features where feasible, replacement woodland/hedgerow planting and pond creation off-site, protected species surveys (ie, badgers, birds, reptiles, bats) and subsequent appropriate mitigation, the significance of effect would be reduced to **negligible**.
- 4.30 There are no identified features of historic interest within the site. The proposed landscape mitigation may serve to improve the setting of historic features in the immediate vicinity. Consequently, the significance of effect is **negligible/slight positive** with no mitigation necessary.
- 4.31 The proposed development would result in the loss community facilities such as the Little Flyers nursery, allotments and informal open space as well as a small area of agricultural land (classified as grade 3b albeit used non-intensively as grazing) and the development of vacant/under-used land. Key existing land uses such as the motorway infrastructure would be

excluded from the development footprint and therefore safeguarded. There may be some scope for noise, air and light nuisance to residential properties to the north; however as both the site and residential properties are set within the urban context in proximity to the M56 motorway, and that the proposals include for an extensive intervening landscape mitigation scheme, the significance of effects on land use has been assessed as **moderate adverse**. Further mitigation comprising the accommodation of the Little Flyers nursery within the development proposals or its relocation off-site and the relocation of allotments off-site would reduce the significance of effects on land use to **slight adverse**.

- 4.32 The recreational resource on Site C is limited to the land to the east of the M56 spur and comprises well-used for informal recreation with unclassified footpaths and open areas of rough grass, allotments and the line of a 'major recreational route' as identified within the MCC UDP but not discernable on the ground. Such recreational resources would be lost as a consequence of the proposed development resulting in a significance of **moderate adverse**. The effect on allotments could be mitigated through relocation off-site. Furthermore, the nature of development and incorporation of landscape buffer provides opportunity for the incorporation of new foot/cycle path connectivity, including the delivery of the aspirational 'major recreational route'. Given the additional mitigation measures and the existing provision of recreational space within the immediate vicinity at Painswick Park, it is considered that the significance of effect could be reduced to **slight adverse**.

Site D - Land to South of Ringway Road, between Tedder Drive and Styal Road

- 4.33 Site D comprises approximately 11.6 ha of land located to the east of the Airports Operational Area, in proximity to the northern end of the airport runways. The site is divided into the four distinct areas, separated into east and west by Styal Road with the eastern side further separated into three by two railway branch lines. The site is occupied by several uses including a small agricultural field and residential property (south-east), electricity sub-station with bridge access to Styal Road (south-centre - between the two railway branch lines) which is excluded from the developable footprint, rough

grass and woodland (north-east), and two residential properties, redundant commercial properties and petrol station surrounded by grazing fields (west between Tedder Drive and Styal Road).

- 4.34 The site has no statutory ecological or historic environment designations. There are two sites listed within the HER; Smithy Farm, which is identified as being within the developable footprint to the west, and the site of structures within Styal Road outside the developable footprint. Potential protected species include bats, reptiles, badger, invertebrates and breeding birds. Land identified for both the future implementation of the SEMMMS road link (cutting through the centre-east and western areas) and future railway improvements to the southern branch line, would be safeguarded and therefore outside the developable footprint. The Sustrans cycleway (route 85) and locally designated 'major recreational route' forming the Airport Orbital Cycleway, passes along Styal Road through the centre of the site, although outside the developable footprint. A single PRow crosses east-west through the site between Heald Green and Moss Nook; this is overgrown in places and appears not to be regularly used. The site is within an area designated as Green Belt (MCC).
- 4.35 The development proposals at Site D comprise commercial development, primarily offices, hotels and other commercial facilities. Each of the identified development footprints would form an independent land parcel with staff and visitor car parking, landscaping scheme, boundary fencing and vehicle access to Styal Road. The proposals include for the implementation of a landscape mitigation scheme to the periphery of each development footprint, including the retention of existing ecological and landscape features wherever possible.
- 4.36 The extent of change to the existing landscape character would dependent upon the size and scale of development. However, in the context of the existing urban fringe, relative absence of sensitive residential receptors, fragmentation of development footprints and the proposed incorporation of a landscape mitigation scheme, the significance of effect is assessed as being **slight adverse** (worst case). However, despite additional mitigation in the form of perimeter tree planting and implementation of a site masterplan to integrate the site with the surrounding urban fringe, the significance of effect would remain unchanged.

- 4.37 There would be some modest change in the nature of views from residential properties to the north and south, with those properties located along Styal Road facing the development more notably affected, as would be users of the PRoW. However, given the proposed landscape mitigation the significance of effect is assessed as being **slight adverse** (worst case). Consequently, additional mitigation as described above would not serve to reduce the significance of effect.
- 4.38 The proposed development would result in the small scale removal of plantation, grassland and hedgerow habitat. However, habitats have been identified as being neither extensive nor uncommon and consequently, the significance of effect has been assessed as being **negligible**. Regardless of additional mitigation this assessment would remain unchanged.
- 4.39 The proposals would result in the demolition of Smithy Farm, a historic interest feature identified on the HER, thus attracting a **moderate adverse** significance of effect. Mitigation, in the form of desk based investigations and site based recording accompanied by documentary research, would serve to reduce the impacts, although the overall significance of effect remains unchanged.
- 4.40 The proposed development would result in the loss of residential and commercial properties, including Smithy Farm, a single property to the south and petrol station as well as a relatively small area of agricultural land (identified as being on the boundary of grade 3b/urban classification) and the development of vacant/under-used rough grassland to the north-east of the site. Land presently occupied by the electricity sub-station and land identified for the future implementation of the SEMMMS road scheme and rail improvements would be excluded from the development footprint and therefore safeguarded. There may be some scope for noise, air and light nuisance to nearby residential properties; however, given the relatively few number of properties potentially affected, the existing urban context and that the proposals include for an intervening landscape mitigation scheme, these effects are likely to be barely perceptible. Consequently, the overall significance of effects on land use has been assessed as **moderate adverse**. It is not considered feasible within the context of the development proposals for the retention of the residential/commercial properties within the

site or agricultural land and therefore no further mitigation is has been considered.

- 4.41 The recreational resource on Site D is limited to a single PRoW that crosses the site east-west from Heald Green through the central-east and west footprints to Ringway Road, and informal open space to the north. The PRoW would need to be closed or diverted as part of the proposed development. The Sustrans cycleway (route 85) that passes through the centre of the site along Styal Road is outside the developable footprint and not therefore affected. The loss of a PRoW is such that the significance of effects is assessed as being **moderate adverse**. Potential mitigation measures include the partial retention and/or localised diversion of footpaths and/or their enhancement to improve accessibility, and would reduce the significance of effect to **slight adverse**.

Site E - Land to West of A538 (Oak Farm)

- 4.42 Site E comprises approximately 54.8ha of land located to the west of the Airport Operational Area with direct connectivity to the far north-east of the site adjacent to the operational facilities, ie aircraft maintenance and freight storage/office, and immediately to the west of Site A. The site is primarily occupied by agricultural land (classified as grade 3b) with a wooded clough (Sunbank Wood) to the north-west. Sunbank Lane passes through the site (east-west) from the A538 Wilmslow Road, providing access to isolated residential properties (Keepers Cottage and Oak Cottages) and farmland within the site, as well as properties in Halebank to the west and beyond. The site also includes a depot located to the far north within the curtilage of the M56 (junction 6) sliproad/A538 Wilmslow Road and Oak Farm, also to the north of the site and accessed from the A538 Wilmslow Road.
- 4.43 The far eastern reaches of the Sunbank Wood SBI (Grade A) and ancient woodland extends into Site E to the north-west as three linear corridors along streams that feed into the River Bollin. The Cotteril Clough SSSI and SBI (Grade A) is located immediately to the south, but outside, the site. Potential protected species include great crested newt, badger, common toad, birds, otter, water vole and adder, as well as native bluebell. There is one site listed within the HER, the 'site of Broad Oak Farm'; however, the

site has been largely redeveloped with the post-war terraced residential dwellings (Oak Cottages). The Sustrans cycleway (route 85), a locally designated 'major recreational route' forming part of the Airport Orbital Cycleway, passes along the A538 Wilmslow Road immediately to the east of the site. In addition, there are 5 PRoWs that pass through the site; PRoW 16 also forms part of the MAG Runway 2 Trail connecting with Sunbank Lane and provides access to the Airport's Aviation Viewing Park in Site A. The site is within an area designated as Green Belt (MCC).

- 4.44 The proposed development primarily comprises facilities requiring direct connectivity with the airfield, including operational (ie, vehicle maintenance and support, flight catering and fuel farm) and cargo (ie transit sheds, freight forwarding sheds), as well as surface car parking to the far north. The proposals include for the relocation of junction 6 the M56 to west of existing, and the realignment of the A538 Wilmslow Road to maximise airfield connectivity. The indicative alignment is shown as passing through the north-eastern extent of Sunbank Wood. Therefore initial assessment assumes a worst case scenario with some loss of woodland/SBI. However, final alignment would be the subject of detailed design and may avoid encroachment on Sunbank Wood entirely.
- 4.45 Operational and cargo facilities would typically include industrial-type hangers to a maximum height of approximately 45m from ground level and hard standing at a ratio of approximately 60 / 40. Such facilities would require boundary fencing to a maximum of 3.6m height and high-mast (approximately 25m high) lighting. Car parking facilities would include hard-standing, low level lighting, site security fencing and barrier controls, with internal pedestrian walkways, bus pick-up points, distributor roads and landscaping. Both operational and car parking facilities would be operational 24 hours a day/365 days a year.
- 4.46 Land required for the future implementation of the Western Rail route, passing through the centre of the site would be excluded from the developable footprint. The proposals include for the implementation of a landscape mitigation scheme along the western boundary including the safeguarding of the Sunbank Wood/clough with extensive buffer adjacent to both Sunbank Wood and Cotteril Clough.

- 4.47 The development proposals retain key landscape features including the majority of Sunbank Wood SBI and ancient woodland, and include for the implementation of a landscape scheme along the site's western boundary, serving to protect Cotteril Clough SSSI and SBI, and screen the proposals from isolated properties to the west including Halebank. However, there would be a notable change in the largely open character of the landscape, replacing grassland, hedgerow and tree cover to existing highway infrastructure with a combination of hard-standing and industrial-type buildings. The introduction of lighting into the previously unlit area is unlikely to be notably distinct, given the existing airport and highway lighting context. Consequently, the significance of effects on the landscape character is assessed as being **moderate adverse**. Additional mitigation in the form of retaining tree cover along the A538 where opportunity exists, structure planting along the south-western boundary including a dense tree belt to reinforce the wooded character and link with adjacent ancient woodlands to provide additional screening to the south, with careful design of the lighting scheme (using cut-off lighting where possible) and a site layout and alignment of buildings to minimise visual intrusion would further reduce the significance of effects to **slight adverse**.
- 4.48 Residential properties located within the site boundary are proposed to be demolished as part of the development. Impacts beyond the site would be limited to views of buildings from Halebank to the north-west and occasional scattered views from properties to the south. Views from the south and north-west would be possible, but unlikely to be of significance. Consequently, the assessment of significance is **slight adverse**. Additional mitigation as described above would serve to improve the visual amenity. However, this is unlikely to be sufficient to reduce the significance.
- 4.49 The proposals seek to retain the majority of Sunbank Woods SBI (of local importance) and ancient woodland within the site, thereby reducing the adverse impacts on key features of ecological interest. However, there would be a loss/degradation of habitat including broad-leaved woodland associated with Sunbank Woods to the north-east, a small section of brook, up to 15 ponds, an extensive network of hedgerow, and significant areas of open grassland, although these are generally botanically impoverished, and

buildings with potential to support roosting bats and nesting birds. Furthermore, the introduction of lighting into a previously unlit area may affect bat and possibly bird behaviour. It is assessed that the proposed development would result in a **moderate adverse** effect on ecology and nature conservation. However, the full implementation of additional mitigation including careful design of the road realignment scheme to avoid impingement upon the SBI, appropriate survey (arboricultural, water vole, riverine invertebrates, great crested newt, bat, farmland birds, amphibians and badgers) and subsequent provision of mitigation as identified, provision of similar habitat to that lost from the SBI within the landscape buffer and/or off-site, replacement woodland/plantation of an appropriate native species, replacement hedgerow planting, the retention/replacement of open watercourse (possibly in combination with a Sustainable Urban Drainage System) and pond creation, accompanied with control over construction would serve to reduce the effects to **negligible** in the long-term.

- 4.50 The proposals would result in the development of land on the Site of Broad Oak Farm, a historic interest feature identified on the HER; however, it is noted that the record states that the site has been destroyed. The setting of historic buildings/interest features to the west including Listed Buildings would be largely protected by the retention of intervening Sunbank Wood as enhanced by the proposed landscape buffer. However, there may be some adverse effects on setting arising from the realignment of the A538 Wilmslow Road and relocation of the M56/junction 6. Consequently, the significance of effect on the historic environment is assessed as **slight adverse**. Mitigation, in the form of desk based investigations and site based recording accompanied by documentary research, would serve to reduce the impacts, although the overall significance of effect remains unchanged.
- 4.51 Development of the site would result in a substantial change from the existing land use, most notably the loss of isolated residential dwellings, depot, Oak Farm and large area of agricultural land classified as grade 3b and therefore considered to of moderate value. The proposals would also require the potential stopping up or diversion of Sunbank Lane, which may result in lengthier journeys to/from properties in Halebank. Such properties are unlikely to be significantly affected by the intrusion of noise/light from the proposed development given the context of adjacent M56 motorway and

retention of intervening land for the implementation of a landscape mitigation scheme. However, the relocation of the M56/junction 6 and realignment of the A538 Wilmslow Road would reduce the distance from noise/light source to these receptors. Consequently, the proposed land use change is considered to be of a **moderate adverse** effect. It is not considered feasible within the context of the development proposals for the retention of properties and/or agricultural land and therefore no further mitigation is has been considered.

- 4.52 The 3 PRow that cross through the centre of the site would require either diversion or closure. In addition, PRow 10 that follows the boundary of the site adjacent to the M56 would also require diversion or closure to enable the relocation of the M56 junction 6. PRow 11a, also following the site/M56 boundary, but to the west, could be retained; however, its setting and potentially its connectivity with other paths and Sunbank Lane would be affected. The Sustrans cycleway (route 85) would need to be diverted due to the realignment of the A538 Wilmslow Road. The effect on the recreational resource is assessed as being of **moderate adverse** significance. Mitigation, such as the provision of alternative paths to maintain connectivity where feasible and/or enhancement of foot and cycle paths within the vicinity of the area to ensure connectivity would serve to reduce the effect to **slight adverse**.

Site F - Parallel Taxi-way

- 4.53 Site F comprises approximately 11.8ha of land immediately to the north of the existing Airport Operational Area with direct connectivity to Runway 2. The site is primarily occupied by agricultural land (classified as grade 3b), with the River Bollin and wooded river valley corridor passing through the site's north-eastern extremity. Wood Lane provides access from the south-west to Wycot, a single residential dwelling located within the site, and Stock-in-Hey Farm (located outside of the site), as well as emergency/maintenance access to the Airport.
- 4.54 The site has no statutory ecological designations; there are two SBIs that encompass the majority of the site falling within Cheshire East Council's authority. Potential protected species include great crested newts, bats,

otter, common toad, water vole, badger and breeding birds. There are no historic environment designations within the site. The MAG Runway 2 Trail, both short and long routes, pass through Site F. There are also 2 PRowS that pass through the site. The site is within an area designated as both Green Belt (both MCC and CEC) and as an Area of special County Value (CEC).

- 4.55 The proposed development comprises a relatively minor northern extension to the existing airfield. The proposals incorporate the retention of landscaping forming part of the Runway 2 Landscape Habitat Management Area, covering an extensive area of land surrounding the runway.
- 4.56 There would be some removal of existing landscape features at the airport's perimeter, including woodland planting in the Bollin Valley, and the replacement of existing vegetation, including trees/scrub throughout the site area with hardstanding. However, the proposed development would have little overall change to the landscape character of the area given that proximity to the existing airport runway. Consequently, the assessment of effect is assessed as being of **slight adverse** (worst case). Mitigation in the form of off-site enhancement to the adjacent landscaping to complement the MAG Landscape Habitat Management plan for surrounding land accompanied by boundary planting to provide differentiation and soften the effects of development between airport and adjacent land, as well as providing screening where feasible would serve to reduce this effect to **negligible**.
- 4.57 The proposed development would lead to a change in view from Stock-in-Hey Farm and PRowS, principally as a result of the removal of vegetation and the extension of the airport boundary slightly closer to receptors. However, the level of impact would be minor and is assessed as being of **slight adverse** (worst case). Mitigation, as described above, would reduce these effects to **negligible**.
- 4.58 The proposals would result in the partial loss of both the East Woodend Wood SBI and the Woodend-Lady Lane SBI, as well as the loss of an important network of great crested newt ponds and associated terrestrial habitat, the Woodend bat barn established as part of the mitigation for

Runway 2, habitat associated with the River Bollin and grass, scrub and plantation. However, development is unlikely to further fragment wider habitats and river corridor. The significance of effect on the ecology and nature conservation is assessed as being of **moderate adverse**. The full implementation of mitigation in the form of appropriate survey (ie, great crested newt, badgers, birds and riverine species of mammals and invertebrates) and the subsequent provision of identified mitigation, the replacement/relocation of the Woodend bat barn, pond creation and the maintenance of connectivity of the river corridor, would serve to further reduce the negative effects to **negligible** in the long-term.

- 4.59 There being no identified features of historic interest within the site, the significance of effect is **negligible** with no mitigation necessary.
- 4.60 Development of the site would result in a change from the existing land use, including the loss of an isolated residential property (Wycot) and a relatively small area of agricultural land classified as grade 3b. The proposals would also require the stopping up/diversion of Wood Lane which presently serves as the only access Stock-in-Hey Farm (located outside the site). Consequently, whilst the extent over which change would occur is relatively small, the loss of a residential property and disruption to neighbouring properties results in a **moderate adverse** significance of effect. Mitigation such as the diversion/provision of an alternative access to Stock-in-Hey Farm would reduce the effect of development; however this would not be sufficient to revise the assessment of significance.

The 2 PRowWs that pass through the site would require either diversion or closure. The area of woodland adjacent to the River Bollin at the site's northern extent forms part of the developable footprint and therefore this recreational resource would be lost. However, it is assumed that the discretionary path, which forms part of the MAG Runway 2 trail alongside the River Bollin would be retained through an extended tunnel. The effect on the recreational resource is assessed as being of **slight adverse** significance. Mitigation, such as the provision of alternative and/or enhanced foot and cycle paths within the vicinity of this area to ensure connectivity would serve to reduce the effect. However, in the context of the site's location and extent of diversion necessary, this is considered to be insufficient to further reduce significance.

5.0 CONCLUSIONS

- 5.1 The Environmental Evidence Study sought to understand, at a strategic level, the potential environmental consequences of the Airport's plans for future expansion. Part 1 of the study, the Environmental Baseline, described the existing environmental conditions present at each of the 6 identified sites. Part 2, the Environmental Appraisal (this report), describes the findings of the strategic appraisal of potential environmental effects arising from the implementation of MAG's development plans for each of the sites.
- 5.2 In principle, the appraisal considered both the value of the environmental resource as identified within the baseline study and the magnitude of change that is most likely to occur as a result of pursuing the identified development scenario (see Appendix A). These scenarios were prepared by MAG, based on the most likely form of development to take place at each site to meet their future development needs as set out within their Manchester Airport Master Plan to 2030 (MAG, 2007). It is acknowledged that in the event of development being brought forward at any of the sites, there would be a need for a more detailed environmental assessment.
- 5.3 The appraisal was undertaken in two stages. Stage 1 considered the potential effects of the development scenarios as provided, including any mitigation measures identified within the scenario; and Stage 2 considered additional mitigation measures that may be implemented to further reduce any identified adverse environmental effects.
- 5.4 At both stages a significance rating was assigned in order to simplify and provide consistency to the findings. However, the rigid application of significance criteria to assign a rating has in some instances skewed the outcome by taking the worst case environmental effect potentially experienced, thereby ignoring any positive effects found elsewhere either on or off the site, and should therefore only be viewed as an indicator.
- 5.5 This section provides a summary of the key characteristics of each site and the conclusions of the strategic appraisal of environmental effects.

- 5.6 **Site A** is set within existing airport context with the A538 Wilmslow Road forming a definite boundary between the site and countryside to the west. Consequently, whilst there would be a notable change to the landscape, the significance of effect would be moderated by its proximity to existing airport buildings, lighting and activity. Cotteril Clough SSSI would be protected from development, although there would be a partial loss of the Ponds Near Runway SBI, and a section of the Cotteril Clough SBI and ancient woodland. However, through the full implementation of mitigation measures described, the ecological effects could be reduced to slight adverse in the short-term, further reducing to negligible in the longer term. The Cloughbank Farm listed building would be demolished; however as this has already been substantially modified it is considered that mitigation by recording is likely to be acceptable. The Site of Ringway Chapel would be retained and have an additional landscape buffer to protect its setting. There would be some loss of residential properties with residents displaced. The loss of the Aviation Viewing Park could be mitigated by provision at an alternative site and footpath loss mitigated by footpath diversions and enhancements. Consequently, whilst there would be some adverse environmental effects arising from the proposals these could be mitigated to an acceptable level.
- 5.7 **Site B** is set within an urban context in close proximity to the airport's runway. The proposed surface car parking development would result in little effect on the landscape or visual amenity of nearby receptors, particularly in light of the proposed landscape mitigation buffer zone. The site has little ecological or historic environmental interest. The setting of historic environment features would be protected by the landscape mitigation buffer zone. Consequently, the proposals at Site B would not give rise to any significant environmental adverse effects.
- 5.8 **Site C** comprises a relatively small site adjacent to junction 5 of the M56. Given the introduction of new buildings within an otherwise undeveloped site there would be notable effects on the landscape and visual amenity. Few ecological interest features were identified which were not capable of mitigation. Key effects on land use and recreation include the loss of amenity allotments which could be mitigated through either on-site retention or alternative provision off-site and the Little Flyers Nursery which could also

be mitigated through off-site provision. Consequently, whilst there would be some adverse environmental effects arising from the proposals these could be mitigated to an acceptable level.

- 5.9 **Site D** is close to the north-west end of the airport's runways and set within an urban context. The proposed development for commercial uses and hotel would result in only a slight change to the landscape. With relatively few sensitive receptors. Furthermore, the effects on visual amenity would also be slight. Features of ecological interest were being capable of mitigation. The demolition of Smithy Farm, listed on the HER but attracting no statutory protection, is unlikely to be controversial. Development proposals would result in the demolition of residential properties with residents displaced. A single PRow passing through the site could be either accommodated in the development proposals or diverted. Consequently, the proposals at Site D would not give rise to any significant environmental adverse effects.
- 5.10 **Site E** is a large site adjacent to the M56 with limited direct connectivity to the airport's existing Operational Area; greater connectivity with the Airport would be achieved via proposals at the adjacent Site A. The proposals at Site E include for the relocation of the M56 junction 6 and the subsequent realignment of the A538 Wilmslow Road. The indicative realignment is shown as passing through the eastern edge of Sunbank Woods; however, it is emphasised that this is indicative for the purposes of assessment only and would be subject to detailed design if brought forward. The introduction of airport operations into this otherwise undeveloped agricultural land would result in a notable change to the landscape, but could be mitigated by a new landscape buffer which could assist in forming a strong boundary to the open countryside to the west. Only slight adverse impacts would be experienced by properties at Halebank to the west assuming retention of the existing Sunbank Woods as reinforced by the proposed landscape mitigation scheme. Sunbank Woods SBI and ancient woodland would be largely excluded from the developable footprint. Assuming implementation of the landscape buffer, the effects on landscape and nature conservation could be reduced to negligible in the longer term. Some residential properties would be demolished, including Oak Farm, Keepers Cottage and Oak Cottages. Up to 5 PRows would require either closure or significant

diversion with opportunities for mitigation limited by the nature of the development and need for site security. On balance, whilst there would be some adverse environmental effects arising from the proposals these could generally be mitigated to an acceptable level.

- 5.11 **Site F** is immediately adjacent to Runway 2 and directly connected to the Airport's existing Operational Area. Extension of this boundary would result in little noticeable effect on the landscape and only a slight effect on visual amenity. Development of the site would result in the partial loss of two SBIs; however, the site has little ecological interest and no historic interest. The proposals would result in the loss of a single residential property and disruption to the nearby Stock-in-Hey Farm off-site. 2 PRoWs would be affected their loss could be mitigated by alternative provision. Consequently, the proposals at Site F would not give rise to any significant environmental adverse effects.
- 5.12 Excepting issues relating to development within the Green Belt, none of the identified extension sites attracts a designation of international or European importance, and only Site A attracts designations of national importance.
- 5.13 The environmental effects could generally be mitigated through the implementation of the additional measures as identified.
- 5.14 Consequently, at a strategic environmental level, none of the identified sites attract such significant environmental baseline conditions so as to rule them out for consideration for future development. However, further investigations and/or survey accompanied by consultation with relevant stakeholders and the assessment of potential effects would need to be undertaken during the development of more detailed development proposals.

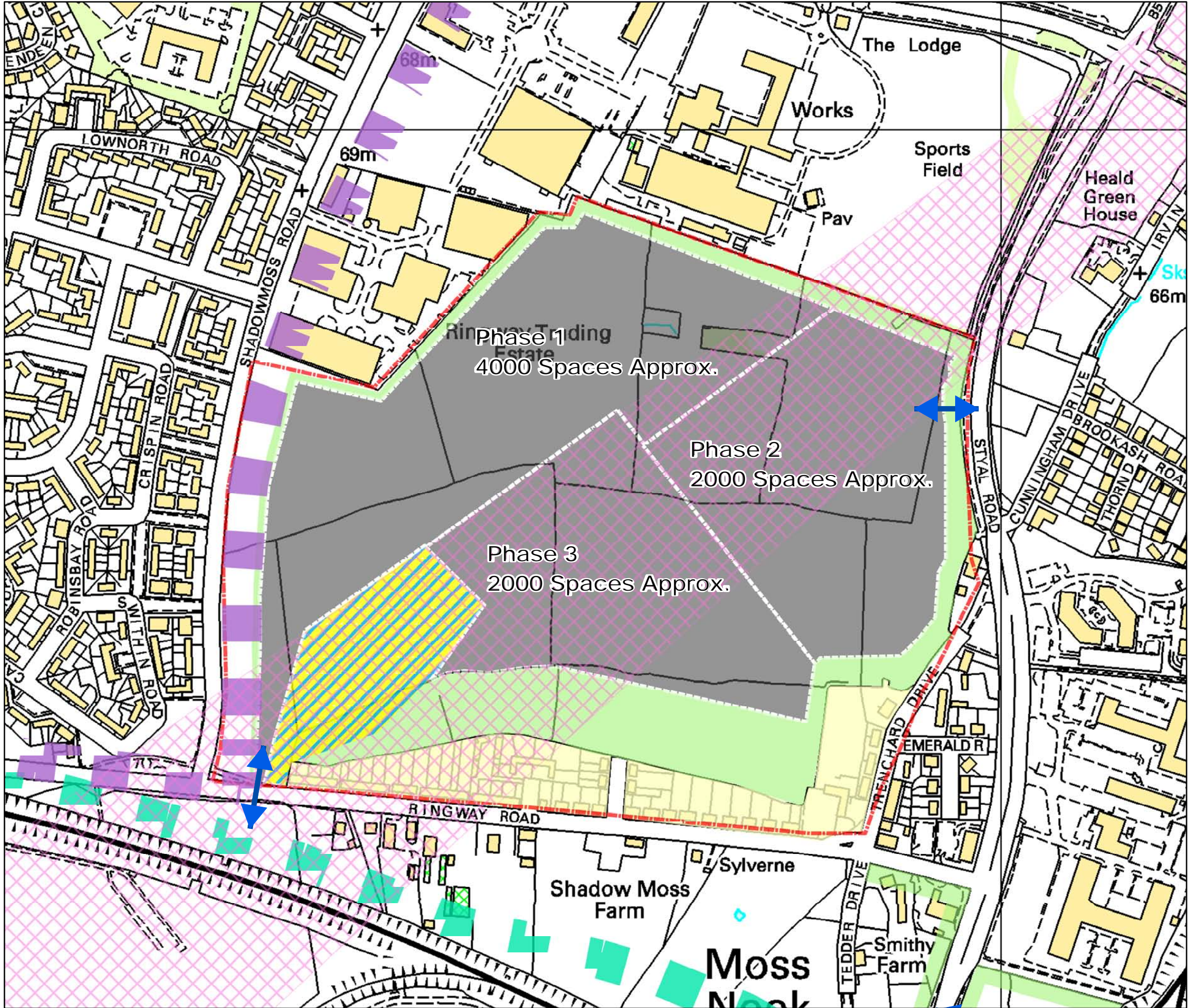
DRAWINGS

Drawing	Revision	Description
916-01/001		Site Location Plan

APPENDICES

Appendix	Description
A	Illustrative Development Scenario Layouts and Accompanying Text
B	Historic Environment Appraisals

Illustrative Layout Area B 2030



Legend

- Landscape Mitigation
- Site Access
- Residential
- Runway Approach Lights
- Metrolink Route
- SEMMMS
- Car Parking
- Public Safety Zone
- Area B Boundary

Please note that the proposed site areas indicated are for illustrative purposes only. Detailed plans to be developed.

Area B Illustrative Layout

- Land for the proposed South East Manchester Multi Modal Scheme (SEMMMS) is safeguarded to the south of Area B.
- The proposed Metrolink route from Wythenshawe to the Airport is located at the western boundary of the site and is also safeguarded.
- Due to the proximity of existing residential properties at the perimeter of the site, particularly along Ringway Road and Trenchard Road, a landscape mitigation buffer zone will be required to provide separation.
- Access is expected to be provided from SEMMMS in the south west corner of the site and from Styal Road on the eastern boundary.
- Due to the location directly under the approach to Runway 23R, Area B cannot accommodate buildings of any significant height. As such the Area will be used to accommodate surface car parking which will be displaced as a result of apron development adjacent to the central terminal complex.
- Car parking within Area B is part of the integrated plan to deal with spaces displaced by apron development and long-term growth. It is in line with the Ground Transport Plan and is part of the wider strategy to contain growth in airport related road traffic.
- Staff spaces cannot be located within the designated Public Safety Zone¹ (PSZ) due to the daily turnover rate. As such spaces within the PSZ could only be parked with passenger long stay vehicles.
- The first phase, located to the north west of the site, will accommodate approximately 4,000 spaces. These will principally be made up from the displaced spaces from the sections of T1/T3, T2 long stay and Staff West, which are required for Apron development in the first instance.
- The second phase will accommodate 2000 spaces, again made up from the next phase of displaced spaces from sections of T1/T3, T2 long stay and Staff West.
- The final third phase will accommodate a further 2000 spaces.
- The number of car parking spaces within each phase is commercially sufficient to justify development of each phase.
- The development of Area B in this order will ensure that land closest to residential properties is only developed in the final phase.
- Landscape mitigation within Area B will comprise planting especially in areas closest to residential properties and to be consistent with Airport Security and residential amenity requirements.

Area B Development Characteristics

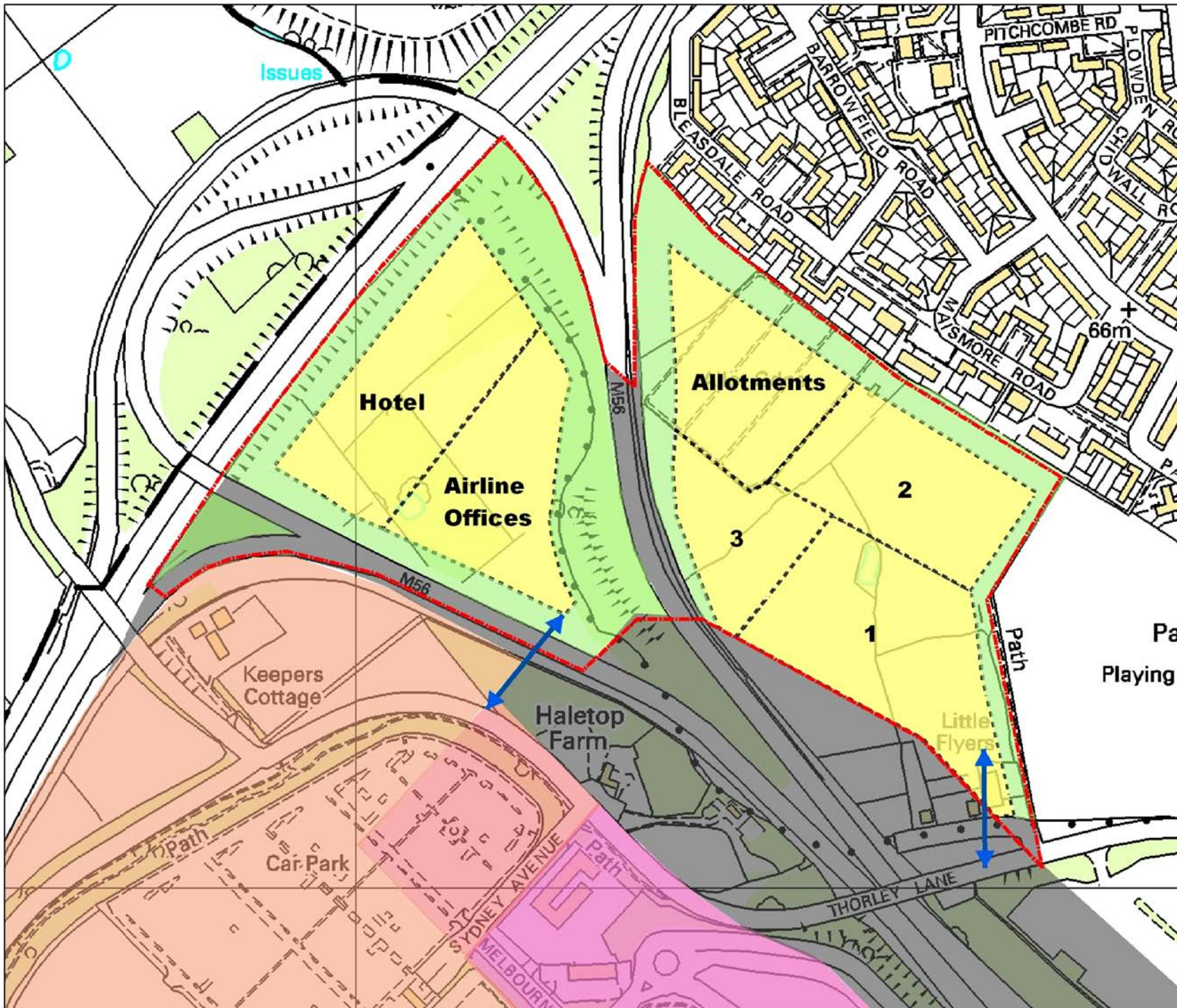
- Runway safeguarding limits the height of development.
- The majority of the site would comprise hard-standing (parking and internal access road area) with boundary landscaping
- 300 spaces per hectare
- Lighting – low level
- Each car park would contain some internal pedestrian walkways, bus pick-up areas, distributor roads and both peripheral and internal landscape works.
- In operation 24 hrs a day / 365 days a year for parking of cars.
- Two way barrier controlled access.

¹ Public Safety Zones are designated areas of land at the end of runways within which development is restricted. The shape and size of Public Safety Zones are based on risk contours and are specific to the type and volumes of air traffic using a particular runway at an individual airport. They are a planning policy tool (Department for Transport Circular 1/2002) designed to prevent new developments such as houses that would result in a significant increase in the number of people living, working or congregating within these areas.

Illustrative Layout Area C 2030

Legend

-  Surface Access & Car Parking
-  Landscape Mitigation
-  Aircraft Maintenance
-  Apron & Taxiway
-  Operational
-  Office, Hotel, Freight & Other Uses
-  Central Terminal Area
-  Site Access
-  Area C Boundary

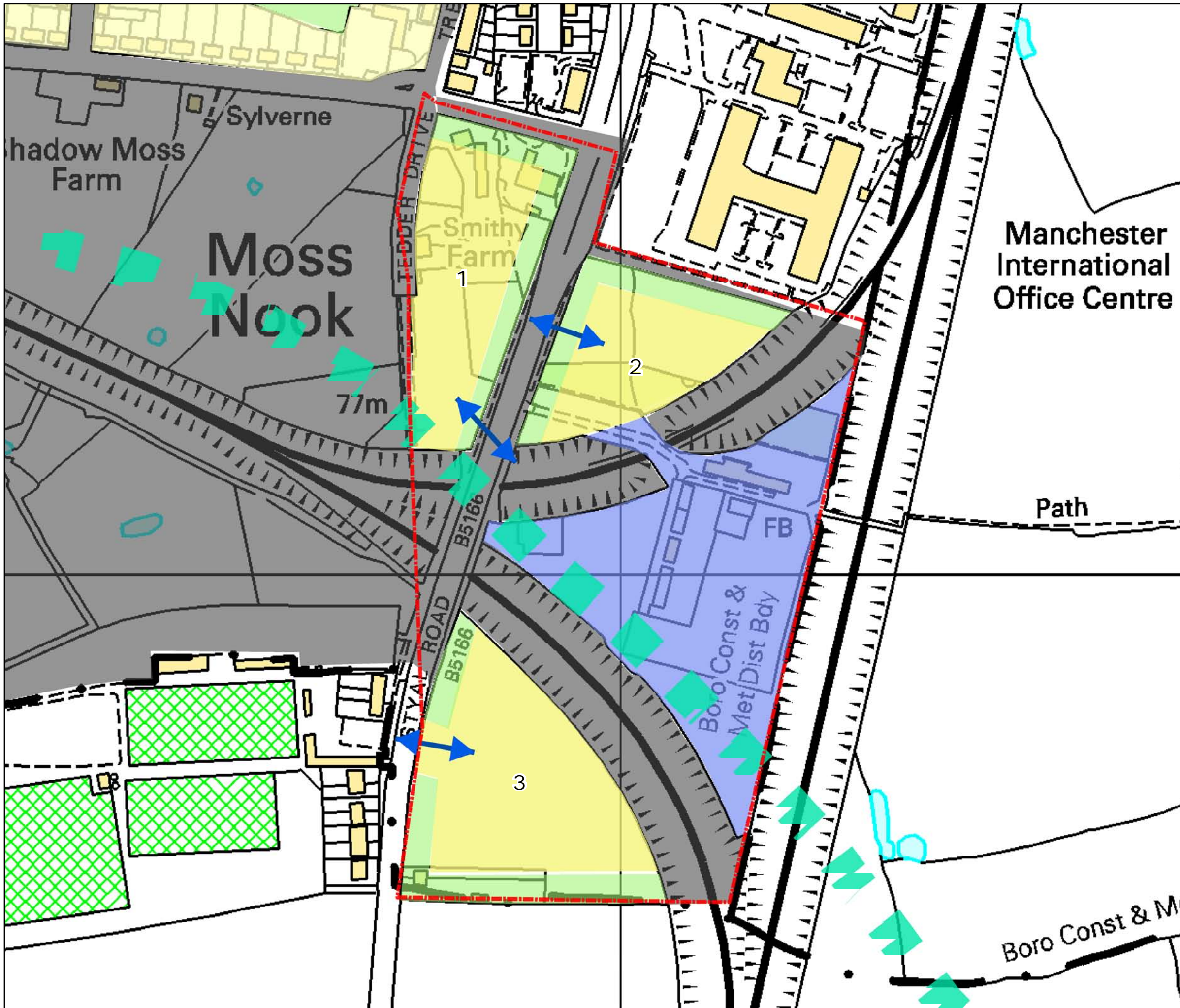


Please note that the proposed site areas indicated are for illustrative purposes only. Detailed plans to be developed.






Area C Illustrative Layout

- **Access to Area C would be provided in two locations from Thorley Lane and would be in the form of a bridge link over the M56 spur road.**
- **Due to its high profile location Area C and the cost associated with developing the site it will only be viable for commercial operational development.**
- **This will typically comprise ancillary offices, hotels and other commercial facilities directly related to the Airport activity and will generally comprise discrete built development with associated car parking set within a landscaped setting.**
- **Area C Development Characteristics**
- **Any building would have a high quality landscaping scheme to reflect the location at the Gateway to the Airport.**
- **Key landscape features of ecological or visual importance would be retained in-situ.**
- **The phasing accommodates the allotments which are to be retained or relocated.**
- **Each site would be treated as a sealed unit with respect to access, visitors and staff car parking, delivery vehicles and contractors traffic.**
- **Boundary fencing would depend on location and type of operation. If provided would be to a maximum of 3.6m.**
- **The height of any building would have regard to the landform, but will not exceed 45m in height above ground level.**

Illustrative Layout Area D 2030



Legend

-  Surface Access and Car Parking
-  Landscape Mitigation
-  Office, Hotel & Other Uses
-  Site Access
-  United Utilities Infrastructure
-  Area D Boundary
-  A6 to Manchester Airport Relief Road

Please note that the proposed site areas indicated are for illustrative purposes only. Detailed plans to be developed.

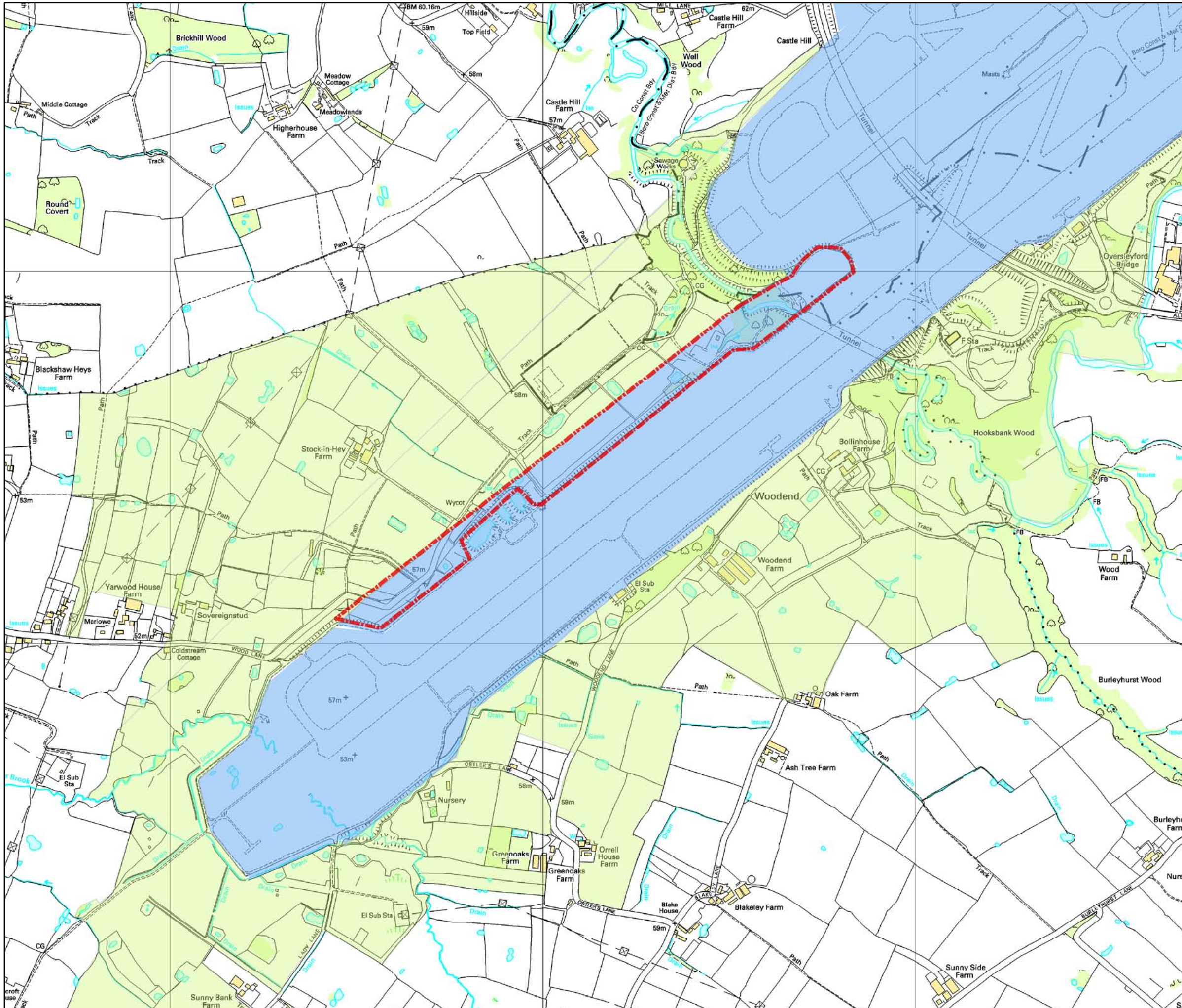
Area D Illustrative Layout

- Land for the proposed South East Manchester Multi Modal Scheme (SEMMMS) is safeguarded. The proposed road scheme bisects Area D (east – west). SEMMMS offers the opportunity to open up an Eastern Gateway to the Airport.
- The central portion of the site accommodates United Utilities infrastructure and cannot be used for development.
- The remainder of the Area will be divided into three parcels of operational commercial development.
- This will typically comprise ancillary offices, hotels and other commercial facilities which would generally comprise discrete built development with associated car parking set within a landscaped setting. However, the size of the development plots are relatively small and remote from the main Airport site.
- Access will be provided to each development plot from the B5166 Styal Road, which will have an access to SEMMMS.
- Area D is located within the Green Belt and therefore proposals must in accordance with PPG2 and maintain openness.




Area D Development Characteristics

- Building will have a landscaping scheme.
- Key landscape features of ecological value or visual importance would be retained in situ.
- Each site would be treated as a sealed unit with respect to access, visitors and staff car parking, delivery vehicles and contractors traffic.
- Boundary fencing would depend on location and type of operation. If provided would be to a maximum of 3.6m.
- The height of any building would have a regard to the landform, but is unlikely to exceed 45m in height above ground level.

Illustrative Layout Area F 2030



Legend

-  Proposed Parallel Taxiway
-  Landscape Habitat Management Area
-  Airfield

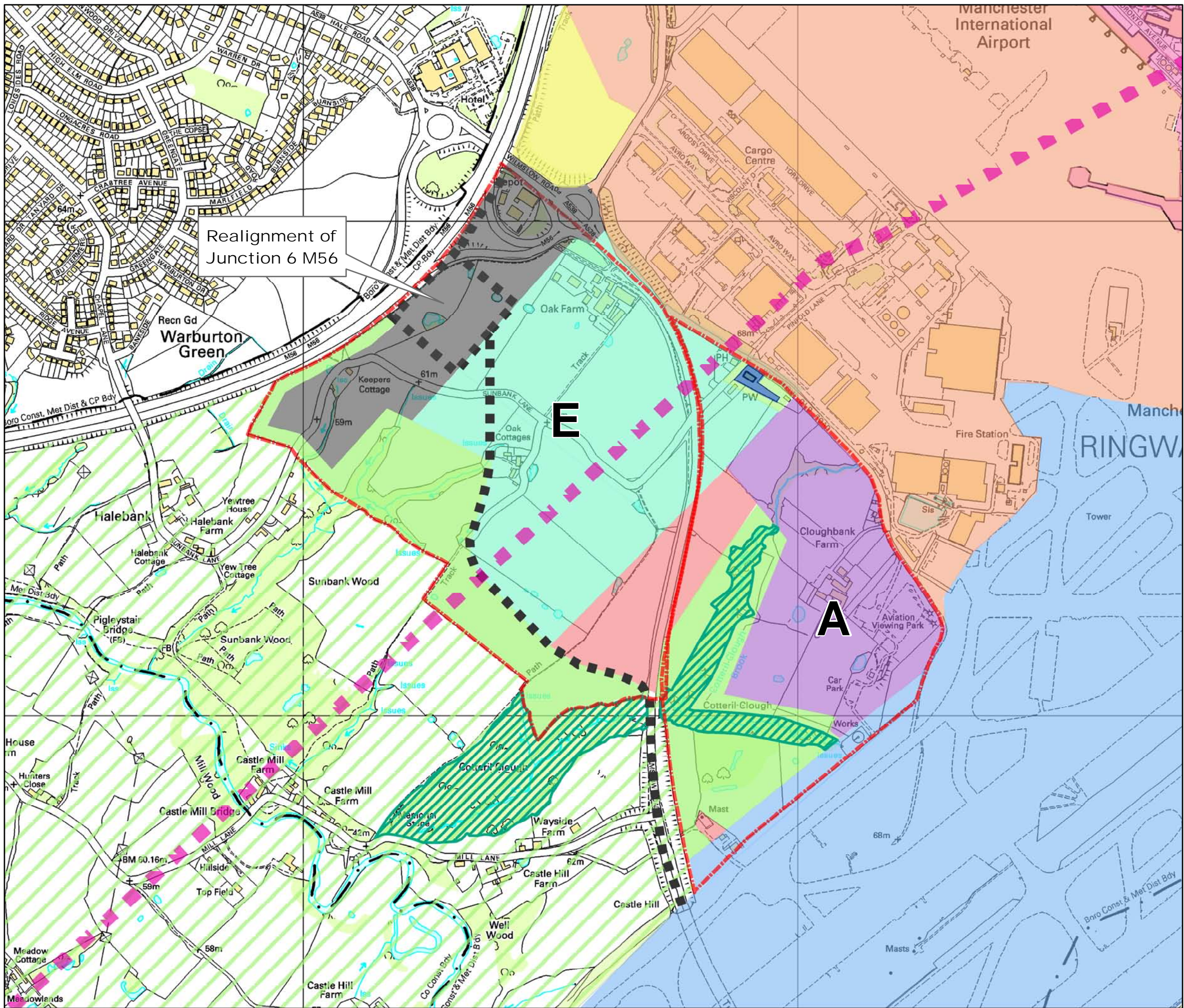
Please note that the proposed site areas indicated are for illustrative purposes only. Detailed plans to be developed.

1:10,000

Crown Copyright
Licence Number
AL18020A



Illustrative Layout Area A and E 2030



Legend

- Operational Area Extensions
- Surface Access and Car Parking
- Western Rail Safeguarded Route
- Cotteril Clough SSSI
- Landscape Mitigation
- Office, Hotel & Other Uses
- Realignment of Junction 6 & Wilmslow Road
- Cargo
- Ringway Church
- Aircraft Maintenance
- Operational
- Apron & Taxiway
- Central Terminal Area
- Environmental Mitigation
- Cotteril Clough SSSI
- Airfield

Please note that the proposed site areas indicated are for illustrative purposes only. Detailed plans to be developed.

Areas A & E Illustrative Layout

- Junction 6 of the M56 is to be retained. The A538 will be redirected to follow a new route to the west of its existing position. There is a fixed point of Wilmslow Road and its associated embankment as it passes through the tunnel under the runway.
- Land for the proposed Western Rail Extension is safeguarded – the proposed rail scheme bisects Area E (east – west) and the northern tip of Area A.
- Cotteril Clough SSSI will be protected and a landscape mitigation buffer provided.
- Sunbank Wood and Ponds and Marl Pit SBIs will be protected and a landscape mitigation buffer provided.
- Ringway Church and Churchyard will be retained.
- The Area's direct connectivity with the apron to the south and east means that it is suitable for uses requiring direct connectivity with the airfield including extensions to apron and taxiway, aircraft maintenance, operational uses and cargo.
- The area to the south and east of the realigned A538 would comprise cargo transit sheds requiring direct connectivity with the apron with the area to the north and west comprising cargo freight forwarding sheds. As speed of movement of goods is a specific requirement for air related logistics, freight forwarders need to be located close to transit shed activity.
- Car parking would be located adjacent to Junction 6 M56 to provide direct access to the Motorway and minimise journey times to the Central Terminal Area.
- Operational uses include vehicle maintenance and support, flight catering and the fuel farm which requires a location along the route of the existing fuel pipeline.
- Access will be provided to each landside development parcel from the realigned A538 Wilmslow Road.
- Some of the existing infrastructure including roads will require replacing and/or diversion.
- All proposed uses will be rationalised through modern purpose built facilities where possible.
- Proposed uses will be amalgamated where possible to make more efficient use of the land.

Area A & E Development Characteristics

- General
- Uses with direct connectivity to the airfield will need to be located in a secured airside area with an entrance controlled by security guards and accessed by one entrance.
- Key landscape features of ecological or visual importance would be retained in-situ
- Boundary fencing would depend on location and type of operation. If provided would be to a maximum of 3.6m.

Car Parking

- The majority of the site would comprise hard-standing (parking and internal access road area) with boundary landscaping
- 300 spaces per hectare
- Lighting – low level
- Each car park would contain some internal pedestrian walkways, bus pick-up areas, distributor roads and both peripheral and internal landscape works.
- In operation 24 hrs a day / 365 days a year for parking of cars.
- Two way barrier controlled access.

Taxiway

Areas A & E Illustrative Layout

- Direct connectivity with runway and apron or linked by existing taxiway;
- Linear space, parallel to existing runway or taxiway. Taxiway width of minimum 25m; distance between runway centreline and taxiway centreline minimum 190m; distance between taxiway centreline and taxiway centreline 95m;
- Broadly flat land at similar level to existing apron/taxiway;
- Lighting would be located at ground level within the taxiway. This would be illuminated in hours of darkness or poor visibility;
- Secure boundary fencing would be provided to a maximum of 3.6m;
- Noise attenuation barrier to boundary of approx 5m;
- All remaining development would be at surface level and comprise combination of hardstanding and grass edging;
- In operation 24 hrs a day / 365 days a year for movement of aircraft; and
- Minimal boundary / no landscaping provided.

Apron

- Linked with existing runway/aprons by taxiway;
- Broadly flat land at similar level to existing apron/taxiway;
- High-mast lighting, approximately 30m high, would be located around the perimeter of the site. This would be illuminated in hours of darkness or poor visibility;
- Secure boundary fencing would be provided to a maximum of 3.6m
- Noise attenuation barrier to boundary of max 5m;
- All remaining development would be at surface level and comprise hard standing, with the exception of assorted signage;
- In operation 24 hrs a day / 365 days a year for movement/parking of aircraft and ground equipment; and
- Minimal boundary / no landscaping provided.

Cargo, Operational and Aircraft Maintenance

- Aircraft-related development must have direct connectivity with apron or be linked by taxiway;
- The ratio of built development (hangers) to hard standing (parking/vehicle manoeuvring) would be approximately 60 / 40;
- Buildings would in the form of industrial hangers (steel sheet clad) with any associated offices internal to main buildings, to a maximum height of approximately 45m;
- All associated staff parking would be provided centrally within the Airport – there would be a very minor element of parking bays associated with each unit;
- Each site would be treated as a discrete entity with respect to access;
- Boundary fencing would be provided to a maximum of 3.6m;
- High-mast lighting would be provided around the perimeter of the site. This would be approximately 25m high and lit during twilight and darkness 365 days a year;
- All remaining development would be at surface level and comprise hard standing;
- Minimal / no landscaping provided – any provided landscaping would be at external boundary of the site; and
- In operation 24 hrs a day / 365 days a year in support of the overall airport operation.

Historic Environment Summary Assessment Table

Assessment of historic environment interest features identified as being either on-site or those off-site within 500m buffer zone, of greater than local importance and potentially affected

Site	Description of Existing Asset, Setting & Use	Value	Affect on Asset, Setting & Use (inc identified mitigation)	Magnitude	Significance	Additional Mitigation	Magnitude	Significance
A	Site of Cloughbank Farm (HER 9584.1.0) Listed Building Grade II Farm, Farmhouse and outbuildings. Record states: No evidence for site survival remains as area has been re-landscaped for Manchester International Airport (1993) Listed designation identifies modification with some features remaining.	Medium	Building to be demolished	Major Adverse	Moderate Adverse	Mitigation by Recording - Undertake detailed appraisal and recording of site to assess quality and condition of historic features However, would still result in demolition of Listed Building	Major Adverse	Moderate Adverse
A	Site of Ringway Chapel (HER: 9582.1.0) Monument Chapel was demolished in 1894 and new church (existing) built 1895. Liaison with GMAU identified potential for below-ground remains within/beyond churchyard – unlikely that existing building would meet criteria for Listing. Graveyard has at least 1 war grave of social significance.	Low	Building retained Landscape buffer incorporated into scheme to protect setting – would also serve to protect remains below ground. Some isolation from similar buildings in wider setting No public amenity – private use as office	Negligible	Negligible			

Site	Description of Existing Asset, Setting & Use	Value	Affect on Asset, Setting & Use (inc identified mitigation)	Magnitude	Significance	Additional Mitigation	Magnitude	Significance
A	The Romper PH 18 th Century building No status Previous study (WPC, 2007) identified that unlikely to meet criteria for Listing though has some architectural and historic local interest	Low	Building to be demolished	Major Adverse	Moderate Adverse	Mitigation by Recording – If deemed necessary (liaison with GMAU). Undertake detailed appraisal and recording of site to assess quality and condition of historic features However, would still result in demolition of building	Major Adverse	Moderate Adverse
A	Historic Landscape Previous study (PJO, 2007) identified largely medieval and later landscape patterns. However excavations for Runway 2 identified remains of more ancient settlements may survive. No assessment as to landscape value ~ value assigned on basis of presence but not designated	Medium	Noticeable change to landscape. Site is partially developed and within airport context. Landscape assessment identifies notable change in character due to vegetation loss and introduction of hardstanding and buildings.	Minor Adverse	Slight Adverse	Detailed design to retain as many features as possible – however, opportunity would be limited by nature of development. Desk-based study into potential remains below ground in wider area with appropriate mitigation measures (ie, field work) as recommended.	Minor Adverse	Slight Adverse
A	Styal Estate (off-site) Boundary approx 800m SE of site, separated by Runway 2. National Trust Property Set within Styal Conservation Area – several listed buildings	High	Located off-site - no change to building or use. Styal Estate screened by existing/retained vegetation. Separated by airport runway affecting setting and amenity – no change. Introduction of new buildings within existing airport context.	No change	Negligible			

Site	Description of Existing Asset, Setting & Use	Value	Affect on Asset, Setting & Use (inc identified mitigation)	Magnitude	Significance	Additional Mitigation	Magnitude	Significance
B	Site of Moss Nook (HER: 2029.1.0) Monument Building and settlement – concentration of buildings at junction of Ringway Road and Styal Road Condition uncertain	Low	Outside development footprint Scheme includes landscape buffer that would change existing setting from the north (presently open). Limited effect on views - may be positive in screening development at Ringway Trading Estate. Private use – no change	Negligible	Slight (potentially positive)			
B	Tatton Arms Public House (HER: 9034.1.0) Building Inn and public building Some modification Condition Fair	Low	Outside development footprint Scheme includes landscape buffer that would change existing setting from the north (presently open). Limited effect on views - may be positive in screening development at Ringway Trading Estate. Private use – no change	Negligible	Slight (potentially positive)			
B	Chamber Hall, Barn (off-site – to N of site separated by Ringway Trading Industrial Estate) (HER: 8628.2.0) Listed Building Grade II 18 th century Barn and Cow House Some alterations Condition Fair	Medium	Located off-site Intervening development of Ringway Trading Estate (buildings). Site B is presently open and unlikely to form notable feature of setting. Proposed landscaping may be noticeable in limited views – potentially positive as providing additional screening towards airport	Negligible	Slight (potentially positive)			

Site	Description of Existing Asset, Setting & Use	Value	Affect on Asset, Setting & Use (inc identified mitigation)	Magnitude	Significance	Additional Mitigation	Magnitude	Significance
B	Chamber Hall (off-site – to N of site separated by Ringway Trading Industrial Estate) (HER: 8628.1.0) Listed Building Grade II 17 th century farm, farmhouse and farmstead	Medium	Located off-site Intervening development of Ringway Trading Estate (buildings). Site B is presently open and unlikely to form notable feature of setting. Proposed landscaping may be noticeable in limited views – potentially positive as providing additional screening towards airport	Negligible	Slight (potentially positive)			
C	Etrop Grange (off-site – to E of site, separated by Painswick Park and located in recent development) (HER: 1369.1.0) Listed Building – Grade II Late 18 th century house and settlement. Redeveloped as hotel. 3-storey. Condition unknown.	Medium	Located off-site Site screened by intervening development and tree belts within Painswick Park and would be further screened by proposed landscaping, potentially positive as providing additional screening.	Negligible	Slight (potentially positive)			
C	1 & 2 Thorley Lane, Haletop Farm (off-site – to S of site, separated by M56 spur) (HER: 8638.1.0) Listed Building – Grade II 17 th century Farm, farmhouse, farmstead and timer framed building Condition Good	Medium	Located off-site Intervening M56 spur roads (airport and motorway bound) and tree belts off-site. Proposed landscaping, potentially positive as providing additional screening.	Negligible	Slight (potentially positive)			

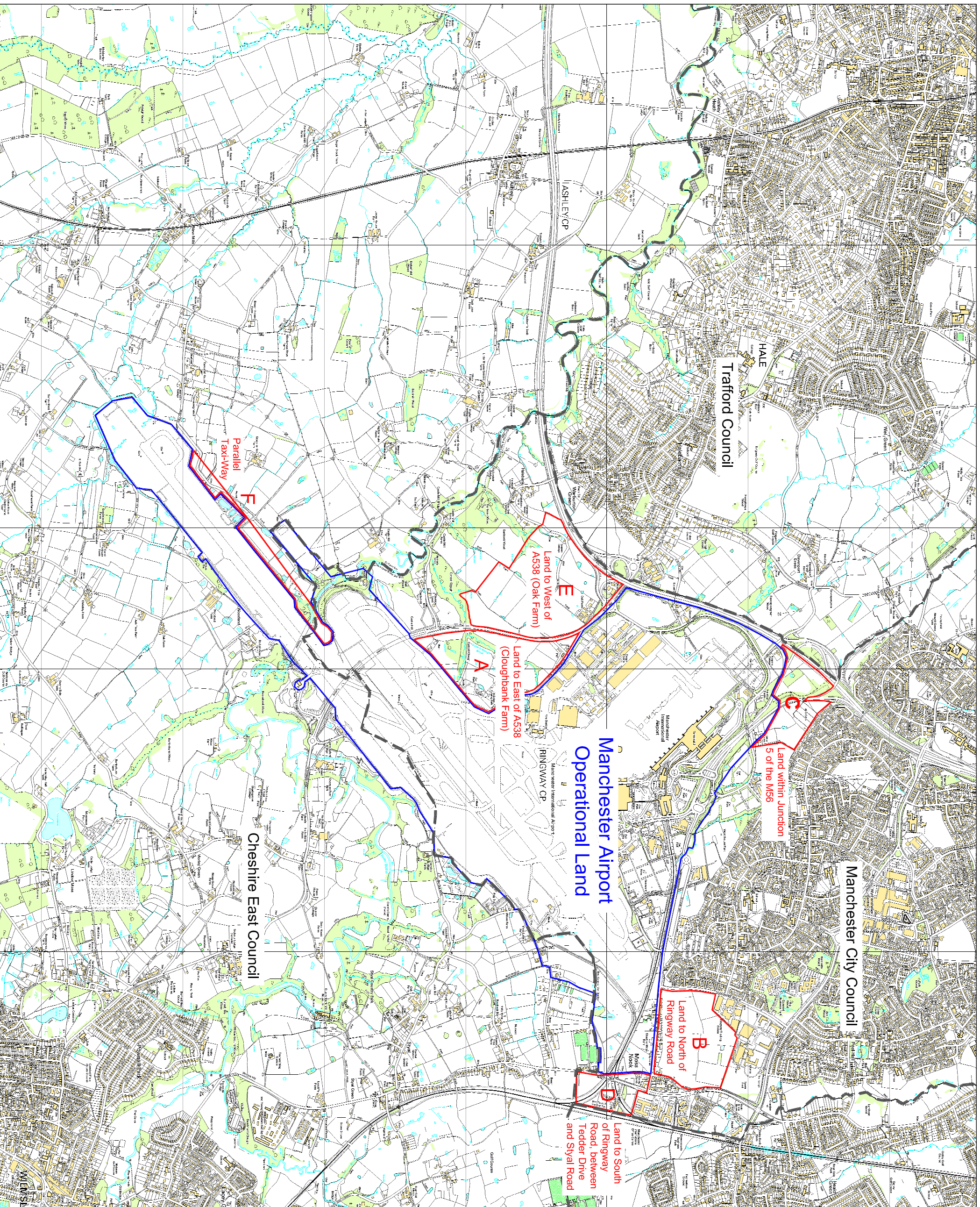
Site	Description of Existing Asset, Setting & Use	Value	Affect on Asset, Setting & Use (inc identified mitigation)	Magnitude	Significance	Additional Mitigation	Magnitude	Significance
C	Davenport Green Hall (off-site – to W of site separated by M56 motorway and junction 6 highway) (HER: 3735.1.0) Listed Building – Grade II 17 th century great house, hall, settlement and timber framed building Condition Good	Medium	Located off-site Intervening M56 including junction 5 and tree belts off-site. Proposed landscaping, potentially positive as providing additional screening.	Negligible	Slight (potentially positive)			
D	Smithy Farm (HER: 2207.1.0) Building 19 th century blacksmiths workshop, forge, garden, industrial site, tenement and yard Some modification Condition Good	Low	Building to be demolished	Major Adverse	Moderate Adverse	Mitigation by Recording - Undertake detailed appraisal and recording of site to assess quality and condition of historic features However, would still result in demolition of building	Major Adverse	Moderate Adverse
D	Site of Structures (HER: 2222.1.0) Monument 19 th century barn, settlement and tenements Now lies under Styal Road Condition Destroyed	Neg	Located outside development footprint, under existing highway and identified as destroyed.	No change	Negligible			
E	Site of Broad Oak Farm (HER: 9581.1.0) 19 th century farm, farmhouse, farmstead and pond Largely built over with post-war housing Condition Destroyed	Neg	Site to be developed over. Identified as already developed and destroyed. Buildings over site to be destroyed.	No change	Negligible			

Site	Description of Existing Asset, Setting & Use	Value	Affect on Asset, Setting & Use (inc identified mitigation)	Magnitude	Significance	Additional Mitigation	Magnitude	Significance
E	Rose Cottage (off-site, to N of site, adjacent to M56 motorway and airport operational areas) (HER: 8420.1.0) Listed Building – Grade II Some 20 th century alterations Condition unknown	Medium	Located off-site Intervening M56 including junction 6/Wilmslow Road junction and tree belts off-site.	No change	Negligible			
E	Site of Cloughbank Farm (off-site, within Site A) (HER 9584.1.0) Listed Building Grade II Farm, Farmhouse and outbuildings. Record states: No evidence for site survival remains as area has been re-landscaped for Manchester International Airport (1993) Listed designation identifies modification with some features remaining.	Medium	(To be destroyed as part of Site A proposals – for purposes of assessment, taking worst case scenario that asset remains). Located off-site Intervening belt of trees located within Site A and Wilmslow Road. Set within airport context. Private use unchanged Note: If Site A were to be developed asset would be destroyed.	No change	Negligible			
E	Yewtree House (off-site, to W of site within Halebank on Sunbank Lane) (HER: 8629.1.0) Listed Building Grade II 18 th century farm, farmhouse and farmstead. Condition uncertain	Medium	Located off-site, although close proximity Intervening Sunbank Woods would be retained as part of development proposals with additional landscaping proposed. Existing amenity context of airport operations and proximity to M56 with background noise and lighting. Use unaffected. Potential for limited views during winter with additional lighting.	Minor Adverse	Slight Adverse			

Site	Description of Existing Asset, Setting & Use	Value	Affect on Asset, Setting & Use (inc identified mitigation)	Magnitude	Significance	Additional Mitigation	Magnitude	Significance
E	Buckhall Farm (off-site, to N of site, separated by M56/junction within hotel development) (HER: 9707.1.0) Listed Building – Grade II 19 th century farm, farmhouse and farmstead Currently hotel offices Condition uncertain	Medium	Located off-site Forms part of hotel complex. Intervening M56/junction slip roads with planting.	No change	Negligible			
E	Historic Landscape Previous study (PJO, 2007) identified largely medieval and later landscape patterns. However excavations for Runway 2 identified remains of more ancient settlements may survive. No assessment as to landscape value ~ value assigned on basis of presence but not designated	Medium	Noticeable change to landscape. Site is partially developed and within airport context. Landscape assessment identifies notable change in character due to vegetation loss and introduction of hardstanding and buildings.	Minor Adverse	Slight Adverse	Detailed design to retain as many features as possible – however, opportunity would be limited by nature of development. Desk-based study to assess need for further investigations/field work into potential for archaeological remains throughout the site.	Minor Adverse	Slight Adverse
E	Styal Estate (off-site) Boundary approx 1.1km SE of site, separated by Runway 2. National Trust Property Set within Styal Conservation Area – several listed buildings	High	Located off-site - no change to building or use. Styal Estate screened by existing/retained vegetation. Separated by airport runway affecting setting and amenity – no change. Introduction of new buildings within existing airport context.	No change	Negligible			
F	Beehive Farmhouse (off-site, below Runway 2) (HER:DCH4731) Listed Building Grade II ¹	Neg	Asset no longer exists	No change	Negligible			

Site	Description of Existing Asset, Setting & Use	Value	Affect on Asset, Setting & Use (inc identified mitigation)	Magnitude	Significance	Additional Mitigation	Magnitude	Significance
F	Hanson House and adjoining outbuildings (off-site, below Runway 2) Listed Building Grade II ¹	Neg	Asset no longer exists	No change	Negligible			
F	Hill House (off-site, below Runway 2) (HER: DCH5081) Listed Building Grade II ¹	Neg	Asset no longer exists	No change	Negligible			

¹ Building has subsequently been built over during the development of Runway 2; however listed status not been revoked.



This drawing is the copyright of AXIS P E D Limited and may not be
 reproduced, stored in a retrieval system, or transmitted in any form or by
 any means, electronic, mechanical, photocopying, recording, or otherwise,
 without the prior written consent of the company to do so.
 Follow any figured dimensions - do not scale. IF IN DOUBT ASK.

Revision History • Date

- Site Boundary
- Airport Operational Boundary
- Local Authority Boundaries

axis <small>Architectural & Planning Services 100, Canal Street, Manchester, M1 3DW 0161 275 0077 • www.axis.co.uk</small>	
client:	Manchester Airport Group
project:	Local Development Framework Environmental Evidence Base
drawing title:	Study Areas with Local Authority Boundaries
date:	July 2009
drawing number:	916-01-001
scale:	1:25,000@A3
drawn by:	SM
checked:	AS
status:	
drawn by:	
checked:	
status:	
drawn by:	
checked:	
status:	