JVH TOWN PLANNING CONSULTANTS LTD

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Matter E: Green Belt policy, the Langley Sustainable Urban Extension [SUE] allocation and the Peddimore employment allocation (BDP policies TP10 & GA5-6)

Main issues: Does the Plan comply with national policy in its approach to the Green Belt? Are the Langley SUE and Peddimore employment allocations justified and deliverable? Should other Green Belt and/or major greenfield allocations be made?

Questions:

1) Does policy TP10 set out an appropriate approach to the management of the Green Belt?

TP10 refers to the green belt boundary as shown on the proposals map this makes no allowance for safeguarded land or additional land needed to meet the housing requirement identified.

The management of the land that is finally included in the green belt should be in line with the policies in the NPPF, which makes clear what types of development can be allowed.

The Policy would be better understood if it more closely reflected the exceptions that will be allowed as set out in para 89 of the NPPF.

2) Do exceptional circumstances exist which justify an alteration to the Green Belt boundary to accommodate 6,000 new dwellings?

It is clear from the assessed housing needs that Birmingham needs to find land for new homes, and that these cannot be met from the land resource within the built up area. The SHLAA [doc H11 table 1] sets out the sources of land available and the total supply is some 50,982 dwellings, a figure which includes the new allocations in the draft plan.

This figure of 50, 982 is significantly below the identified need although it includes for the SUE at Langley.

Para 83 of the NPPF makes it clear that Green Belt boundaries may be altered through a review of the Local Plan, but that at that time Planning Authorities should take account of their long term permanence to ensure that they are capable of enduring beyond the plan period. It is considered that the exceptional circumstances exist to further review the Green Belt to find sites that will accommodate additional land over and above the 6,000 new homes at Langley.

- 3) Do exceptional circumstances exist which justify an alteration to the Green Belt boundary to provide 80ha of employment land?
- 4) Is there adequate justification, including Sustainability Appraisal and assessment of the transport, education, health, drainage, sewerage and other infrastructure implications, for the selection of Green Belt "Area C" to accommodate the Langley SUE?
 - b) Is the SUE deliverable within the expected timescale?

The Langley SUE is expected to deliver 6,000 new homes but only 5,000 in the plan period [para 5.63 of SUB1] This is a very large urban extension and the plan envisages that market capacity will mean that the site will not be fully delivered in the Plan period. The development is not expected to come on stream within the first five 5 years according to para 3.1 of H 10. This is a site that will be delivering towards the end of the Plan period. In this respect therefore the site will not be fully deliverable in the Plan period and will not contribute in the early years. In our view given the housing needs, the exporting of the City's housing requirement and the timescales associated with this SUE, alternative and additional sites should be allocated which would be able to deliver earlier in the plan period. Such sites have been identified to the Council which are both sustainable and deliverable.

- 5) Is there adequate justification for all the requirements of policy GA5, including preparation of a Supplementary Planning Document?
- 6) a) Is there adequate justification, including Sustainability Appraisal and assessment of the transport, drainage, sewerage and other infrastructure implications, for the selection of the Peddimore site for employment development?
 - b]Is the development of the Peddimore site achievable within the expected timescale?

- 7) Is there adequate justification for all the requirements of policy GA6, including preparation of a Supplementary Planning Document?
- 8) Do exceptional circumstances exist which justify further alterations to the Green Belt boundary to release additional land for housing and/or employment development, either within the Plan period or as safeguarded land for development beyond the Plan period?

We consider that exceptional circumstances do exist that mean that additional land should be released to deliver the housing required for the city's needs. Such land should be released from the Green Belt in this plan and should be allocated for development. The need is such that there is a requirement to bring forward housing land in the short to medium term to meet the housing requirement [See our answer to 2 above]. This would be the preferred position and one which we consider is justified. A less preferred alternative for this Plan would be to identify areas of land currently within the Green Belt and which are appropriate for release and to identify them as safeguarded land, which could be released if the strategy currently identified fails to deliver homes at the anticipated levels or beyond the plan period.

This second approach is less attractive as a planning solution given the extent of the objectively assessed housing needs, and the uncertainty regarding the export of dwellings to the neighbouring authorities in order to meet the requirements of the City.

The initial consultations regarding the release of Green Belt land [HTY 11 page 16] sets out the range of dwellings to be considered for released was up to 10,000 homes in the north east of the City area in order to meet a larger quantum of the housing requirement. This level of housing in that sector has become diluted in the submitted plan to 6,000 homes at Langley, which for the reasons set out above are unlikely to all be delivered in the Plan period.

9) a) If additional housing or employment land is required, or if the selection of the Langley SUE /Peddimore site(s) is found not to be justified, is there justification, including SA, to release other specific area(s) of Green Belt for development?

The land at Dutton's Lane should be released from the green belt and allocated for housing. This is a site of 25.25 hectares adjoining the existing built up area known as Harvest Fields and contained by existing development on two sides in the form of Duttons lane and Weeford Road. The site is principally agricultural but includes the land and buildings at Woodside Farm which are currently in a variety of ad hoc industrial and storage uses located in and around the farm buildings. The site extends to the north as far as the northern extent of residential development along Weeford Road.

This site was examined by the Council as part of Area A1 in their consideration of the Green Belt in the north east sector. An initial sieve of the sites in the north east sector led to part of the A1 area and part of B1 being taken forward to a Stage 3 analysis for further detailed consideration.

The SA submitted with the Plan document SUB3 of 2014 assesses the stainability of the Plan as a whole and the sustainability of the growth locations that have been chosen to meet the strategy as drafted. There is no comparative with another or a varied strategy within this document.

The SA at the submission stage of September 2013 SUB 5 reviewed the sustainability of the whole part of the A1 site and the other general locations.

To consider in detail the sustainability of the Duttons Lane reference has to be made to the initial appraisal documents that were carried out when looking at the green belt review; so that the site the subject of this promotion can be assessed on its own merits.

In the Green Belt document of October 2013 [Ref PG1] the subject site was considered as part of the larger area A 1.1. The combined conclusions table on page 92 reflected the comparative scores of the remaining four general locations.

This comparative indicates that whilst the combinations of A1 and B1 did not score as highly as the preferred location at Langley [C]; that the whole of A1 was a sustainable solution.

The fundamental issue is that my client's site has never been appraised as a free standing development site, but only as part of the larger areas. It is not understood to be fundamental to the plan stagey that Green Belt releases should be of a minimum size.

Investigation of documents PG5 on Landscape character and visual sensitivity records that area LCA5 Dutton's Lane and land to the east of Weeford Road are of low landscape sensitivity, and with a low sensitivity to development due to the presence of the existing urban influence, limited landscape features and abundance of this type of landscape [PG5 pages 35-39].

Investigation of PG 7 ecological constraints indicated that the site is arable land, with a single water body, and two TPO trees, there are no SSS1 or sites of local nature importance. There are three areas showing protected species one being at the existing industrial buildings .Our own ecology report indicates that there is no constraint to development upon this basis.

Investigation of PG6 the archaeology and historic environment, records the Duttons Lane site as an amber resource where development will be acceptable subject to excavation, recording and design suitable solutions.

In terms of the viability of the site the LPA have tested the viability of A1 in PG3 page 11 and record that the site is viable. The work that supports the promotion of Dutton's Lane does not indicate any inputs that would make the development unviable. Work has been undertaken on ecology, flood risk and drainage, ground conditions, transport and master planning.

In terms of Green Belt scoring, the site has never been individually assessed as to the impact upon the Green Belt other than as part of A1.1

However it is clear from that appraisal that this site could be developed without affecting the fundamental purposes of the Green Belt, due to its containment by existing development on two sides, and the visual impact of the development being contained by the topography, the development would not cause the merging of towns; would not be seen as encroachment given the existing character of the area and uses, there is no issue with protecting the special character of any historic town, and the issue of encouraging recycling of urban land is not affected by the proposal given the scale of the housing problem and that all developable urban sites are already being relied on to come forward for development.

b) Would the development of the other area(s) / major greenfield site(s) be achievable within the Plan period,

The Dutton's Lane site would be available and developable in the plan period. The work that has been undertaken by the site owner and that of the City Council does not raise any matters that would affect the deliverability of the site. The site is within a single ownership with a willing landowner. The land to the south in Harvest fields was developed in similar circumstances having been allocated in the 1999 Unitary Development Plan; although there were several landowners involved in that development.

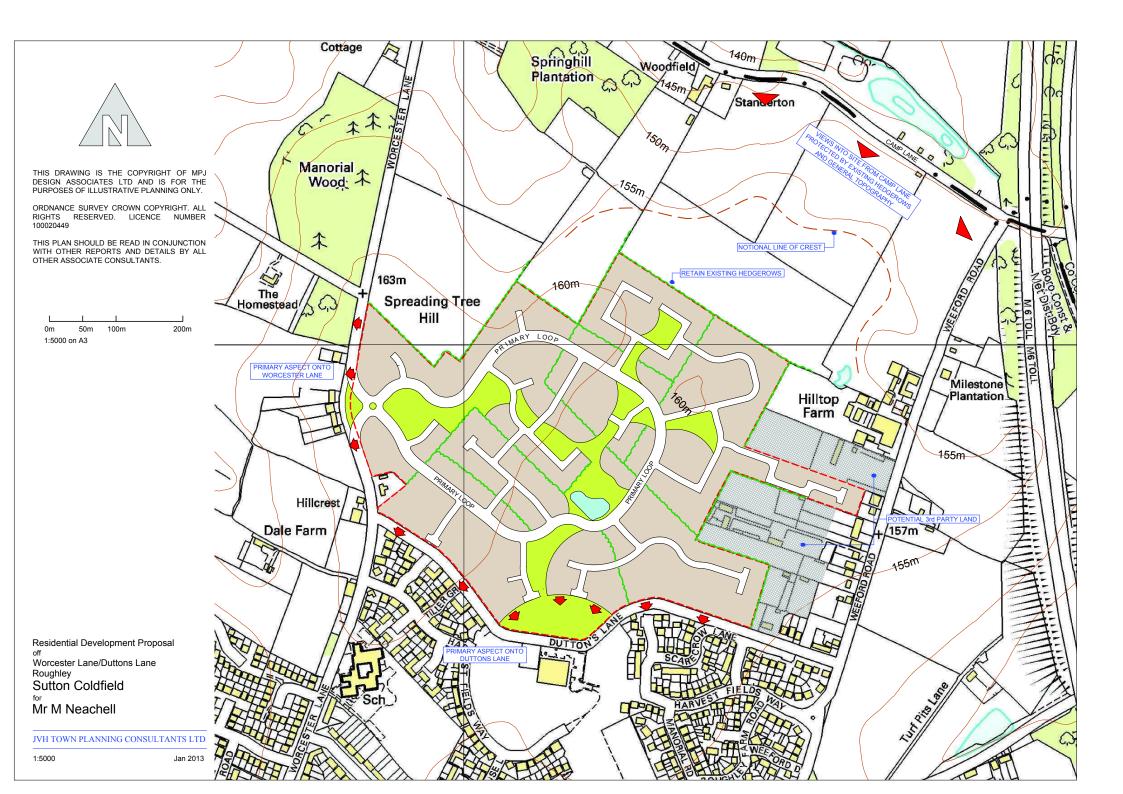
c) Should it/they be safeguarded for development beyond the Plan period?

If the land is not allocated in this Plan it should be safeguarded for the future. See our response to question 8.

Appendix List

1a	Indicative master plan

- 1b Sample development figures
- 1c Ecology report summary, Area A
- 1d Ecology report summary, Area B
- 1e Transport report summary, Areas A and B
- 1f Flood risk assessment summary, Area A
- 1g Flood risk assessment summary, Area B
- 1h Phase 1 ground report summary, Area A
- 1i Phase 1 ground report summary, Area B



Residential Development Representaion off Worcester Lane, Sutton Coldfield on behalf of Mr M Neachell

Sample Development Figures

(for 750 units)

Gross site Area 25.25 hectares

2 bedroom properties - 150no. = 300 persons 3 bedroom+ properties - 600no. = 1800 persons

Total 2100 persons

@ 20 sqm/person, 4.2 hectares of open space required

Developable site area 21.05 hectares, giving density of 36/hectare

(for 700 units)

Gross site Area 25.25 hectares

2 bedroom properties - 140no. = 280 persons 3 bedroom+ properties - 560no. = 1680 persons

Total **1960 persons**

@ 20 sqm/person, 3.92 hectares of open space required

Developable site area 21.33 hectares, giving density of 33/hectare



EXTENDED PHASE I SURVEY REPORT AREA A, DUTTONS LANE, SUTTON COLDFIELD

January 2013

Project Name	Area A, Duttons Lane, Sutton Coldfield
Project Number	C048
Document Name	Extended Phase I Survey Report
Author	Matthew Haydock
Version	00
Date of issue	22 January 2013

1. NON-TECHNICAL SUMMARY

Absolute Ecology were commissioned to undertake an Extended Phase I Habitat Survey of land off Duttons Lane (Area A), Sutton Coldfield, West Midlands.

The Phase I survey was undertaken on 7 January 2013 by an experienced and licensed ecologist who is a full member of the Institute of Ecology & Environmental Management (IEEM).

The site comprised semi-improved grassland and arable fields bordered by hedgerows, a field pond and a collection of buildings comprising commercial premises and stables.

The site included habitat which could be used by roosting bats; mature trees within the hedgerows and a variety of buildings on the site. A tree assessment should be undertaken to identify any trees which should be surveyed for roosts. A building inspection should be undertaken to check for evidence of bats and to assess whether any buildings require further survey. Any emergence or dawn survey of trees and buildings that is found to be necessary would need to be undertaken between May and August inclusive.

The site included habitat likely to be used by foraging and commuting bats. At least one season of bat activity transects would be necessary to identify any important commuting routes or foraging areas. Monthly transects between April and October should be undertaken in advance of any planning application. Results may be used to inform the master-plan.

There was evidence of badger activity on the site boundary, indicating this species is present in the locality. Although no setts were found, badger activity can change over a short space of time, so a full badger survey is recommended prior to any planning application. This can be undertaken at any time of year.

The hedgerows potentially provide sub-optimal habitat for dormouse but given the rarity of the species in the area of Sutton Coldfield, further survey for this species is not deemed necessary.

The site is likely to support a range of widespread bird species commonly found in farmland, woodland edge and urban areas. A breeding bird survey is recommended, to assess the level of activity and diversity of bird species using the site. Breeding bird survey can be undertaken in spring and early summer.

Nesting birds may be present in buildings, hedgerows, scrub, trees and grassland during the bird breeding season (March to August inclusive). If vegetation or building removal is planned during these months, a prior check for nesting birds should be undertaken by an ecologist. Any active nests that are found must not be moved until fledglings have dispersed.

The rough grassland field and arable field margins on the site have potential to support reptiles, particularly slow worm and possibly common lizard and grass snake. A reptile survey between April and September is recommended to confirm presence or absence.

There is a pond on site and an additional two ponds within 500 metres, and the site provides potential terrestrial habitat for great crested newts should they be present. It is recommended that the ponds are surveyed for great crested newts to confirm presence or absence of this species. Great crested newt pond surveys can only be undertaken between mid March and mid June, with at least two of the four surveys between mid April and mid May.

To prevent potential delays, it would be prudent to undertake the recommended surveys well in advance of any master-planning and certainly before any planning application is made.

2. INTRODUCTION

2.1 Background & Objectives

Absolute Ecology were commissioned to undertake an Extended Phase I Habitat Survey of land off Duttons Lane (Area A), Sutton Coldfield, West Midlands B75 5RJ (SP132998).

The Phase I survey was undertaken on 7 January 2013 by an experienced ecologist who is a full member of the Institute of Ecology & Environmental Management (IEEM). The objective of this report is to provide the client with information on any known or potential protected or rare species that may be using the site, and to outline recommendations on how to proceed with the works in a legal and ecologically sensitive manner.

Unless the client indicates to the contrary, information on the species found to be present on the site will be passed to the county biological records centre to update records held for the area.

2.2 Site Description

The site comprised semi-improved grassland and arable fields bordered by hedgerows, a field pond and a collection of buildings comprising commercial premises and stables. The site is adjacent to the urban infrastructure of Sutton Coldfield to the south, and open mixed farmland and patches of woodland to the north and west. The M6 toll road lies to the east.

2.3 Site Location



Figure 1: Location of site (left) and aerial view of site (right)



EXTENDED PHASE I SURVEY REPORT AREA B, LAND OFF SLADE ROAD, SUTTON COLDFIELD

January 2013

Project Name	Area B, Land off Slade Road, Sutton Coldfield
Project Number	C048
Document Name	Extended Phase I Survey Report
Author	David Allen
Checked By	Matthew Haydock
Version	00
Date of issue	22 January 2013

1. NON-TECHNICAL SUMMARY

Absolute Ecology were commissioned to undertake an Extended Phase I Habitat Survey of land off Slade Road, Sutton Coldfield, West Midlands (Area B).

The Phase I survey was undertaken on 7 January 2013 by an experienced and licensed ecologist who is a full member of the Institute of Ecology & Environmental Management (IEEM).

The site comprised of farmland with a woodland area, hedgerows, pond and grassland. The site is bounded by Slade Road, Weeford Road and the M6 toll to the east. Beyond Weeford Road to the west is residential development, whilst to the north and south there is open farmland.

There were mature trees present within hedgerows and the woodland which had features of potential for roosting bats. A tree assessment for bats should be undertaken prior to any work to the trees, including surgery or felling. Depending on the potential for the tree to support roosting bats, emergence /dawn bat survey may be recommended (May to August inclusive).

Bats may forage over the habitats in the site and may use hedgerows and woodland edge as commuting routes. Bat activity surveys of the site should be undertaken to assess the levels of bat activity across the site, and to identify any important foraging areas or commuting routes. Activity transects should be undertaken monthly between April and September/October.

No evidence of badger was found on site but this species could occur on the site in future. As badger activity can change over a short space of time, a full badger survey should be undertaken prior to any planning application and construction works.

The woodland and hedgerows potentially provide sub-optimal habitat for dormouse but given the rarity of the species in the area of Sutton Coldfield, further survey for this species is not deemed necessary.

Nesting birds may be present in hedgerows, trees and grassland during the bird breeding season (March to August inclusive). If vegetation removal or any ground works planned during these months, a prior check for nesting birds should be undertaken by an ecologist. Any active nests that are found must not be moved until fledglings have dispersed. Recommendations are given to provide a variety of bird nesting opportunities (e.g. bird boxes) as part of any development.

The rough grassland and hedgerows on the site have potential to support reptiles, particularly slow worm, common lizard and grass snake. A reptile survey between April and September is recommended to confirm presence or absence.

There is a pond on site and an additional three ponds within 500 metres, and the site provides potential terrestrial habitat for great crested newts should they be present. If possible, all of the ponds should be surveyed for great crested newts to confirm presence or absence of this species. Great crested newt pond surveys can only be undertaken between mid March and mid June, with at least two of the four surveys between mid April and mid May.

2. INTRODUCTION

2.1 Background & Objectives

Absolute Ecology were commissioned to undertake an Extended Phase I Habitat Survey of land off Slade Road (Area B), Sutton Coldfield, West Midlands B75 5TD (SP137 995).

The Phase I survey was undertaken on 7 January 2013 by an experienced ecologist who is a full member of the Institute of Ecology & Environmental Management (IEEM). The objective of this report is to provide the client with information on any known or potential protected or rare species that may be using the site, and to outline recommendations on how to proceed with the works in a legal and ecologically sensitive manner.

Unless the client indicates to the contrary, information on the species found to be present on the site will be passed to the county biological records centre to update records held for the area.

2.2 Site Description

The site comprised semi-improved grassland fields, which had recently been grazed by cattle and horses, bordered by hedgerows, a wooded area to the south west and a large pond along the south east border. The site lays adjacent to open mixed farmland to the north and south. To the west there is residential development and to the east lies the M6 Toll road. The town of Sutton Coldfield lies to the south west of the site.

2.3 Site Location



Figure 1: Location of site (left) and aerial view of site (right)

WYG Transport Planning



Mr. & Mrs. Neachell

Land North of RoughleyProposed Residential Development

Access & Transport Feasibility

WYG Report No. RT80280-01

Executive Park Avalon Way Anstey

Leicester

LE7 7GR

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January 2013

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WYG Transport Planning



5 CONCLUSIONS

- 5.1.1 This report provides an initial transport feasibility study and assessment of the potential traffic impact of residential development of approximately 1,350 dwellings on two areas of land north of Roughley in Sutton Coldfield.
- 5.1.2 The report concludes that the site is within reasonable walking and cycling distance of a number of local facilities and amenities in Roughley, including local schools. There is scope to provide improved pedestrian and cycle routes as part of the development proposals
- 5.1.3 Bus services in the local area are reasonable, although it is recommended that a new bus service would need to be provided to link development area A to Sutton Coldfield and Birmingham.
- 5.1.4 It is recommended that the capacity of the existing bus services to accommodate additional passengers as a result of the development area B is assessed. If additional buses are required to cater for additional passenger demand, then appropriate forward funding by the developers of the site would be required.
- 5.1.5 Vehicular access to development area A is proposed via the provision of a suitable new roundabout junction on Worcester Lane. Two access roads from the roundabout would be provided into the development area in a loop road arrangement. The loop road arrangement would be designed to accommodate buses.
- Two points of vehicular access are recommended to development area B, off the B4151 Slade Road and Weeford Road. It is considered that a simple priority T-junction onto the B4151 Slade Road would have sufficient capacity to cater for predicted traffic flows and access onto Weeford Road could either be provided via a simple priority T-junction to the north of Dutton's Lane or a 4th arm to the existing Weeford Road/Harvest Fields Way junction. It is recommended that a link road is provided through development areas B between the B4151 Slade Road and Weeford Road as this would reduce the impact of development generated traffic onto the adjacent highway network.
- 5.1.7 Traffic generated by the proposed development areas would have an impact at a number of off-site junctions on the local highway network. However, it is considered that this impact could be satisfactorily mitigated through the provision of appropriate junction improvements.

WYG Environment Planning Transport part of the wyg Group

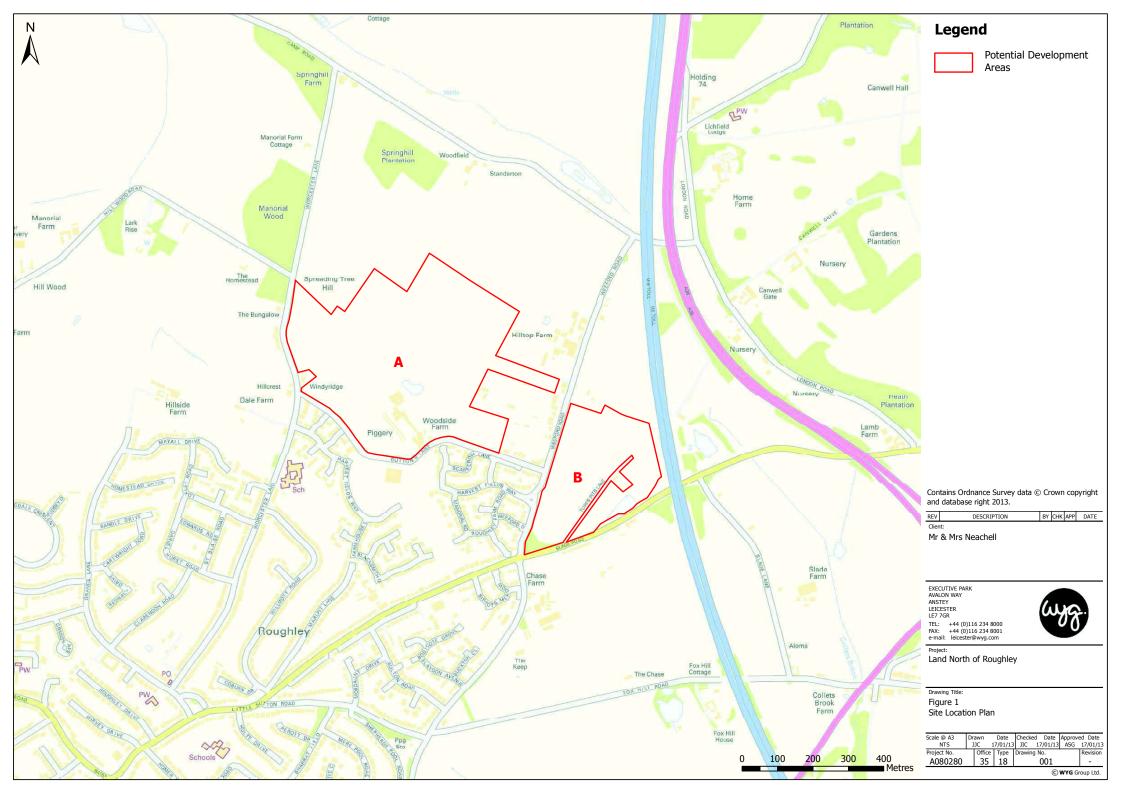
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WYG Transport Planning



The scale and nature of improvements would be determined as part of any detailed transport assessment for individual development proposals.

5.1.8 In view of the above, it is considered that there are no overriding highway constraints which would preclude the development of approximately 1,350 dwellings to the north of Roughley, Sutton Coldfield.





Mr M Neachall

Flood Risk and Runoff Assessment

Land off Duttons Lane, Sutton Coldfield, Area A

West Midlands J-D1071 – R02

1 Executive Summary

Opus International Consultants (UK) Ltd (Opus) was commissioned to carry out a Level 1 flood risk and runoff assessment for a proposed residential development of land located off Duttons Lane, Sutton Coldfield.

This report is to support an **Outline Planning Application** for this site and to incorporate a SuDS based storm water management scheme.

The site is to be assessed in accordance with the requirements of the <u>National Planning Policy Framework (NPPF)</u> and the associated Technical Guidance to determine the suitability of the proposed development format on the site.

As well as fluvial flood risk the report will also assess the risk posed locally by the development itself and the runoff it may potentially generate.

This element will include a general overview of the suitability of Sustainable Drainage Systems (SuDS) type systems.

If required, mitigation measures and recommendations will be made that will enable the site to be suitably developed while actively seeking to reduce flood risk locally.

The following guidelines and references have been used in the preparation of this report:

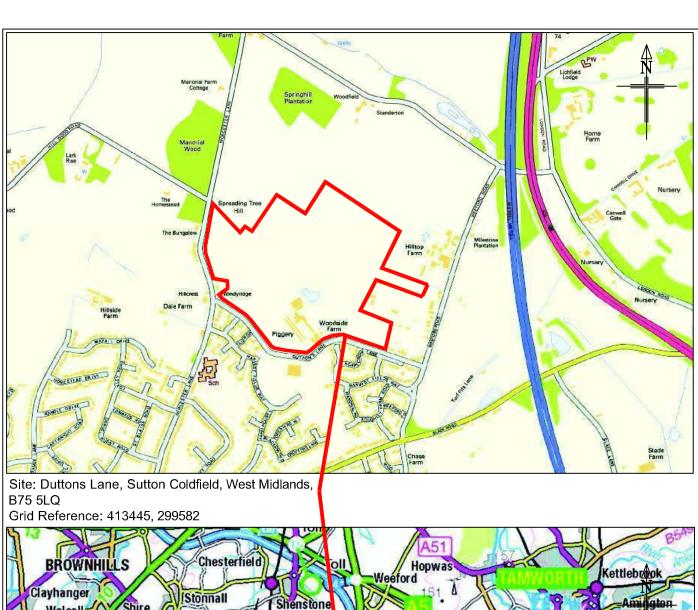
- a) NPPF Technical guidance (NPPF-TG)
- b) <u>Environment Agency Flood Risk Standing Advice for England National Version 2.0</u>
- c) Opus International Consultants (UK) Ltd Phase 1 (Desk study) Investigation
 Report reference J-D1021 R01
- d) Opus archives

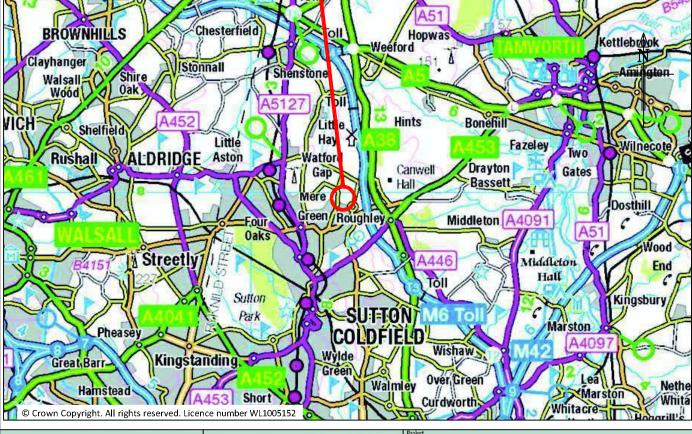
The report is also based on additional information received from the Environment Agency (EA), Birmingham City Council (BCC) and Severn Trent Water (STW).

The report concludes that the development is suitable for this location and can be safely developed to mitigate all identified long term residual flood risks in this area.

It is demonstrated that the layout may be developed to incorporate a SuDS based system that will not only provide adequate runoff protection but will also provide an improvement in the runoff quality.

Within this strategy the development will also include the use of SuDS and infiltration based systems where feasible, subject to a site investigation and a series of BRE365 soakaway tests.





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Revision	Amendment	Approved	Date	Drawn	Designed	Approved		Revision Date		NPLAN		
R0	First Issue			LMH	LMH	-		-	AREA A			
				Project No.			Scale		Drawling No.	Status	Sheet. No.	Revision
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Mr M Neachall

Flood Risk and Runoff Assessment Land off Slade Road, Sutton Coldfield, Area B

West Midlands J-D1071 – R03

1 Executive Summary

Opus International Consultants (UK) Ltd (Opus) was commissioned to carry out a Level 1 flood risk and runoff assessment for a proposed residential development of land located off Slade Road, Sutton Coldfield.

This report is to support an **Outline Planning Application** for this site and to incorporate a SuDS based storm water management scheme.

The site is to be assessed in accordance with the requirements of the <u>National Planning Policy Framework (NPPF)</u> and the associated Technical Guidance to determine the suitability of the proposed development format on the site.

As well as fluvial flood risk the report will also assess the risk posed locally by the development itself and the runoff it may potentially generate.

This element will include a general overview of the suitability of Sustainable Drainage Systems (SuDS) type systems.

If required, mitigation measures and recommendations will be made that will enable the site to be suitably developed while actively seeking to reduce flood risk locally.

The following guidelines and references have been used in the preparation of this report:

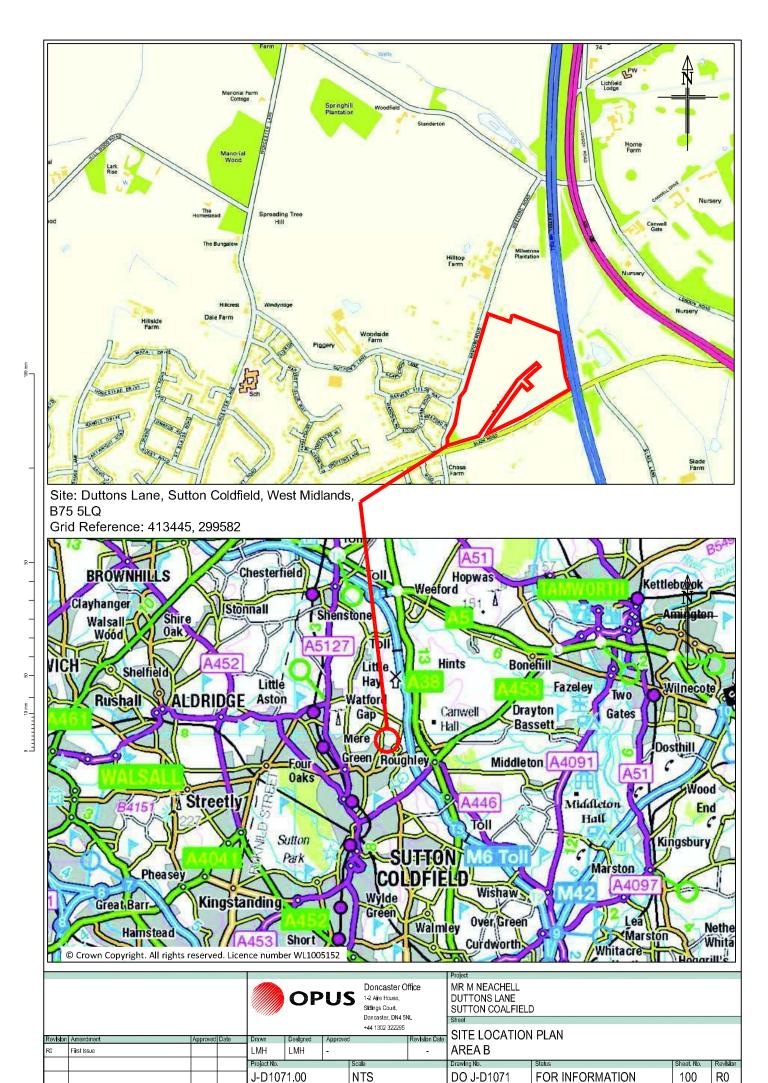
- a) NPPF Technical guidance (NPPF-TG)
- b) <u>Environment Agency Flood Risk Standing Advice for England National Version 2.0</u>
- c) Opus International Consultants (UK) Ltd Phase 1 (Desk study) Investigation
 Report reference J-D1021 R01
- d) Opus archives

The report is also based on additional information received from the Environment Agency (EA), Birmingham City Council (BCC) and Severn Trent Water (STW).

The report concludes that the development is suitable for this location and can be safely developed to mitigate all identified long term residual flood risks in this area.

It is demonstrated that the layout may be developed to incorporate a SuDS based system that will not only provide adequate runoff protection but will also provide an improvement in the runoff quality.

Within this strategy the development will also include the use of SuDS and infiltration based systems where feasible, subject to a site investigation and a series of BRE365 soakaway tests.





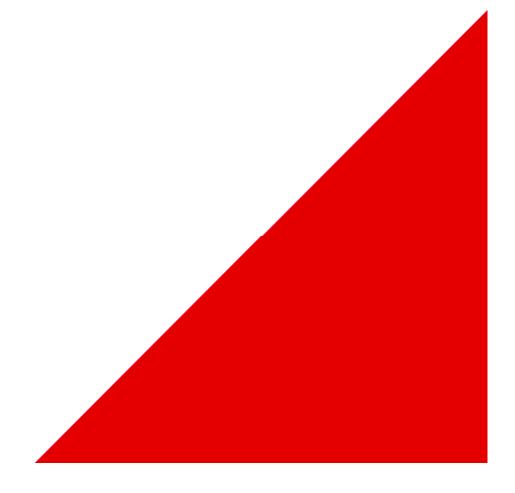
Phase 1 (Desk Study) Investigation Report

On a site at

Area A, Duttons Lane, Sutton Coldfield

For

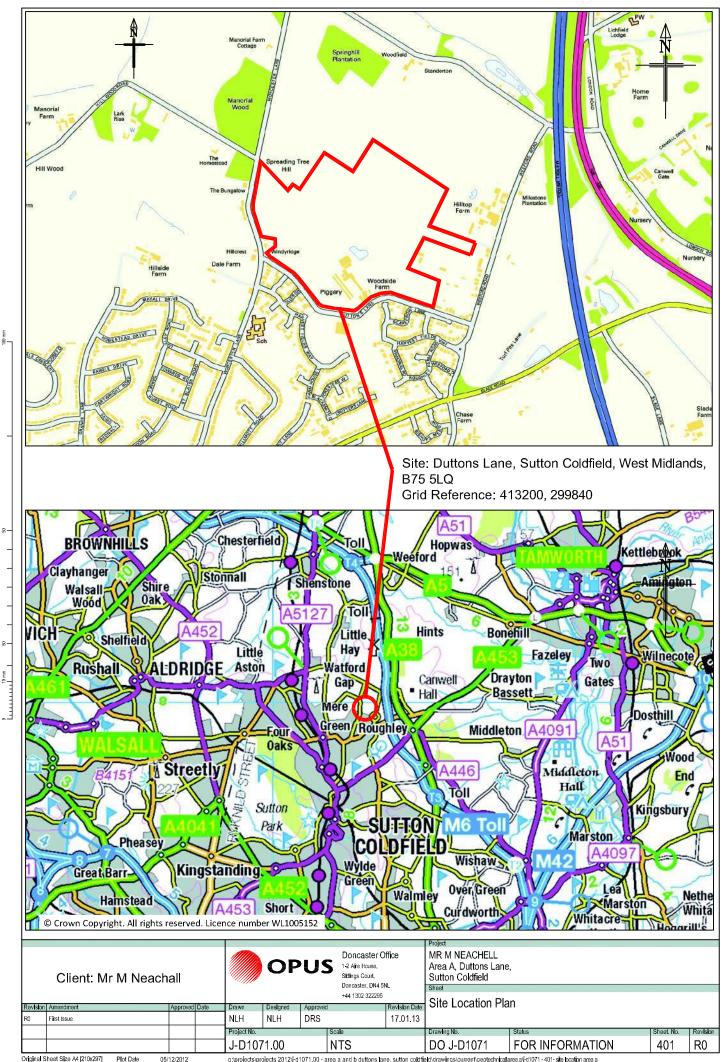
Mr M Neachall



EXECUTIVE SUMMARY

Location	The site is located on undeveloped land, north of Duttons Lane, Sutton Coldfield,
	centred on approximate National Grid Reference 413200, 299840 as shown on drawing no. DO J-D1071.00-401 Ro, Site Location Plan.
	Access to the site can be gained off Duttons Lane to the south of the site, all fields are interconnected with the exception of the two south western most fields adjacent to Woodside Farm, which have separate access off Duttons Lane.
	For the purpose of the report the site has been divided into 8 fields with Woodside Farm and Piggery as a separate area.
History	Historical Ordnance Survey maps, from 1884 to 2012
	Onsite Earliest map (1884) shows the site to be predominantly undeveloped land within a network of 12 fields with the number of fields increasing and decreasing between 9 and 12 fields over the years. A pond is evident in the centre of the site from the 1884 edition. A small reservoir is constructed in the northwest of the site in 1938. In 1938 an area is shown in the centre of the site labelled as 'marlpit plantation' this is no longer labelled from 1955 however a cresecent shaped feature remains to present.
	Buildings are shown in the south of the site from 1955, these are extended and labelled as 'Woodside Farm' and 'Piggery'.
	Offsite From the earliest available edition the surrounding area is shown as predominantly agricultural land, residential development increases to the south east over time.
	Worcester Lane is shown adjacent to the western boundary with Duttons Lane running adjacent to southern boundary.
	A number of gravel pits, sandpits and marlpits are shown between 750m-1000m of the site, these have subsequently been developed over or backfilled.
	Environs: Predominantly fields and more recently residential properties.
Geology & Hydrogeology	Solid – Permo-Triassic sandstones and conglomerates of the Kidderminster Formation and Enville Member.
	Drift – No superficial deposits.
	Faults – There are no known surface faults on site.
	Groundwater – Principal Aquifer (West/Kidderminster Formation) and Secondary (A) Aquifer (East/Enville Member) and overlain by soils of high leaching potential.
Mineral Extraction	The site is located in an area where a Coal Authority Report is required however the report states that the site is not at risk from any historical, present or future workings.
	No BGS recorded mineral sites are shown to be within 1000m of the site.

	Various historical gravel pits, sand pits and marl pits have been noted between
	500m-1000m of the site.
Anticipated Ground Conditions	BGS borehole data shows ground conditions in the area to be to be sand, gravel, clay and sandstone. It is anticipated that Made Ground shall be encountered within the area of Woodside Farm and Piggery and possibly within the 'Marlpit Plantation'.
Contamination Summary	The following on site sources of ground contamination have been identified:
Summary	 Potential pesticides from historical use as a farmer's field; Chemicals used as part of timber company processes; ACMs within farm building construction; Made Ground in area of Woodside Farm and Piggery and outbuildings; TPHs from spilled fuel through use of Woodside Farm area as a car lot; Ground gasses from potentially backfilled marl pit. Potential off site sources of ground contamination have been identified:
	 Pesticides from past/present farming activities; Ground gas generation from historical landfill located 12m south of the site.
Foundation Summary	Traditional strip / trench footings based on a safe bearing capacity at 75 - 100kN/m2 within the anticipated sand/gravel/clay soils are considered suitable for this site, subject to confirmation via investigation. Foundations may be placed at a minimum depth of 600mm in granualr soils or 900mm in clay soil (assuming medium volume change potenial)
	Foundations may require deepening due to trees in accordance with NHBC Standards should clay soils be encountered.
	Considering the potential for former ponds and or pits on site specialist foundations may be required locally.
	If the existing made ground and / or newly placed fill is greater than 600mm or the ground is proven to be clay and foundations are within the influence of trees then a cast in-situ suspended or suspended ground floor will be required.
	No radon protective measures required, however there is a potential for other ground gases which is to be confirmed through an intrusive investigation.
Soakaways / Drainage	Natural ground conditions are anticipated to be variable potentially high permeability strata. Several areas of ponds and standing water were noted therefore soakaways are considered unlikely to be viable, subject to intrusive works.
Further Works	 Regulartory liason; Intrusive investigation; Foundation solution plan; Assessment of potential ground gas; and Asbestos demolition survey.





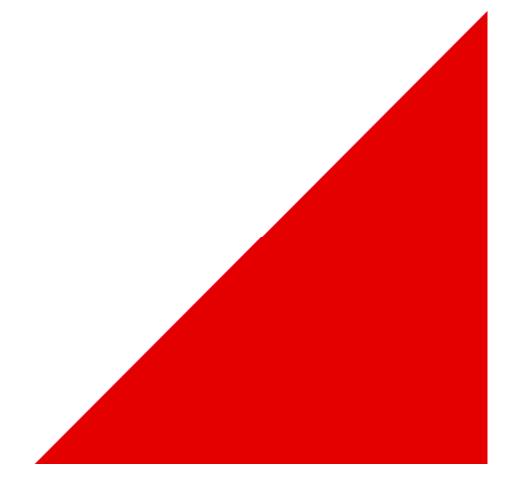
Phase 1 (Desk Study) Investigation Report

On a site at

Area B, Duttons Lane, Sutton Coldfield

For

Mr M Neachall



EXECUTIVE SUMMARY

Location	The site is approximately 10.12ha in area and is centred on national grid reference 413680, 299500. The site is divided into 4 fields and is cut centrally by 'Turf Pits Lane' which is orientationed north east – south west.
	Access to the site can be gained via Weedford Road, Turf Pits Lane or Slade Road. All fields are accessible and are linked by numerous gates and stiles.
History	Historical Ordnance Survey maps, from 1884 to 2012
	Onsite
	Earliest maps show the site to be predominantly undeveloped land within a network of fields. The site remains unchanged until 1903 when allotment gardens are noted within the south west, these are not shown from 1938. Footpaths are noted along the northern adge and across the centre of the site, the latter is later known as 'Turf Pits Lane'. A large pond is shown on the south western border in 2012.
	Offsite
	1903 – Roads along western and southern boundaries noted as 'Weedford Road' and 'Slade Road' respectively.
	1914 – 1938 – 'Roughley Farm' is shown roughly 20m south west with associated pump.
	1964 - Increase in residential and commercial development to the south west in 'Little Sutton'.
	2006 – 2012 - M6 Toll Road shown running north south 400m east of the site. The western embankment is shown to fall into the north east of the site.
	Environs: Predominantly fields
Geology & Hydrogeology	Solid – Predominantly sandstones and conglomerates of the Kidderminister Formation (in the west of the site) with pebbly (gravelly) sandstone of the Bromsgrove Sandstone Formation (in the east of the site) and mudstone of the Mercia Mudstone Group located along the south eastern site boundary.
	Drift – There are no drift deposits mapped across the site.
	Faults – There are two recorded surface faults that affect the site, one located across the centre of the site and the other along the south western boundary. Both faults are orientated north east – south west.
	Groundwater – Bedrock Principle Aquifer with highly permeable soil class (majority of site). Non Aquifer present along south eastern boundary with negligibly permeable soils.
Mineral Extraction	The site is listed within the Law Society's Guidance Notes and Directory for Coal Mining Searches as requiring a Coal Mining Report.
	The site is not within the zone of likely physical influence on the surface from past opencast/underground workings.

	The site does not lie within the likely zone of influence of any present opencast/underground coal workings.
	The site is not within an area for which a licence to remove coal by opencast/underground methods is pending or been granted.
	No faults or other lines of weakness at the surface having affected the stability of the property.
	There are no coal mine entries recorded on, or within 20m of the site.
	There are no man-made mining cavities within 1000m of the site.
Anticipated Ground Conditions	A thin layer of topsoil, underlain by sand, gravel and clay underlain by the Kidderminster Formation (majority of site/west), Bromsgrove Sandstone Formation (minority of the site/east) and the Mercia Mudstone Group (Eastern site boundary).
Contamination Summary	The following on site sources of ground contamination have been identified:
Summary	 Potential for pesticides from historical use as a farmer's field. Made Ground in area of former allotment gardens and associated ditches.
	Potential off site sources of ground contamination have been identified:
	Pesticides from past/present farming activities.
	The level of contamination on site is currently considered likely to be low.
Foundation Summary	Traditional strip / trench footings based on a safe bearing capacity at 75 - 100kN/m2 within the anticipated natural ground are considered suitable for this site, subject to confirmation via investigation.
	Foundations may require deepening due to trees in accordance with NHBC Standards should clay be encountered.
	Raft foundations 10m either side of the fault.
	Ground bearing floor slabs are likely to be a viable option for this site.
	No radon protective measures required.
Soakaways / Drainage	Natural ground conditions are anticipated to be potentially intermediate to high permeability strata it is therefore considered that soakaways may be viable, however a number of areas of standing water were noted across the site therefore verification is required through suitable testing in accordance with BRE365.
Further Works	Regulatory Liaison
	Intrusive investigation
	Foundation Schedule

