Lichfield District Council

Local Plan Allocations

Sequential Test

Lichfield district council
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Contents

1. Purpose of the Document

The purpose of this technical note is to provide evidence of the application of the Sequential Test within the District of Lichfield.

The Local Plan Strategy was adopted in February 2015 and sets the spatial strategy for District which in terms of residential growth is to provide a minimum of 10,030 dwellings across the plan period to 2029. It does this through the allocation of a number of strategic sites, which provide for approximately 5,850 dwellings. The Local Plan Allocations document forms the second part of the Local Plan and sets out the site specific policies and identifies a range of smaller sites to deliver the residual quantum of growth set out in the Local Plan Strategy.

This report has been compiled using information from the Level 1 Strategic Flood Risk Assessment (SFRA) produced by CAPITA in 2014, the Level 2 SFRA produced by JBA Consulting in 2017 and considerations made by Lichfield District Council when applying the Sequential Test to these sites.

2. Sequential Test Guidance

Guidance relating to the application of the Sequential Test is shown in the form of a flow chart in Planning Practice Guidance.

The National Planning Policy Framework (NPPF) was re-issued in July 2018. The NPPF sets out the Government's requirements for the planning system and provides a framework within which local people and councils can produce distinctive local and neighbourhood plans to reflect the needs and properties of their communities. The NPPF must be taken into account by local planning authorities when preparing Local Plans and for applicants preparing planning applications.

Planning Practice Guidance (PPG) was published in 2014 and sets out how the NPPF should be implemented. NPPG: Flood Risk and Coastal Change advises on how planning can account for the risks associated with flooding and coastal change in plan making and the application process. It sets out Flood Zones, the appropriate land uses for each zone, flood risk assessment requirements, including the Sequential and Exception Tests and the policy aims for developers and authorities regarding each Flood Zone.

The Sequential Test

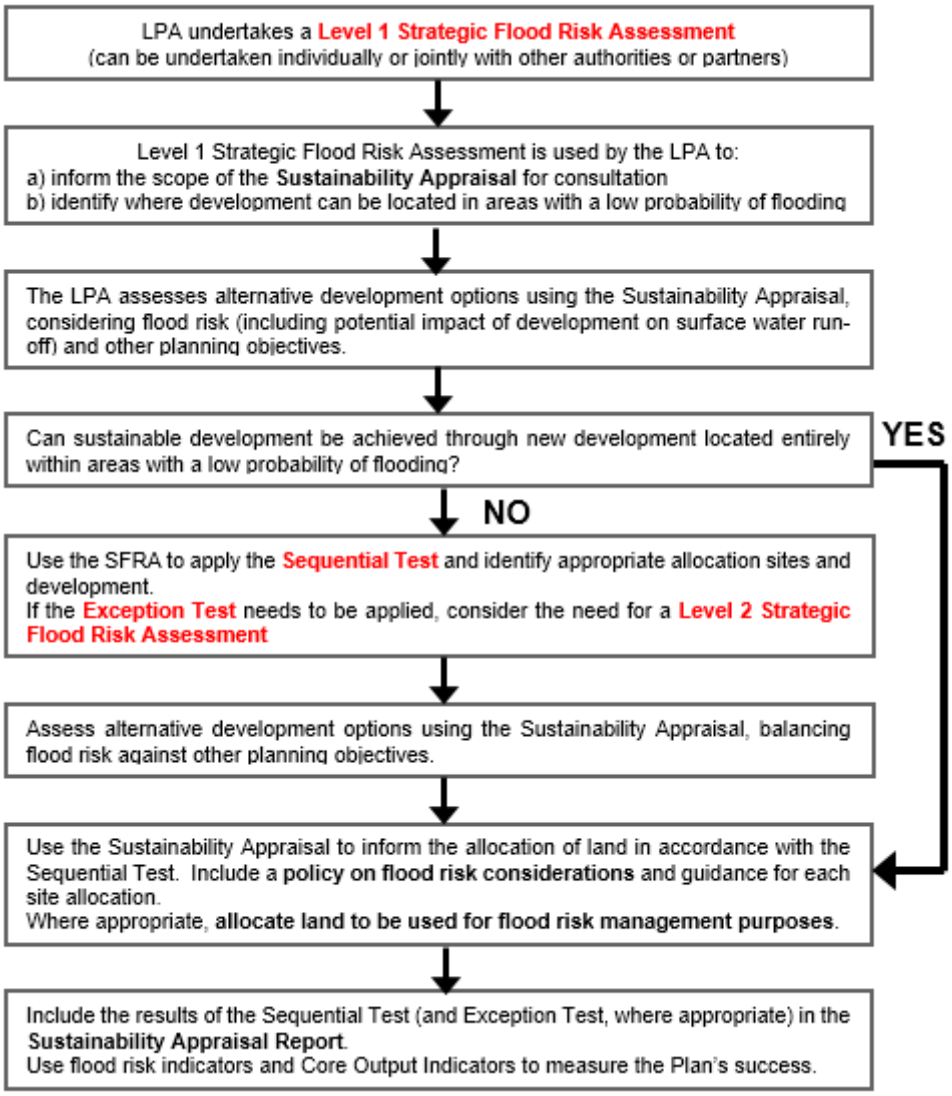
"The Sequential Test ensures that a sequential approach is followed to steer new development to areas with the lowest probability of flooding. The flood zones, as refined in the Strategic Flood Risk Assessment for the area, provide the basis for applying the Test. The aim is to steer new development to Flood Zone 1 (areas with a low probability of river or sea flooding). Where there are no reasonably available sites in Flood Zone 1, local planning authorities in their decision making should take into account the flood risk vulnerability of land uses and consider reasonably available sites in Flood Zone 2 (areas with a medium probability of river or sea flooding), applying the Exception Test if required. Only where there are no reasonably available sites in Flood Zones 1 or 2 should the suitability of sites in Flood Zone 3 (areas with a high probability of river or sea flooding) be considered, taking into account the flood risk vulnerability of land uses and applying the Exception Test if required".
(National Planning Practice Guidance, paragraph 019)

The Exception Test

"The Exception Test, as set out in paragraph 102 of the NPPF, is a method to demonstrate and help ensure that flood risk to people and property will be managed satisfactorily, while allowing necessary development to go ahead in situations where suitable sites at lower risk of flooding are not available. Essentially, the two parts to the Test require proposed development to show that it will provide wider sustainability benefits to the community that outweigh flood risk, and that it will be safe for its lifetime, without increasing flood risk elsewhere and where possible reduce flood risk overall.".
(National Planning Practice Guidance, paragraph 023)

A description of how flood risk should be taken into account in the preparation of Local Plans is outlined in Diagram 1 contained within the Planning Practice Guidance (
Figure 2-1).

Figure 2-1: Flood risk and the preparation of Local Plans†



† Based on Diagram 1 of NPPF Planning Practice Guidance: Flood Risk and Coastal Change (paragraph 004, Reference ID: 7-005-20140306) March 2014

2.1 Flood Zones

The PPG identifies the following Flood Zones (see Table 2-1). These apply to both Main River and Ordinary Watercourses.

Table 2-1: Flood Zone descriptions

Zone	Probability	Description
Zone 1	Low	This zone comprises land assessed as having a less than 1 in 1000 annual probability of river or sea flooding in any year (<0.1%).
		All land uses are appropriate in this zone.
		For development proposals on sites comprising one hectare or above the vulnerability to flooding from other sources as well as from river and sea flooding, and the potential to increase flood risk elsewhere through the addition of hard surfaces and the effect of the new development on surface water run-off, should be incorporated in a flood risk assessment.
Zone 2	Medium	This zone comprises land assessed as having between a 1 in 100 and 1 in 1,000 annual probability of river flooding (0.1% - 1%) or between 1 in 200 and 1 in 1,000 annual probability of sea flooding (0.1% – 0.5%) in any year.
		Essential infrastructure, water compatible infrastructure, less vulnerable and more vulnerable land uses (as set out by NPPF) as appropriate in this zone. Highly vulnerable land uses are allowed as long as they pass the Exception Test.
		All developments in this zone require an FRA.
Zone 3a	High	This zone comprises land assessed as having a greater than 1 in 100 annual probability of river flooding (>1.0%) or a greater than 1 in 200 annual probability of flooding from the sea (>0.5%) in any year Developers and the local authorities should seek to reduce the overall level flood risk, relocating development sequentially to areas of lower flood risk and attempting to restore the floodplain and make open space available for flood storage.
		Water compatible and less vulnerable land uses are permitted in this zone. Highly vulnerable land uses are not permitted. More vulnerable and essential infrastructure are only permitted if they pass the Exception Test.
		All developments in this zone require an FRA.
Zone 3b	Functional Floodplain	This zone comprises land where water has to flow or be stored in times of flood. SFRAs should identify this Flood Zone in discussion with the LPA and the Environment Agency. The identification of functional floodplain should take account of local circumstances.
		Only water compatible and essential infrastructure are permitted in this zone and should be designed to remain operational in times of flood, resulting in no loss of floodplain or blocking of water flow routes. Infrastructure must also not increase flood risk elsewhere.
		All developments in this zone require an FRA.

2.2 The sequential, risk based approach

Undertaking a Sequential Test: This approach is designed to ensure areas with little or no risk of flooding (from any source) are developed in preference to areas at higher risk, with the aim of keeping development outside of medium and high flood risk areas (Flood Zones 2 and 3) and other sources of flooding, where possible. The sequential approach can be applied both between and within Flood Zones.

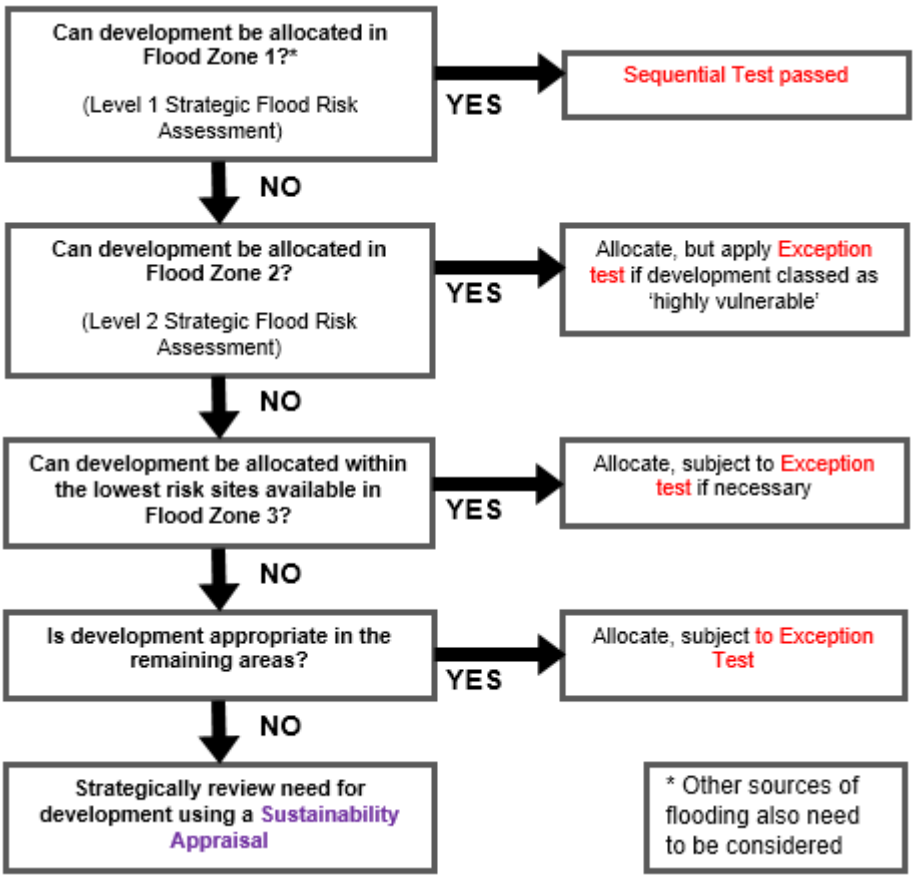
Undertaking the Exception Test: It is often the case that it is not possible for all new development to be allocated on land that is not at risk from flooding. In these circumstances the Flood Zone maps (that show the extent of inundation assuming that there are no defences) are too simplistic and a greater understanding of the scale and nature of the flood risks is required.

2.3 Applying the Sequential Test and Exception Test in the preparation of a Local Plan

When preparing a Local Plan, the Local Planning Authority should demonstrate it has considered a range of site allocations, using SFRAs to apply the Sequential and Exception Tests where necessary.

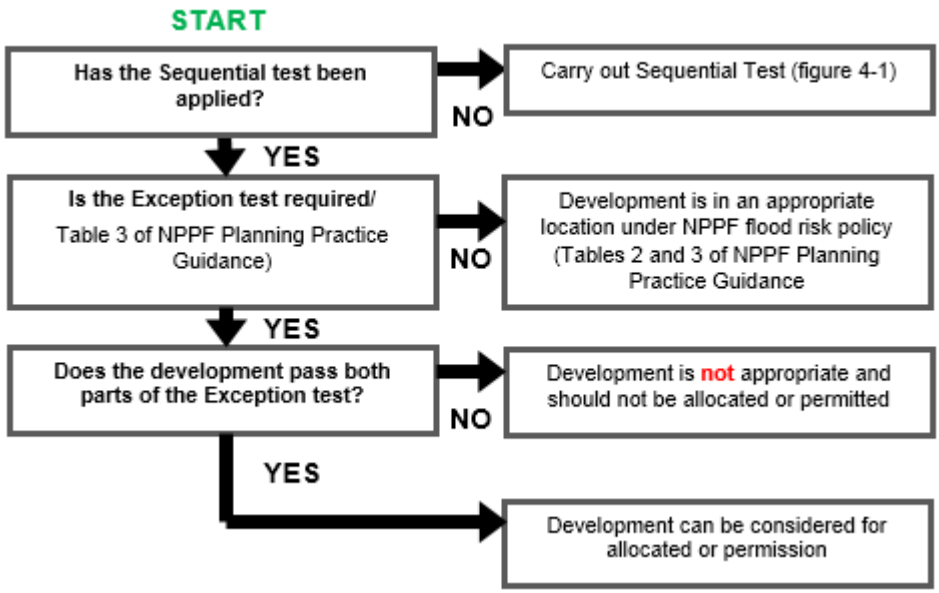
The Sequential Test should be applied to the whole Local Planning Authority area to increase the likelihood of allocating development in areas not at risk of flooding. The Sequential Test can be undertaken as part of the Sustainability Appraisal. Alternatively, it can be demonstrated through a free-standing document, or as part of strategic housing land or employment land availability assessments. NPPF Planning Practice Guidance for Flood Risk and Coastal Change describes how the Sequential Test should be applied in the preparation of a Local Plan (Figure 2-2).

Figure 2-2: Applying the Sequential Test in the preparation of a Local Plan



The Exception Test should only be applied following the application of the Sequential Test and as set out in Table 3 of the Planning Practice Guidance: Flood Risk and Coastal Change. The PPG describes how the Exception Test should be applied in the preparation of a Local Plan (Figure 2-3).

Figure 2-3: Applying the Exception Test in the preparation of a Local Plan



The exceptions test has been undertaken by Lichfield District and is presented as a separate document.

3 Planning Considerations

3.1 Overview of Work

This section sets out the approach that has been applied in carrying out the NPPF Sequential Test of potential development sites within the District that are being considered as possible development allocations through the preparation of the Local Plan Allocations document.

Table 2-2 summarises the information considered from the Level 2 SRFA (2017) which is considered alongside planning considerations to inform the application of the Sequential Test.

3.2 Lichfield District Council Approach to Site Allocations

The Local Plan Strategy was adopted in February 2015 and forms Part 1 of the Lichfield Local Plan. Accompanying this document was a Level 1 SFRA for South Staffordshire, Cannock Chase, Lichfield and Stafford, which was published in June 2014. This was an update of an earlier Level 1 SFRA from 2008 undertaken for individual districts.

Within the adopted Local Plan Strategy, the overall approach toward providing for new homes, jobs, infrastructure and community facilities over the plan period was established. The Local Plan Strategy states the Plan will deliver a minimum requirement of 10, 030 dwellings and create between 7, 000-9, 000 additional jobs.

The Spatial Strategy set out within the Local Plan Strategy states that housing development will be focused upon the following key urban and rural settlements:

- Lichfield City;
- Burntwood;
- Alrewas, Armitage with Handsacre, Fazeley, Fradley, Shenstone and Whittington; and
- Adjacent to the neighbouring towns of Rugeley and Tamworth.

The adopted Local Plan identifies the strategic development sites and a broad location for development and identifies the housing distribution across the District. The Local Plan Strategy left approximately 5,900 homes to be identified through new sites, including a set range for the number of homes to be provided for five of the key rural settlements, with final numbers and locations to be determined through the Local Plan Allocations document.

Policy Rural 1: Rural Areas identifies that approximately 24% of the District's housing growth will be provided within the key rural settlements (Alrewas, Armitage with Handsacre, Fazeley, Shenstone and Whittington) and 5% of the District's housing growth will be met within the village boundaries of smaller villages, and Policy Rural 2: Other Rural Settlements supports small scale development within rural settlements where there is a local need. This level of growth is accounted for in Table 8.1: Housing Distribution & Delivery which identifies that some of the housing provision will comprise of other rural areas and Core Policy 6: Housing Delivery specifies the type of residential development which will be permitted in the remaining rural areas. This includes:

- Infill development within defined village settlement boundaries;
- Affordable housing delivered through Rural Exceptions;
- Changes of use and conversion schemes;
- Small scale development supported by local communities, identified through the Local Plan Allocations document or community led plans;
- Agricultural, forestry and other occupational workers dwellings.

3.3 Methodology

The section sets out the approach that has been applied in carrying out the Sequential Test of potential residential development sites within Lichfield District that are being considered as development allocations in the Local Plan Allocations Document.

Set out below is an outline of the approach adopted by Lichfield District Council to testing potential residential development sites.

Stage 1
An assessment was undertaken to see what the residual development requirements were for each element of the settlement hierarchy as set out in the spatial strategy of the adopted Local Plan Strategy (as set out in Core Policies 1 and 6).

Stage 2
Where there was a requirement to deliver growth in settlements all sites within the SHLAA capable of delivering 5 or more dwellings were identified. Where sites benefitted from extant planning permission for more than 5 dwellings at the time of the assessment these were selected and proposed for allocation. At this initial stage both Colton Road and Footherley Hall benefitted from planning permission and as such were selected as proposed allocations.[1]

Where the SHLAA and site selection process found that there were insufficient sites within the built areas / village settlement boundary then sites adjacent to those areas were considered.

Where sites beyond the settlement boundary were considered a range of evidence including the Sustainability Appraisal and Level 1 SFRA were used to determine whether they would be suitable for allocation.

Stage 3
The Local Plan Allocations Regulation 19 consultation was undertaken

Following the initial Regulation 19 consultation and in light of changes to the Environment Agency floodplain data, the following sites proposed for allocations were identified as falling within the mapped floodplain:

- Site Rugeley 1: Former Rugeley Power Station;
- Site Alrewas 2: Land north of Dark Lane;
- Site Shenstone 1: Land at Lynn Lane;
- Site Shenstone 2: Land adjacent Shenstone Pumping Station, Lynn Lane;
- Site Shenstone 3: Land off Millbrook Drive, Shenstone;
- Other Rural 3: Footherley Hall, Footherley Lane; and
- Other Rural 5: Station Works, Colton Road.

A further Regulation 19 consultation was held on the Local Plan Allocations which removed a number of sites[1] including Shenstone 2 and Shenstone 3.

The Environment Agency made representations to this consultation and acknowledged that the principle of development has already been accepted for Site Shenstone 1: Lynn Lane through the adoption of the Shenstone Neighbourhood Plan (2016) and that Rugeley 1: Rugeley Power Station can be taken forward with detailed flood risk requirements as specified within the Rugeley Power Station Development Brief Supplementary Planning Document. Therefore, only three proposed sites need to be sequentially tested, these are Site Alrewas 2: Land north of Dark Lane, Other Rural 3: Footherley Hall, Footherley Lane and Other Rural 5: Station Works, Colton Road. In line with Stage 2 of the Council's approach towards site allocations these sites were all proposed to be allocated as they benefitted from extant planning permission supported by site specific flood risk assessments.

The following section sets out the result of the sequential test.

[1] Cabinet Report May 2017 outlines the key reasons for the deallocation of sites

Table 2-2: Summary of information required for the Sequential Test.

SITE	EASTING	NORTHING	FLUVIAL FLOOD ZONE					SURFACE WATER FLOODING			CLIMATE CHANGE	GROUNDWATER*	DRAINAGE*	DEVELOPMENT VULNERABILITY	EXCEPTION TEST CANDIDATE (Y/N)
			1	2	3a	3b	Indic 3b	30-year	100-year	1000-year	IMPACTS (Y/N) and Banding	(Y/N)	(Y/N)	Essential Infrastructure / Water Compatible / Highly / More / Less	Compare Flood Zone and Development Vulnerability within NPPF
Colton Road, Station Works	404787	319235	100%	-	-	-	-	0%	0%	0%	Y - from Central banding upwards	Y	N	Housing - more vulnerable	N
Footherley Hall, Footherley Lane	409955	303644	85%	2%	0%	-	13%	3%	7%	29%	Y - from Central banding upwards	Y	Y	Housing - more vulnerable	Y
Land north of Dark Lane, Alrewas - modified.	417451	417451	92%	8%	0%	-	0%	0%	0%	1%	Y - from Central banding upwards	Y	N	Housing - more vulnerable	N

Drainage - if there was a drain in the site boundary this was classed as Yes, in that this needs further consideration in a site specific Flood Risk Assessment

Groundwater - if it was in the over 75% risk category for groundwater risk, this was classed as Yes, this needs further consideration in a site specific Flood Risk Assessment

4 Site Specific Details

Site specific considerations are summarised in this section in Table ***2-3***, Table 2-4 and Table 2-5.

Table 2-3: Site Summary Information - Colton Road, Station Works

Site Name	**Colton Road, Station Works**	
Process Number	**Process Description**	**Answer**
1	**Can the site be entirely located within Flood Zone 1?**	Yes, but developers will need to consider the risk of flooding both from the Moreton Brook and the unnamed drain to the east of the site, as there is currently no detailed modelling of these watercourses.
2	**Does the site pass the Sequential Test at this stage?**	**Yes, subject to addressing stage 1 of this process through a site specific Flood Risk Assessment**
3	**Planning reasons why the site cannot be located in Flood Zone 1**	-
4	**Can the site be located in Flood Zone 2?**	-
5	**Vulnerability of development**	-
6	**Does the site pass the Sequential Test at this stage?**	-
7	**Is the Exception Test needed?**	-
8	**Planning reasons why the site cannot be located in Flood Zone 2**	-
9	**Can the site be located in Flood Zone 3b?**	-
10	**Vulnerability of development**	-
11	**Does the site pass the Sequential Test at this stage?**	-
12	**Is the Exception Test needed?**	-
	Consideration of other sources of flooding	**Surface Water** The site itself is not shown to be at risk of surface water flooding. The surface water risk surrounding the site is influenced by the topographic low to the east of the site and to any gaps in the railway embankment, which may affect access and egress. These areas seem relatively sparse in the 30 and 100-year surface water events but increase to fill the topographic lows and gaps in the railway embankments in the 1,000-year surface water events. **Reservoir** The site is not shown to be at risk of reservoir flooding.

Site Name	**Colton Road, Station Works**	
		The impact of surface water flooding on access and egress should be considered through site specific Flood Risk Assessment
	Consideration of the impacts of climate change	Climate change scenarios show an increase in flooding across Colton Road, encroaching marginally into the eastern boundary of the site. Note that although there is flow through the railway embankment covering the extent of the Moreton Brook and filling the topographic low points associated with the unnamed drain to the east of the site, these watercourses have not been explicitly modelled and therefore the risk from these watercourses will need to be confirmed at site-specific level. *Climate Change should be considered further through site specific Flood Risk Assessment*

Table 2-4: Site Summary Information - Footherley Hall, Footherley Lane

Site Name	**Footherley Hall, Footherley Lane**	
Process Number	**Process Description**	**Answer**
1	**Can the site be entirely located within Flood Zone 1?**	No
2	**Does the site pass the Sequential Test at this stage?**	No
3	**Planning reasons why the site cannot be located in Flood Zone 1**	The site was granted permission (Application Reference: 14/00218/FUL) for 26 extra care assisted living units. In accordance with the Council's methodology to allocating sites all sites which benefitted from extant planning permission at the time of assessment were allocated. The boundary for this site mirrors the red line application boundary and therefore includes land partially within Flood Zone 2 and Flood Zone 3. Although no built element of the permitted scheme was located in either Flood Zone 2 or Flood Zone 3.
4	**Can the site be located in Flood Zone 2?**	No
5	**Vulnerability of development**	Housing - more vulnerable
6	**Does the site pass the Sequential Test at this stage?**	Not at this stage
7	**Is the Exception Test needed?**	Not at this stage
8	**Planning reasons why the site cannot**	The site was granted permission (Application

Site Name	**Footherley Hall, Footherley Lane**	
	be located in Flood Zone 2	Reference: 14/00218/FUL) for 26 extra care assisted living units. In accordance with the Council's methodology to allocating sites all sites which benefitted from extant planning permission at the time of assessment were allocated. The boundary for this site mirrors the red line application boundary and therefore includes land partially within Flood Zone 3. Although no built element of the permitted scheme was located in either Flood Zone 2 or Flood Zone 3.
9	**Can the site be located in Flood Zone 3b?**	Yes, but developers should confirm flood risk to the site from the Footherley Brook by conducting detailed hydraulic modelling using channel topographic survey.
10	**Vulnerability of development**	Housing - more vulnerable
11	**Does the site pass the Sequential Test at this stage?**	**Yes, subject to addressing stage 9 of this process through a site specific Flood Risk Assessment**
12	**Is the Exception Test needed?**	Yes
	Consideration of other sources of flooding	**Surface Water** The surface water flood risk affecting the site is associated with the Footherley Brook to the western boundary of the site and pond located on the site. The surface water extent encroaches further east onto the site in the larger surface water events. **Reservoir** The western half of the site is shown to be within the reservoir inundation flood extents from Little Aston Pool and to a lesser extent, Barr Beacon No. 2. However, risk of flooding from reservoirs is considered low. *These risks and a sequential approach to site layout should be considered through site specific Flood Risk Assessment*
	Consideration of the impacts of climate change	Fluvial extents from climate change do not increase significantly when compared with FZ3a because the floodplain is constrained, with the eastern half of the site at higher ground. Depths, velocity and hazard may however increase. *A sequential approach to site layout, taking this into account should be considered through site specific Flood Risk Assessment*

Table 2-5: Site Summary Information - Land north of Dark Lane, Alrewas

Site Name	Land north of Dark Lane, Alrewas Modified	
Process Number	**Process Description**	**Answer**
1	**Can the site be entirely located within Flood Zone 1?**	No
2	**Does the site pass the Sequential Test at this stage?**	Not at this stage
3	**Planning reasons why the site cannot be located in Flood Zone 1**	The Level 1 SFRA which informed the site allocation process identified this site as Flood Zone 1. During the site assessment process the Environment Agency amended its floodplain data and consequentially the site falls partially within Flood Zone 2. The site benefits from extant planning permission for 121 dwellings (Application Reference: 13/01175/FULM) which was granted at appeal by the Secretary of State. The red line boundary reflects the built area of development.
4	**Can the site be located in Flood Zone 2?**	Yes
5	**Vulnerability of development**	Housing - more vulnerable
6	**Does the site pass the Sequential Test at this stage?**	Yes
7	**Is the Exception Test needed?**	No
8	**Planning reasons why the site cannot be located in Flood Zone 2**	-
9	**Can the site be located in Flood Zone 3b?**	-
10	**Vulnerability of development**	-
11	**Does the site pass the Sequential Test at this stage?**	-
12	**Is the Exception Test needed?**	-
	Consideration of other sources of flooding	**Surface Water** The surface water risk affecting the site is limited to isolated topographic lows along the southern and eastern boundaries of the site. However, surface water flooding only affects the site itself during the 1,000-year event. Surface water flood risk affects the roads to the south of the site. This starts with small areas of surface water in the 30-year event with extents growing in the 100-year event with significant surface water flooding to the south of the site in the 1,000-year event. **Reservoir** The whole site and surrounding area is shown to be within the reservoir inundation extents, from Blithfield Reservoir. However, flooding from reservoirs is considered low risk. *These risks and a sequential approach to site layout should be considered through site specific Flood Risk Assessment*
	Consideration of the impacts of	The climate change events extend into the

Site Name	Land north of Dark Lane, Alrewas Modified	
	climate change	low-lying areas of the site in the east and north with a progressive increase in extent with the larger climate change events. The climate change events also show a significant increase in flooding along the southern boundary of the site preventing dry access and egress. As the site is affected by surface water flooding from the 1,000-year event, climate change may also increase the extent, depth and frequency of surface water flooding. *A sequential approach to site layout, taking this into account should be considered through site specific Flood Risk Assessment*

5 Summary

This report has been prepared to consider the extent to which potential housing allocations within Lichfield District are at risk of flooding.

Lichfield District Council undertook a number of assessments to fully understand the flood risk in the area and has worked closely with its partner organisations, the Environment Agency (EA) and Lead Local Flood Authority - Staffordshire County Council (LLFA SCC) throughout the preparation of the adopted Local Plan Strategy (2015) and the emerging Local Plan Allocations document.

A Strategic Flood Risk Assessment (SFRA) Level 1 was undertaken in 2014 and a Sustainability Appraisal has been undertaken to guide development to the most appropriate locations and has been used to inform both the Local Plan Strategy and the Local Plan Allocations documents. This was further informed by a Level 2 SFRA for the three sites looked at in detail in this document in 2017.

The majority of sites chosen to be allocated within the Local Plan Allocations document were located within Flood Zone 1 and therefore passed the sequential test. However, following on-going consultation with the Environmental Agency, three sites allocated for residential developed were identified as needing to be sequentially tested.

Following the outcome of the sequential test, in line with National Policy the District Council has undertaken an exception test. Further information on each of the proposed site allocations within the floodplain is set out within the Exception Test (this is a separate document). These documents together demonstrate for allocation purposes that the sites proposed pass the Sequential and Exception Test where required. This document highlights that further and more detailed work is needed through site specific Flood Risk Assessment to confirm these findings at Planning Permission stage.

6 Appendices

6.1 Appendix A – Level 2 SFRA GeoPDF Interactive Mapping

Site ID: Land north of Dark Lane, Alrewas

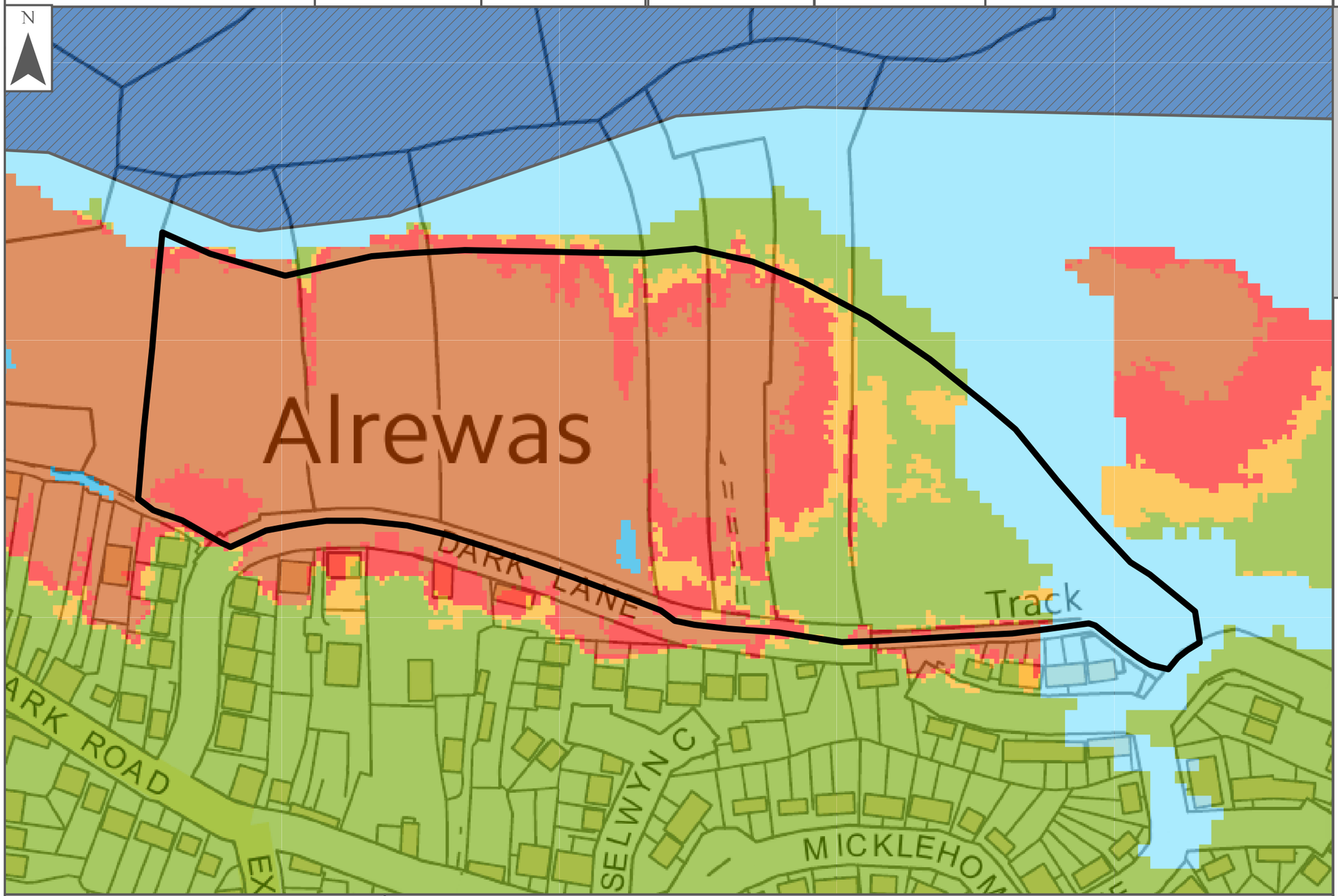
OSNGR: 417451 , 315270 Area: 4.75 ha Greenfield

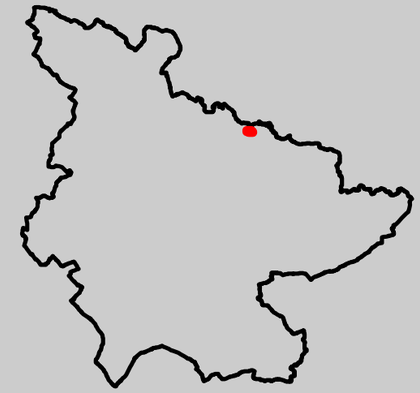
Flood Zone Coverage	FZ3b : 0%	FZ3a: 0%	FZ2: 8%	FZ1: 92%

Proposed Development Details:
Housing

LEVEL 2 SITE SUMMARY TABLES

LICHFIELD DISTRICT COUNCIL STRATEGIC FLOOD RISK ASSESSMENT





LEGEND

Flood Risk

Flood Zones
- Indicative Flood Zone 3b
- Flood Zone 3a
- Flood Zone 2

Climate Change
- Climate Change Central
- Climate Change Higher Central
- Climate Change Upper End

Surface Water
- RoFfSW 30-year Extent
- RoFfSW 100-year Extent
- RoFfSW 1000-year Extent

Areas Susceptible to Groundwater Flooding
- >= 75%
- >= 50% <75%
- >= 25% <50%
- < 25%

Upper End Climate Change event

Depth (m)
- 0 - 0.10
- 0.10 - 0.50
- 0.50 -1.00
- 1.00 -1.50
- 1.50 - 2.00
- 2.00 -2.50
- 2.50 - 3.00
- 3.00 - 3.50
- 3.50 - 4.00
- >4.00
- NODATA

Velocity (m/s)
- 0 - 0.2
- 0.2 - 0.5
- 0.5 - 1.0
- 1.0 - 2.0
- > 2.0
- NO DATA

Hazard Rating
- Very low hazard - caution
- Danger for some
- Danger for most
- Danger for all
- NO DATA

Please refer to Main Report and Site Summary Table for further information on the datasets

0 0.0325 0.065 0.13 km

JBA consulting

LEGEND

Authority Information
- Council Boundary
- Potential Site Allocations
- Main Rivers
- Detailed River Network

Defences
- Embankment
- Wall
- Other

Flood Warning and Flood Alert Areas
- Flood Warning Area
- Flood Alert

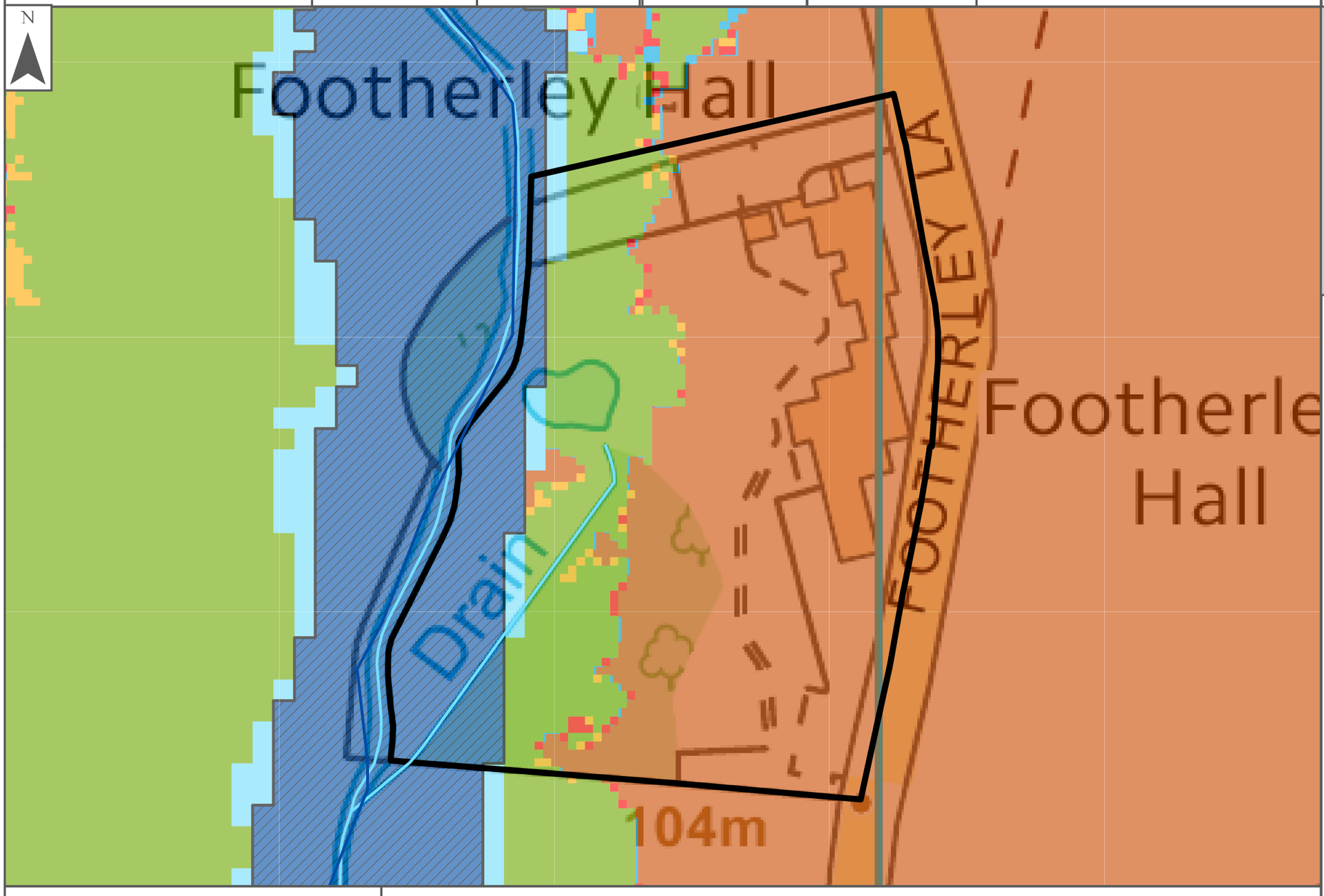
Reservoir Inundation Map
- Reservoir Inundation

Other
- Source Protection Zones

Site ID: Footherley Lane, Footherley Hall

OSNGR: 409955 , 303644 | Area: 1.65 ha | Mixed Greenfield and Brownfield | Proposed Development Details: Housing

Flood Zone Coverage	FZ3b : 13%	FZ3a: 0%	FZ2: 2%	FZ1: 85%



0 0.0175 0.035 0.07 km

JBA consulting

LEGEND

Authority Information
- Council Boundary
- Potential Site Allocations
- Main Rivers
- Detailed River Network

Defences
- Embankment
- Wall
- Other

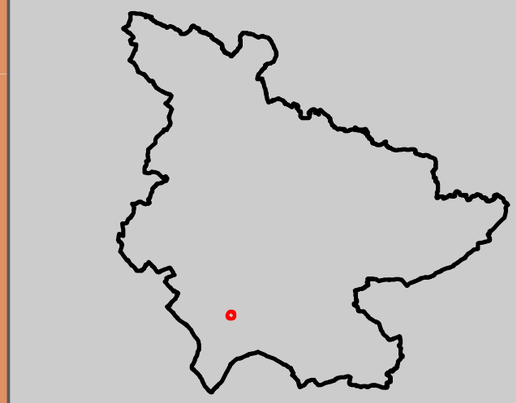
Flood Warning and Flood Alert Areas
- Flood Warning Area
- Flood Alert

Reservoir Inundation Map
- Reservoir Inundation

Other
- Source Protection Zones

LEVEL 2 SITE SUMMARY TABLES

LICHFIELD DISTRICT COUNCIL STRATEGIC FLOOD RISK ASSESSMENT



LEGEND

Flood Risk

Flood Zones
- Indicative Flood Zone 3b
- Flood Zone 3a
- Flood Zone 2

Climate Change
- Climate Change Central
- Climate Change Higher Central
- Climate Change Upper End

Surface Water
- RoFfSW 30-year Extent
- RoFfSW 100-year Extent
- RoFfSW 1000-year Extent

Areas Susceptible to Groundwater Flooding
- >= 75%
- >= 50% <75%
- >= 25% <50%
- < 25%

Please refer to Main Report and Site Summary Table for further information on the datasets

Upper End Climate Change event

Depth (m)
- 0 - 0.10
- 0.10 - 0.50
- 0.50 -1.00
- 1.00 -1.50
- 1.50 - 2.00
- 2.00 -2.50
- 2.50 - 3.00
- 3.00 - 3.50
- 3.50 - 4.00
- >4.00
- NODATA

Velocity (m/s)
- 0 - 0.2
- 0.2 - 0.5
- 0.5 - 1.0
- 1.0 - 2.0
- > 2.0
- NO DATA

Hazard Rating
- Very low hazard - caution
- Danger for some
- Danger for most
- Danger for all
- NO DATA

Site ID: Colton Road, Station Works

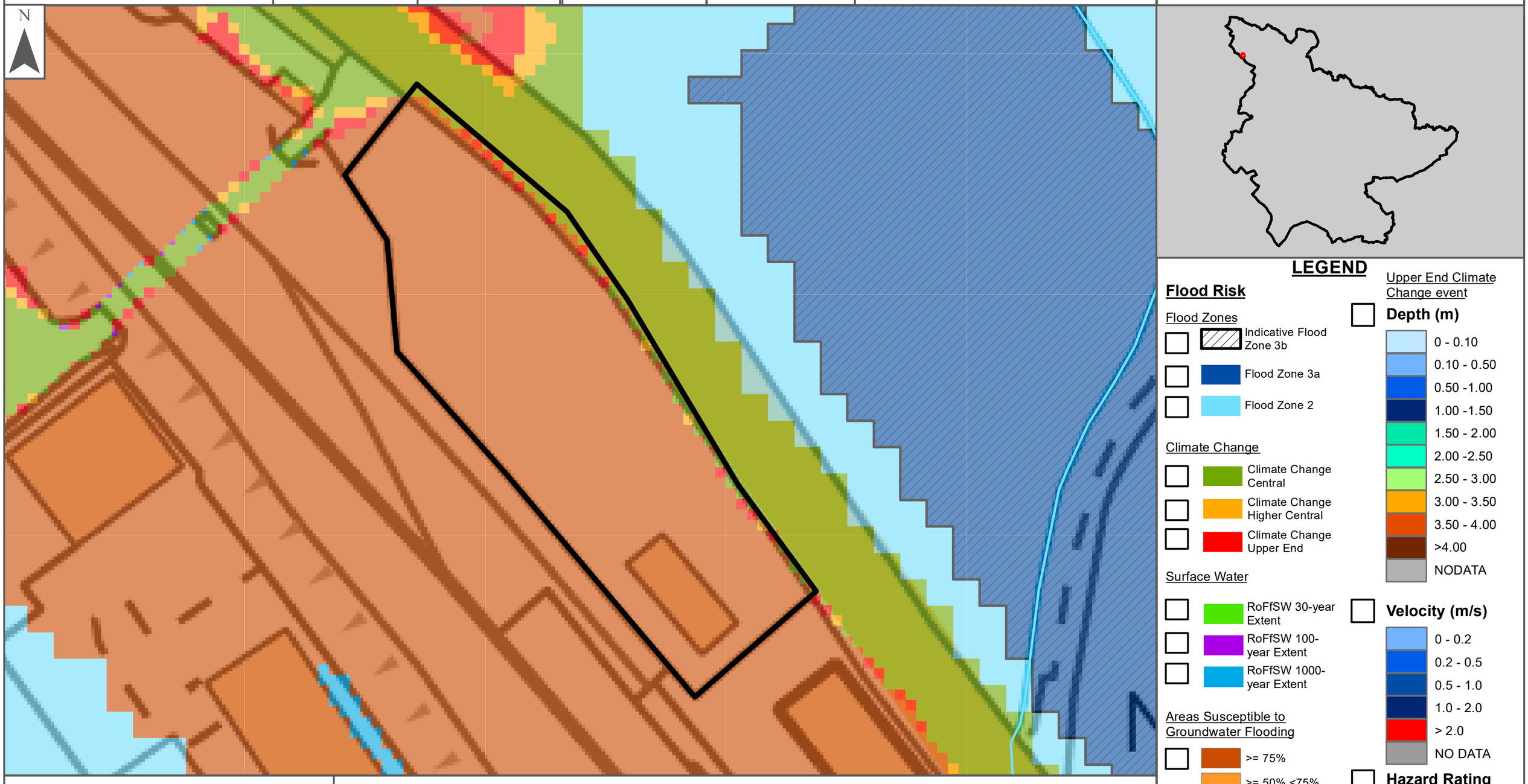
OSNGR: 404787 , 319235 Area: 0.4 ha Brownfield

Flood Zone Coverage	FZ3b : 0%	FZ3a: 0%	FZ2: 0%	FZ1: 100%

Proposed Development Details:
Housing

LEVEL 2 SITE SUMMARY TABLES

LICHFIELD DISTRICT COUNCIL STRATEGIC FLOOD RISK ASSESSMENT



LEGEND

Flood Risk

Flood Zones
- Indicative Flood Zone 3b
- Flood Zone 3a
- Flood Zone 2

Climate Change
- Climate Change Central
- Climate Change Higher Central
- Climate Change Upper End

Surface Water
- RoFfSW 30-year Extent
- RoFfSW 100-year Extent
- RoFfSW 1000-year Extent

Areas Susceptible to Groundwater Flooding
- >= 75%
- >= 50% <75%
- >= 25% <50%
- < 25%

Upper End Climate Change event

Depth (m)
- 0 - 0.10
- 0.10 - 0.50
- 0.50 -1.00
- 1.00 -1.50
- 1.50 - 2.00
- 2.00 -2.50
- 2.50 - 3.00
- 3.00 - 3.50
- 3.50 - 4.00
- >4.00
- NODATA

Velocity (m/s)
- 0 - 0.2
- 0.2 - 0.5
- 0.5 - 1.0
- 1.0 - 2.0
- > 2.0
- NO DATA

Hazard Rating
- Very low hazard - caution
- Danger for some
- Danger for most
- Danger for all
- NO DATA

Please refer to Main Report and Site Summary Table for further information on the datasets

LEGEND

Authority Information
- Council Boundary
- Potential Site Allocations
- Main Rivers
- Detailed River Network

Defences
- Embankment
- Wall
- Other

Flood Warning and Flood Alert Areas
- Flood Warning Area
- Flood Alert

Reservoir Inundation Map
- Reservoir Inundation

Other
- Source Protection Zones

JBA consulting