

Harrogate District Local Plan: Flood Risk Sequential Test



October 2016

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1 Introduction

1 Introduction

- 1.1** The council has started work on preparing a new Local Plan for the district, which will cover the period 2014-2035. This will set out how much, and where, land should be provided to accommodate the new homes and jobs that are needed in the district.
- 1.2** A key factor that must be considered as part of this process is to demonstrate that the council has taken into account the flood risk associated with the development of each site. This report sets out the results of the sequential test for sites selected as draft allocations for new homes and jobs in the Harrogate District Local Plan consultation, October 2016.
- 1.3** The Local Plan growth strategy sets out that provision will be made in the district in the plan period for 11,697 new homes as a minimum, including affordable housing and 20 gypsy and traveller pitches and between 20 and 25 hectares of new employment land.
- 1.4** This growth will be met as far as possible in those settlements that are well related to the key public transport corridor. The scale of development will reflect:
- the settlement's role and character.
 - its relationship to the public transport corridor.
 - the need to deliver new homes and jobs.
 - the need to maintain or enhance services and facilities in rural villages.
 - the capacity of infrastructure and services within the settlement.
- 1.5** New development will be located according to a settlement hierarchy as follows:
- **Main Settlements:** major allocations of land for new homes, employment land and other uses where necessary. These settlements are:
 - Harrogate, Knaresborough and Ripon
 - **New Settlement:** a major new strategic allocation for housing with associated employment and supporting services and facilities.
 - **Local Service Centres:** allocations of land for new homes and local job opportunities. These settlements are:
 - Boroughbridge, Masham and Pateley Bridge.
 - **Primary and Secondary Service Villages:** allocations of land for new homes, with new village shops and businesses encouraged to support their continued sustainability.
 - **Primary Service Villages** are Green Hammerton, Hampsthwaite, Killinghall, Kirkby Malzeard, Pannal, Ripley, Spofforth, Summerbridge and Tockwith.
 - **Secondary Service Villages** are Askwith, Beckwithshaw, Birstwith, Bishop Monkton, Bishop Thornton, Burnt Yates, Burton Leonard, Dacre/Dacre Banks, Darley, Dishforth, Follifoot, Glasshouses, Goldsborough, Grantley, Great Ouseburn, Grewelthorpe, Huby, Kettlesing Bottom, Kirby Hill, Kirk Hammerton, Kirby Overblow, Lofthouse, Long Marston, Markington, Marton cum Grafton, North Rigton, North Stainley, Nun Monkton, Rainton, Roecliffe, Sharow, Sicklinghall, Skelton on Ure and, Staveley.
 - **Smaller Villages:** small scale windfall and rounding off. These settlements are:
 - Arkendale, Baldersby, Bewerley, Brearton, Copgrove, Copt Hewick, Cowthorpe, Farnham, Galphay, Hunsingore, Kirk Deighton, Little Ouseburn, Little Ribston,

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Littlethorpe, Marton le Moor, Melmerby, Middlesmoor, Minskip, Ramsgill, Sawley, Scotton, South Stainley, Studley Roger, Weeton, Whixley and Winksley.

- 1.6** A large number of sites have been put forward for consideration as part of the Local Plan which may have some potential for development for housing, employment, mixed use or gypsy and travellers. These sites have been included in the Strategic Housing and Employment Land Availability Assessment (SHELAA). The SHELAA forms part of the evidence base to inform the preparation of the Local Plan to help demonstrate that enough land can be identified to meet policy requirements. It sets out realistic assumptions about the availability, suitability and deliverability of land to meet the needs of the district over the plan period, including the development capacity for each site.
- 1.7** Further detailed consideration of the sites has been undertaken as part of the allocation process to determine the selection of sites as draft allocations in the Local Plan.
- 1.8** To ensure that the assessment of all the remaining sites was carried out in a clear, consistent and robust manner a Sustainability Appraisal / Strategic Environmental Assessment decision making framework was prepared. This covered environmental, social and economic issues, thereby ensuring a complete assessment of all strands of sustainability. Further consideration of sites has also been undertaken covering factors including, access, topography, compatibility with neighbouring uses, detriment to the built and natural environment, the relationship with the existing pattern of development and an assessment of site deliverability.
- 1.9** This provides an integrated approach to the assessment of sites as part of the local plan site selection process related to the spatial strategy / spatial distribution.

2 Policy Background

2 Policy Background

National Planning Policy Framework and Flood Risk

- 2.1** The National Planning Policy Framework (NPPF) advises in paragraph 99 that: "Local Plans should take account of climate change over the longer term, including factors such as flood risk, coastal change, water supply and changes to biodiversity and landscape."
- 2.2** It goes on in paragraph 100 to advise that in preparing Local Plans "Inappropriate development in areas at risk of flooding should be avoided by directing it away from areas at highest risk, but where development is necessary, making it safe without increasing risk elsewhere. Local Plans should be supported by a Strategic Flood Risk Assessment (SFRA) and develop policies to manage flood risk from all sources, taking account of advice from the Environment Agency and other flood risk management bodies, such as Lead Local Flood Authorities and Internal Drainage Boards. Local Plans should apply a sequential, risk-based approach to the location of development to avoid, where possible, flood risk to people and property and manage residual risk, taking account of the impacts of climate change, by:
- applying the sequential test;
 - if necessary applying the exception test;
 - safeguarding land from development that is required for current and future flood management;
 - using opportunities offered by new development to reduce the causes and impacts of flooding; and
 - where climate change is expected to increase the flood risk so that some existing development may not be sustainable in the long term, seeking to facilitate the relocation of development including housing to more sustainable locations."

Flood Risk and Climate Change Planning Practice Guidance

- 2.3** The Flood Risk and Climate Change Planning Practice Guidance (FRCC-PPG) is more detailed. This advises how planning can take account of the risks associated with flooding in plan making and the development management process. It is this document which provides the basis for the sequential approach. The approach is based around the flood risk management hierarchy, in which actions to avoid, substitute, control and mitigate flood risk is central. This is illustrated in Figure 2.1: Flood Risk Management Hierarchy.

Figure 2.1: Flood Risk Management Hierarchy

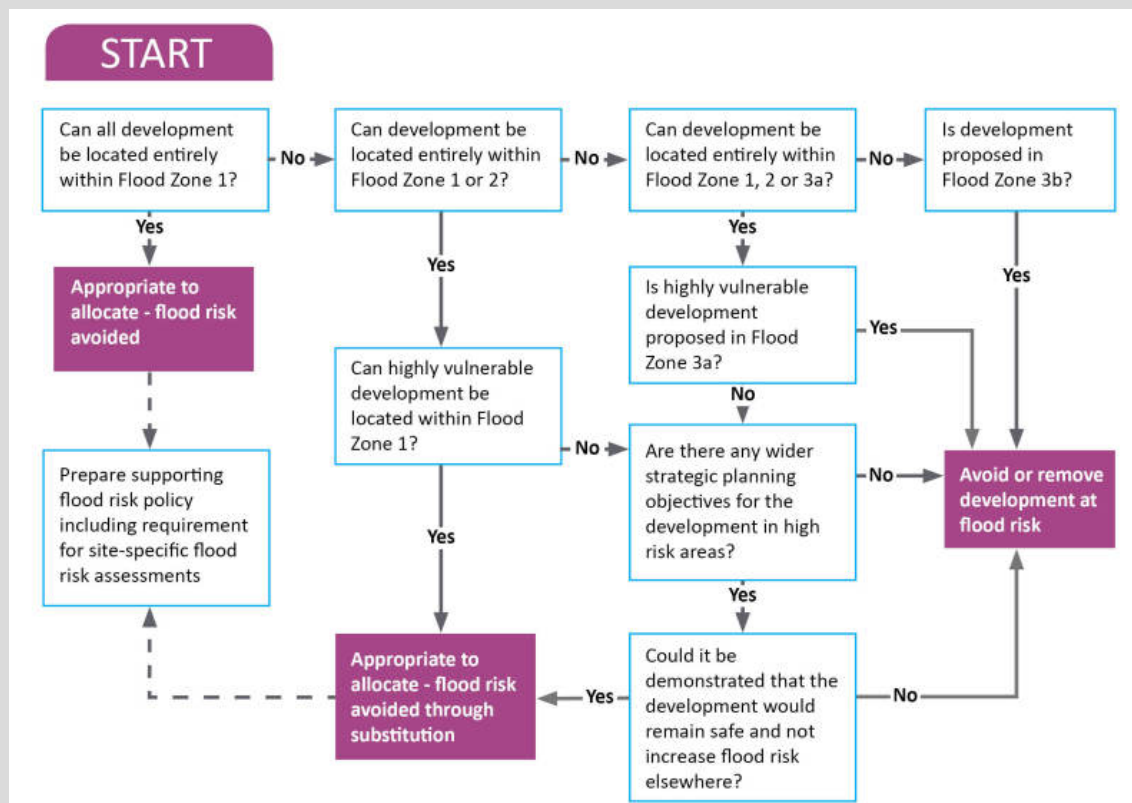


Figure 2.1 Flood Risk Management Hierarchy

2.4 The overall aim of the sequential approach is to steer new development to low risk flood zone 1. Where there are no reasonably available sites in flood zone 1, the flood risk vulnerability of land uses and reasonably available sites in flood zone 2 should be considered, applying the exception test if required.

2.5 Only where there are no reasonably available sites in flood zones 1 and 2 should the suitability of sites in higher risk flood zone 3 be considered. This should take into account the flood risk of land uses and the likelihood of meeting the requirements of the exception test if required.

Harrogate District Strategic Flood Risk Assessment (SFRA) - Level 1 Update 2016

2.6 A Level 1 SFRA Update has been prepared by consultants JBA on behalf of the council to support the Harrogate District Local Plan. The objectives of the level 1 SFRA are to:

- form part of the evidence base for the Local Plan;
- understanding flood risk from all sources and to investigate and identify the extent and severity of flood risk throughout the district;
- make recommendations on the suitability of potential development sites based on flood risk;

2 Policy Background

- provide the evidence base for developers to assess flood risk at a strategic level and to determine the requirements of an appropriate site-specific flood risk assessment; and
- Identify the functional floodplain, including flood zone 3ai

2.7 The SFRA, in accordance with the FRCC-PPG has identified areas of functional flood plain (flood zone 3b). A further indicative flood zone has also been delineated called flood zone 3ai. Flood zone 3ai includes developed land with the same level of flood risk as flood zone 3b where water would flow or be stored in times of flooding if not already constrained by development. Should sites in flood zone 3ai become available for development then both the risk at the site and the role of the site in managing flood risk in the surrounding area should be carefully considered with no increase in development footprint.

2.8 The SFRA covers the whole of Harrogate district. It describes the sources of flooding and goes on explain how the likelihood (probability) and consequences of flooding relate to the flood risk (actual and residual). It also provides an overview of the key planning and flood risk documents that have shaped the current planning framework, setting out the context of the council's responsibilities and duty in respect of managing flood local risk. It also provides a strategic overview of flood risk from all sources within the district using the best available information at the time of publication. It goes on to provide It includes an assessment of the suitability, relative to flood risk, of potential development sites submitted to the council and included in the SHELAA. This information has been used as part of the evidence to inform this sequential test as part of the site selection process.

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3 Applying the Sequential Test

Applying the Sequential Test

- 3.1** One of the key factors in the assessment of sites as part of the Sustainability Appraisal has been the level of flood risk associated with each site. To inform this process the sequential approach for allocation through the Local Plan as set out in the FRCC-PPG and illustrated in figure 3.1, has been informed by the SFRA Level 1 Update. This process involved a high level screening GIS exercise overlaying potential development sites included in the SHELAA against the flood zones.

Figure 3.1 Application of sequential test in Local Plan preparation

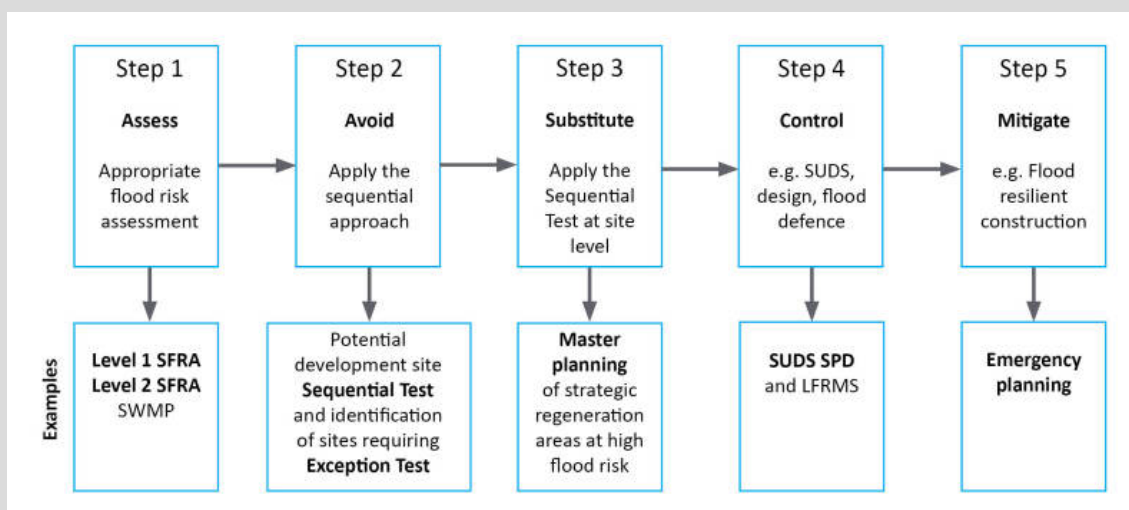


Figure 3.1 Application of sequential test in Local Plan preparation

- 3.2** Surface water risk of these sites has also been assessed by using the Environment Agency's updated Flood Map for Surface Water dataset to help identify those sites that may have drainage problems.
- 3.3** There must be no surface water run-off increase. As a minimum, discharge should be restricted to the existing greenfield run-off rate. If not calculated, the greenfield run-off from a 1 in 1 year storm (1.4l/s/ha) should be used. For any brownfield areas, a 30% minimum reduction in surface water will be expected.
- 3.4** Attenuation and long term storage should be provided to accommodate at least a 1 in 30 year storm. The design should ensure that storm water resulting from a 1 in 100 year event (plus 30% to account for climate change) and drainage system surcharge can be stored on site without risk to people or property and without overflowing into watercourses.
- 3.5** The results of this exercise are shown on the Development Site Assessment spreadsheet in appendix 1 of the Strategic Flood Risk Assessment 2016.
- 3.6** The sequential test uses the information in the council's SFRA to ensure that unless there are robust planning reasons, development should take place, in accordance with the growth strategy, in those areas of the district which are at the low probability of risk of flooding (in flood zone 1). If however there is a lack of suitable alternative sites in those areas that are

3 Applying the Sequential Test

at lowest risk of flooding, then the sequential test allows the council to assess and if necessary allocate land for development in those areas of medium probability of risk of flooding, (flood zone 2). Furthermore, if having assessed all sites in areas of low or moderate risk, the council cannot allocate sufficient land to meet its development needs, then it may still be able to allocate land for development in areas of high probability of risk of flooding, (flood zone 3).

- 3.7** In selecting sites for inclusion as draft allocations in the Local Plan preference has been given to locating development in flood zone 1, or in locations of minimal surface water risk, taking into account information from the development site assessment in the SFRA. As explained in section 1, the issue of flood risk forms one part of the evidence base for selecting draft allocations. The following section sets out those sites that are considered to be the most sustainable, taking into account flood risk.

Site Assessments

- 3.8** The sites selected as draft allocations have been subject to the sequential test as set out in the tables below.

Sites in Flood Zone 1

- 3.9** Table 3.1 shows those sites that are considered to be sustainable options for development, in locations that seek to deliver the council's growth strategy, which are wholly located within flood zone 1. Consequently the principle of developing these sites for the proposed uses would pass the sequential test. For those sites larger than one hectare a site specific Flood Risk Assessment (FRA) would be necessary at the planning application stage to take account in particular of drainage and surface water considerations.
- 3.10** The objectives of a site-specific FRA are to establish whether a proposed development is likely to be affected by current or future flooding from any source. This should include whether the development will increase the flood risk elsewhere and if the measures proposed to deal with these effects and risks are appropriate.

| Draft allocation | Proposed use |
|---|--------------|
| Main Settlements | |
| Harrogate | |
| H3: Land at Kingsley Road | Housing |
| H6: BT Training Centre, St George's Road | Housing |
| H16: Playing Fields, Harrogate College | Employment |
| H17: Heath Lodge Care Home | Housing |
| H18: Greenfield Court, 42 Wetherby Road | Housing |
| H21: Land at Kingsley Drive | Housing |
| H36: Former Police Training Centre, Yew Tree Lane | Housing |
| H37: Land at Station Parade | Mixed |
| H46: Land at Otley Road | Housing |
| H48: Land adjacent to Kingsley Farm | Housing |

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| Draft allocation | Proposed use |
|---|--------------|
| H49: Windmill Farm, Otley Road | Housing |
| H51: Land east of Lady Lane | Mixed |
| H56: Land to the north of Cow Dyke Farm | Housing |
| H65: Harlow Nurseries | Housing |
| H70: Land east of Whinney Lane | Housing |
| Knaresborough | |
| K17: Former Cattle Market | Mixed |
| K21: Land south of Bar Lane and east of Boroughbridge Road | Housing |
| K22: Land at Orchard Close | Housing |
| Ripon | |
| R1: Land adjacent to 63 Bondgate | Housing |
| R6: Land at Springfield Close Farm | Housing |
| R8: Land at West Lane | Housing |
| R23: Former Cathedral Choir School | Housing |
| R24: Deverell Barracks | Housing |
| R25: Claro Barracks | Mixed |
| New Settlement | |
| Options | Proposed use |
| GH11: New Settlement Option at Green Hammerton | Mixed Use |
| Local Service Centres | |
| Draft allocation | Proposed use |
| B2: Land west of Leeming Lane, Langthorpe | Housing |
| B4: Land north of Aldborough Gate | Housing |
| B11: Land at the Bungalow, Boroughbridge | Housing |
| M8: Land north of Swinton Road, Masham | Housing |
| M13: Land at Thorpe Road (smaller site), Masham | Housing |
| P1: Land south of Ashfield Court (smaller site), Pateley Bridge | Housing |
| P5: Grassfield Court, Pateley Bridge | Housing |
| P10: Grassfield House, Pateley Bridge | Housing |
| Primary Service Villages | |
| Draft allocation | Proposed use |
| GH2: Land at New Lane, Green Hammerton | Housing |
| GH4: Land to the east of Bernard Lane, Green Hammerton | Housing |
| GH5: Land to the north of Bernard Lane, Green Hammerton | Housing |

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| Draft allocation | Proposed use |
|---|---------------------|
| GH9: Land west of B6265 and north of A59, Green Hammerton | Housing |
| HM7: Land at Brookfield Garth, Hampsthwaite | Housing |
| KL2: Land adjoining Grainbeck Manor, Killinghall | Housing |
| KL6: Land at Manor Farm, Killinghall | Housing |
| KL13: Former cricket club and adjoining land, Killinghall | Housing |
| KM4: Land south of Richmond Garth, Kirkby Malzeard | Housing |
| KM5: Land east of Richmond Garth, Kirkby Malzeard | Housing |
| PN16: Land west of A61, Pannal | Gypsy and Traveller |
| SB5: Land at Braisty Woods, Summerbridge | Housing |
| SP4: Land at Castle Farm, Spofforth | Housing |
| TW2: Land to the north of Marston Business Park, Tockwith | Employment |
| Secondary Service Villages | |
| Draft allocation | Proposed use |
| BM2: Former allotments off Knaresborough Road, Bishop Monkton | Housing |
| BM3: Land at Church Farm, Bishop Monkton | Housing |
| BM4: Land at Knaresborough Road, Bishop Monkton | Housing |
| BW9: Land to the south of Clint Bank, Birstwith | Housing |
| BW10: Land south of Wreaks Road (smaller site), Birstwith | Housing |
| DB3: Abbots Garage and adjacent land, Dacre Banks | Housing |
| DB5: Land to west of Dacre Banks (smaller site) | Housing |
| DF2: Land at North End, Dishforth | Housing |
| DR1: Land at Stumps Lane, Darley | Housing |
| DR14: Land at Sheepecote Lane (combined site), Darley | Housing |
| GB2: Land at Low Farm, Goldsborough | Housing |
| KB1: Land east of St John's Walk, Kirby Hill | Housing |
| KH4: Land north of Station Road, Kirk Hammerton | Housing |
| KH11: Land at Station Road, Kirk Hammerton | Housing |
| MG7: Land north of Braimber Lane (smaller site), Marton cum Grafton | Housing |
| NS3: Land west of Cockpit Lane, North Stainley | Housing |
| RN2: Former agricultural buildings, Rainton | Housing |
| RN3: Village Farm, Sleights Lane, Rainton | Housing |
| SH1: Land at New Road, Sharow | Housing |
| SV1: Land between Minskip Road and Low Field Lane, Staveley | Housing |
| Smaller Villages | |

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| Draft allocation | Proposed use |
|---|--------------|
| MB3: Land south of Barker Business Park, Melmerby | Employment |

Table 3.1 Draft Allocations in Flood Zone 1 - October 2016

Sites in other areas of flood risk

3.11 As informed by the Level 1 SFRA Update, Sustainability Appraisal and the Local Plan growth policies, the tables below identify those sites which are generally considered to be sustainable options for development that include land within flood zone 1, but also include land in other flood zones or alternatively are at risk from other sources of flooding. The tables below contain the following information relating to these draft allocations:

- Local Plan site reference;
- proposed use;
- site area;
- an explanation of how each site is affected by flood risk; and
- a consideration of whether each site is considered to be sequentially acceptable.

| Main Settlements | |
|------------------|---|
| Site reference | H63, Dragon Road Car Park, Harrogate |
| Proposed use | Mixed use |
| Site area | 0.8ha |
| Flood risk | Surface water. 0.02ha (3.01%) 1 in 30 year, 0.18ha (22.02%) 1 in 100 year and 0.29ha (36.59%) 1 in 1000 year. |
| Consideration | <p>This is a brownfield site close to Harrogate town centre where the SFRA has identified a risk of surface water flooding on the site.</p> <p>Development of the site would conform with the objectives and growth strategy of the Local Plan. A drainage strategy for the site would be required, reflecting the brownfield character of the site and agreed prior to consent being granted including measures to mitigate the identified surface water flood risk.</p> |

| Main Settlements | |
|------------------|---|
| Site reference | K25, Land at Highfield Farm, Knaresborough |
| Proposed use | Residential |
| Site area | 24.4ha |
| Flood risk | The majority of the site is in FZ1, but 0.32ha (1.3%) is in FZ2 and 1.86ha (7.61%) in FZ3a |
| Consideration | <p>The SFRA indicates that very small areas of the site fall within flood zones 2 and 3a. These areas are either side of a drain which follows the southern boundary of the site.</p> <p>Following a sequential approach to development within sites, development of the site will be capable of being directed away from those parts of the site within medium and high flood risk areas and appropriate mitigation will enable surface water effects to be addressed.</p> <p>The site is larger than 1 hectare and as such a site-specific FRA will be required at the planning application stage to demonstrate that the site can be developed safely.</p> |

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| Main Settlements | |
|------------------|--|
| Site reference | K25, Land at Highfield Farm, Knaresborough |
| | The allocation of the site for residential use is considered to be sequentially acceptable as the majority of the site is capable of development on land within flood zone 1 and flood risk from all sources will be mitigated through the preparation of a site-specific FRA. |

| New settlement options | |
|------------------------|---|
| Site reference | FX3, New settlement option to the north of the A59, Flaxby |
| Proposed use | Mixed Use |
| Site area | 196.62ha |
| Flood risk | The majority of the site is in FZ1, but 4.04ha (2.05%) is in FZ2 and 3.21ha (1.63%) in FZ3a. There are some adverse effects of additional surface water. |
| Consideration | <p>The SFRA indicates that very small areas of the site fall within flood zones 2 and 3a. These are located by the pond and alongside Moor Drain which runs through the centre of the site towards the A59</p> <p>The site is proposed as a new settlement including a mix of land-uses. Following a sequential approach to development within sites, development of the site will be capable of being directed away from those parts of the site within medium and high flood risk areas and appropriate mitigation will enable surface water effects to be addressed. In addition the large site size will enable the design and layout to avoid high flood risk areas and/or incorporate on-site storage into site design.</p> <p>The site is larger than 1 hectare and as such a site-specific FRA will be required at the planning application stage to demonstrate that the site can be developed safely.</p> <p>The inclusion of this site within the Local Plan as an option for a new settlement is considered to be sequentially acceptable as the majority of the site is capable of development, through considering the layout and design of the site, on land within flood zone 1 and flood risk from all sources will be mitigated through the preparation of a site-specific FRA.</p> |

| Local Service Centre | |
|----------------------|--|
| Site reference | P7, Former Highway Depot, Pateley Bridge |
| Proposed use | Residential |
| Site area | 0.6ha |
| Flood risk | The majority of the site is in FZ1, but 0.02ha (3.78%) is in FZ2 and 0.1ha (0.91%) in FZ3a |
| Consideration | <p>The SFRA indicates that small parts of this site fall within flood zones 2 and 3a. This is a brownfield site within the centre of the town and the areas of flood risk are at the south of the site.</p> <p>The allocation of the site for residential use is considered to be sequentially acceptable as the site will lead to the regeneration of a brownfield site and the majority of the site is capable of development on land within flood zone 1 through considering the site layout and design. This consideration will need to be informed by discussions with the council and Environment Agency, regarding access and egress to the site, as this can affect the overall design of the development.</p> |

| Primary Service Villages | |
|--------------------------|--|
| Site reference | PN14, Land to the east and west of Leeds Road (smaller site), Pannal |
| Proposed use | Mixed use |
| Site area | 5.8ha |

Applying the Sequential Test 3

| Primary Service Villages | |
|--------------------------|--|
| Site reference | PN14, Land to the east and west of Leeds Road (smaller site), Pannal |
| Flood risk | The majority of the site is in FZ1, but 0.48ha (2.62%) in FZ2, 2.56ha (14.02%) in FZ3a, 0.01ha (0.03%) in FZ3ai and 0.55ha (3%) in FZ3b |
| Consideration | <p>The SFRA indicates that whilst the majority of this site is within flood zone 1, almost 20% of the site lies within medium and high risk flood zones. These areas lie on the west bank of the Crimple Beck.</p> <p>The site is larger than 1 hectare and includes land in areas of high flood risk and as such a site-specific FRA will be required at the planning application stage to demonstrate that the site can be developed safely.</p> <p>Given the size of the site, a significant proportion is not within areas of high or medium flood risk. Following a sequential approach to development within sites, development of the site will be capable of being directed away from those parts of the site within medium and high flood risk areas. This will include adjusting the developable area of the site and/or through considering the design and layout of the site including the provision of green infrastructure or open space within the higher risk areas.</p> |

| Primary Service Villages | |
|--------------------------|---|
| Site reference | SB1, Clough House Farm, Summerbridge |
| Proposed use | Residential |
| Site area | 3.4ha |
| Flood risk | The majority of the site is in FZ1, but a small area (0.1%) is in FZ2 and 0.02ha (0.55%) in FZ3b |
| Consideration | <p>The SFRA indicates that very small parts of this site fall within flood zones 2 and 3b. These areas are located to the west of the site alongside the river Nidd.</p> <p>Following a sequential approach to development within sites, development of the site will be capable of being directed away from the part of the site within medium and high flood risk areas and appropriate mitigation will enable surface water effects to be addressed.</p> <p>The site is larger than 1 hectare and includes land in areas of high flood risk and as such a site-specific FRA will be required at the planning application stage to demonstrate that the site can be developed safely.</p> <p>The allocation of the site for residential use is considered to be sequentially acceptable as the majority of the site is capable of development on land within flood zone 1 and flood risk from all sources will be mitigated through the preparation of a site-specific FRA.</p> |

| Primary Service Villages | |
|--------------------------|---|
| Site reference | SP6, Land at Massey Fold, Spofforth |
| Proposed use | Residential |
| Site area | 4.3ha |
| Flood risk | The majority of the site is in FZ1, but 0.05ha (1.09%) is in FZ2 and 0.01ha (0.19%) in FZ3ai |
| Consideration | <p>The SFRA indicates that very small parts of this site fall within flood zones 2 and 3ai. These areas are located to the east of the site alongside the river Crimple.</p> <p>Following a sequential approach to development within sites, development of the site will be capable of being directed away from the part of the site within medium and high flood risk areas and appropriate mitigation will enable surface water effects to be addressed.</p> |

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| Primary Service Villages | |
|--------------------------|---|
| Site reference | SP6, Land at Massey Fold, Spofforth |
| | <p>The site is larger than 1 hectare and includes land in areas of high flood risk and as such a site-specific FRA will be required at the planning application stage to demonstrate that the site can be developed safely.</p> <p>The allocation of the site for residential use is considered to be sequentially acceptable as the majority of the site is capable of development on land within flood zone 1 and flood risk from all sources will be mitigated through the preparation of a site-specific FRA.</p> |

| Secondary Service Villages | |
|----------------------------|---|
| Site reference | Site DF4 - Land north east of Thornfield Avenue, Dishforth |
| Proposed use | Residential |
| Site area | 1.6ha |
| Flood risk | The majority of the site is in FZ1, but 0.19ha (8.12%) is in FZ2. There are some adverse effects of additional surface water. |
| Consideration | <p>The SFRA indicates that a small area of the site falls within flood zone 2. This area lies on the north-eastern boundary of the site.</p> <p>Following a sequential approach to development within sites, development of the site will be capable of being directed away from the part of the site within medium and high flood risk areas and appropriate mitigation will enable surface water effects to be addressed.</p> <p>The site is larger than 1 hectare and as such a site-specific FRA will be required at the planning application stage to demonstrate that the site can be developed safely.</p> <p>The allocation of the site for residential use is considered to be sequentially acceptable as the majority of the site is capable of development on land within flood zone 1 and flood risk from all sources will be mitigated through the preparation of a site-specific FRA.</p> |

| Secondary Service Villages | |
|----------------------------|--|
| Site reference | NS6, Land south of A6108 (smaller site), North Stainley |
| Proposed use | Residential |
| Site area | 2.9ha |
| Flood risk | Surface water. 0.27ha (9.37%) 1 in 30 year, 0.44ha (15.03%) 1 in 100 year and 0.1.13ha (39.05%) 1 in 1000 year. |
| Consideration | <p>This is a greenfield site to the northwest of the village where the SFRA has identified a risk of surface water flooding on the site.</p> <p>Development of the site would conform with the objectives and growth strategy of the Local Plan. A drainage strategy for the site would be required. This should be agreed prior to consent being granted, including measures to mitigate the identified surface water flood risk.</p> |

| Smaller Villages | |
|------------------|--|
| Site reference | FX4, South of the A59, Flaxby Park Green |
| Proposed use | Employment |
| Site area | 40.3ha |

Applying the Sequential Test 3

| Smaller Villages | |
|------------------|--|
| Site reference | FX4, South of the A59, Flaxby Park Green |
| Flood risk | The majority of the site is in FZ1, but 0.2ha (0.5%) is in FZ2 and 1.51ha (3.73%) in FZ3a. There are some adverse effects of additional surface water. |
| Consideration | <p>The SFRA indicates that very small areas of the site fall within flood zones 2 and 3a. These are small areas alongside the beck and pond on the western side of the site.</p> <p>Following a sequential approach to development within sites, development of the site will be capable of being directed away from the part of the site within medium and high flood risk areas and appropriate mitigation will enable surface water effects to be addressed.</p> <p>The site is larger than 1 hectare and as such a site-specific FRA will be required at the planning application stage to demonstrate that the site can be developed safely.</p> <p>The allocation of the site for employment is considered to be sequentially acceptable as the majority of the site is capable of development, through considering the layout and design of the site, on land within flood zone 1 and flood risk from all sources will be mitigated through the preparation of a site-specific FRA.</p> |

4 Conclusion

4 Conclusion

- 4.1** The application of the sequential test has demonstrated that the majority of the sites that the council is considering as sustainable options for meeting the housing and employment needs of the district are either in flood zone 1, on sites where the developable area can be adjusted to avoid areas of flood risk, or on sites where drainage strategies will be required to demonstrate the mitigation that is necessary to overcome the identified surface water flood risk.
- 4.2** As work progresses on the Local Plan policies allocating sites for development will include developer guidelines requiring that development of the sites in table 1.2 takes account of various factors relating to flood risk for example:
- avoiding development in high risk and medium risk flood zones;
 - The need to undertake a detailed FRA as part of the planning application on sites over 1ha;
 - drainage strategies demonstrating appropriate surface water mitigation measures;
 - no increase in flood risk on site or elsewhere;
 - considering the design and layout of sites;
 - appropriate mitigation for flood risk;
 - the provision of green infrastructure or open space in areas of medium and high risk;
 - no development in the functional floodplain.
- 4.3** The overall conclusion is that the sequential test has been applied and passed for those sites to be recommended as draft allocations in the Draft Harrogate District Local Plan. It is not considered that the exception test or further work in the form of a Level 2 SFRA is required because, in seeking to deliver the growth strategy, development can take place on sustainable sites within the areas with the lowest probability of flood risk.

