

BROMHAM NEIGHBOURHOOD PLAN

SEQUENTIAL TEST RELATING TO FLOOD RISK

INTRODUCTION

1. This document has been prepared in support of Bromham Neighbourhood Plan. Its purpose is to demonstrate that the sites identified for development in the neighbourhood plan that contain areas of flood risk are appropriate for development in the context of the sequential and exception tests relating to flood risk. These tests are required by the National Planning Policy Framework (NPPF) as supported by guidance in the Planning Practice Guidance in the section on Flood Risk and Coastal Change.

2. The aim of the sequential test is to ‘steer new development to areas with the lowest risk of flooding. Development should not be allocated or permitted if there are reasonably available sites appropriate for the proposed development in areas with a lower risk of flooding. The sequential approach should be used in areas known to be at risk now or in the future from any form of flooding.’ (NPPF para 158)

3. The sequential test had not been undertaken for the Regulation 14 pre-submission consultation on the draft Bromham Neighbourhood Plan. The Neighbourhood Plan Steering group was not aware of this requirement, albeit it had fully considered the impact and constraints to development of land at risk of flooding in its site assessment exercise alongside other material planning considerations. However, we are grateful to Rainier Developments Ltd for pointing out the requirement for a sequential test in its response to the Regulation 14 consultation.

Assessing Flood Risk

4. Flood risk is assessed in terms of zones with specific probability parameters. These zones are set out and defined in Table 1 below

Table 1 – Flood risk-zone categories

Flood Zone	Definition
Zone 1 Low Probability	Land having a less than 1 in 1,000 annual probability of river or sea flooding. (Shown as ‘clear’ on the Flood Map – all land outside Zones 2 and 3)
Zone 2 Medium Probability	Land having between a 1 in 100 and 1 in 1,000 annual probability of river flooding; or land having between a 1 in 200 and 1 in 1,000 annual probability of sea flooding. (Land shown in light blue on the Flood Map)
Zone 3a High Probability	Land having a 1 in 100 or greater annual probability of river flooding; or Land having a 1 in 200 or greater annual probability of sea flooding. (Land shown in dark blue on the Flood Map)
Zone 3b The Functional Floodplain	This zone comprises land where water has to flow or be stored in times of flood. Local planning authorities should identify in their Strategic Flood Risk Assessments areas of functional floodplain and its boundaries accordingly, in agreement with the Environment Agency. (Not separately distinguished from Zone 3a on the Flood Map)

Source – Planning Practice Guidance

5. The 'Flood Map' referred to in this table is the Environment Agency Flood Map for Planning.

6. The Planning Practice Guidance on Flood Risk and Coastal Change attributes flood-risk vulnerability status to various types of development in a flood risk vulnerability classification system. The main classes of development are –

Essential Infrastructure – for transport or utilities infrastructure, such as electricity substations;

Highly vulnerable – emergency services (police, fire, ambulance stations, dwellings with basements etc;

More vulnerable – housing, hospitals, care homes, etc

Less vulnerable – shops, buildings used for agriculture etc

Water-compatible development – outdoor sports and recreation facilities, amenity open space etc.

The full classification as set out in the Planning Practice Guidance is reproduced in full at Annex 1.

7. Using the flood-zone risk categories and the flood-risk vulnerability classification, the Planning Practice Guidance provides a flood risk vulnerability and flood zone compatibility table, which sets out the circumstances in which a sequential test is required. The resulting table is reproduced at Table 2.

Table 2 Flood risk vulnerability and flood zone compatibility

Flood Zone	Flood-Risk Vulnerability				
	Essential infrastructure	Highly vulnerable	More vulnerable	Less vulnerable	Water compatible
1	√	√	√	√	√
2	√	Exception test required	√	√	√
3a	Exception test required	X	Exception test required	√	√
3b	Exception test required	X	X	X	√

Key

√ Development is appropriate

X Development should not be permitted.

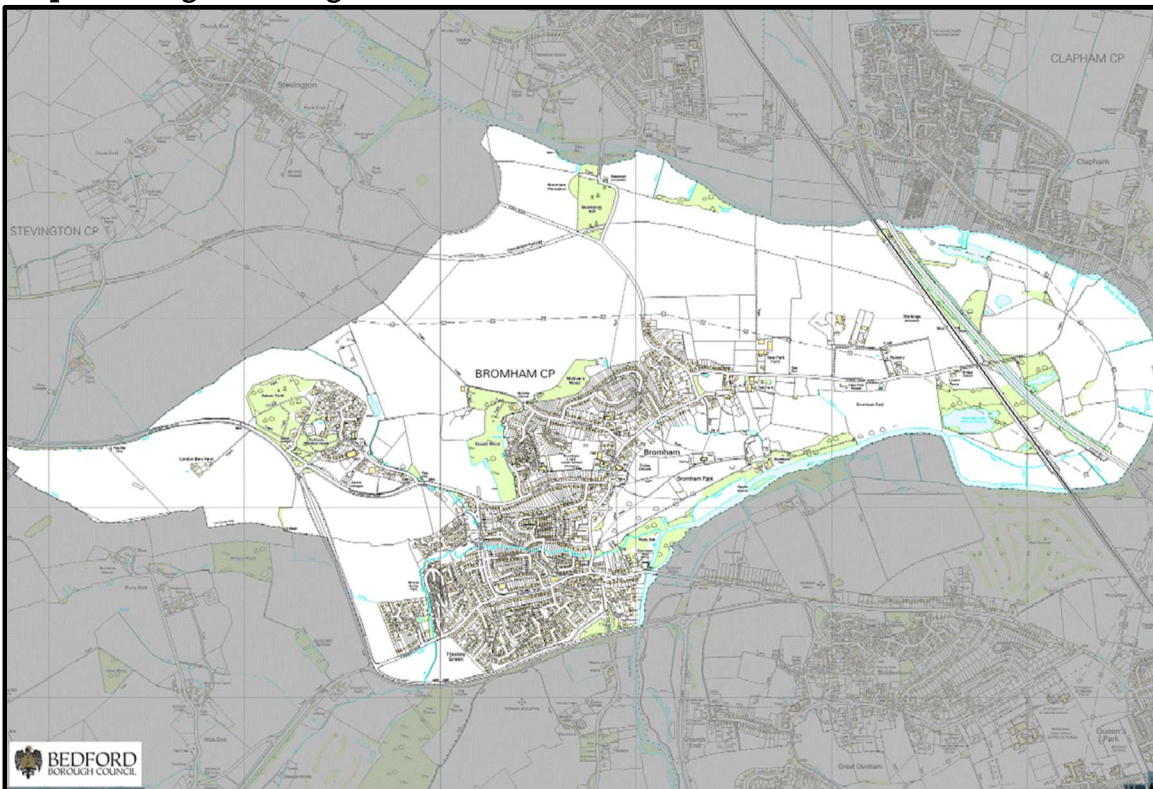
Source – Planning Practice Guidance

CONTEXT

8. The area covered by this sequential test is the Bromham Civil Parish area, which also forms the designated neighbourhood area, as shown at Map 1. The relevant local planning documents of relevance to the Bromham Neighbourhood Plan are the saved policies of the Bedford Borough Local Plan (2002), the Bedford Core Strategy and Rural Issues Plan (2008) and the Bedford Allocations and Designations Local Plan (2013) as well as the emerging Local Plan 2030. Also relevant are Bedford Borough Council's Level 1 Strategic Flood Risk Assessment (2015) and Flood Risk Sequential Test Statement (October 2018).

9. Bromham Civil Parish has two main areas of flood risk: in the eastern sector the flood risk associated with fluvial flooding of the River Great Ouse, the main river in the area; and in the western and central sectors the flood risk is associated with fluvial flooding of Bromham Brook, a tributary of the Great Ouse.

Map 1 – Designated Neighbourhood Area

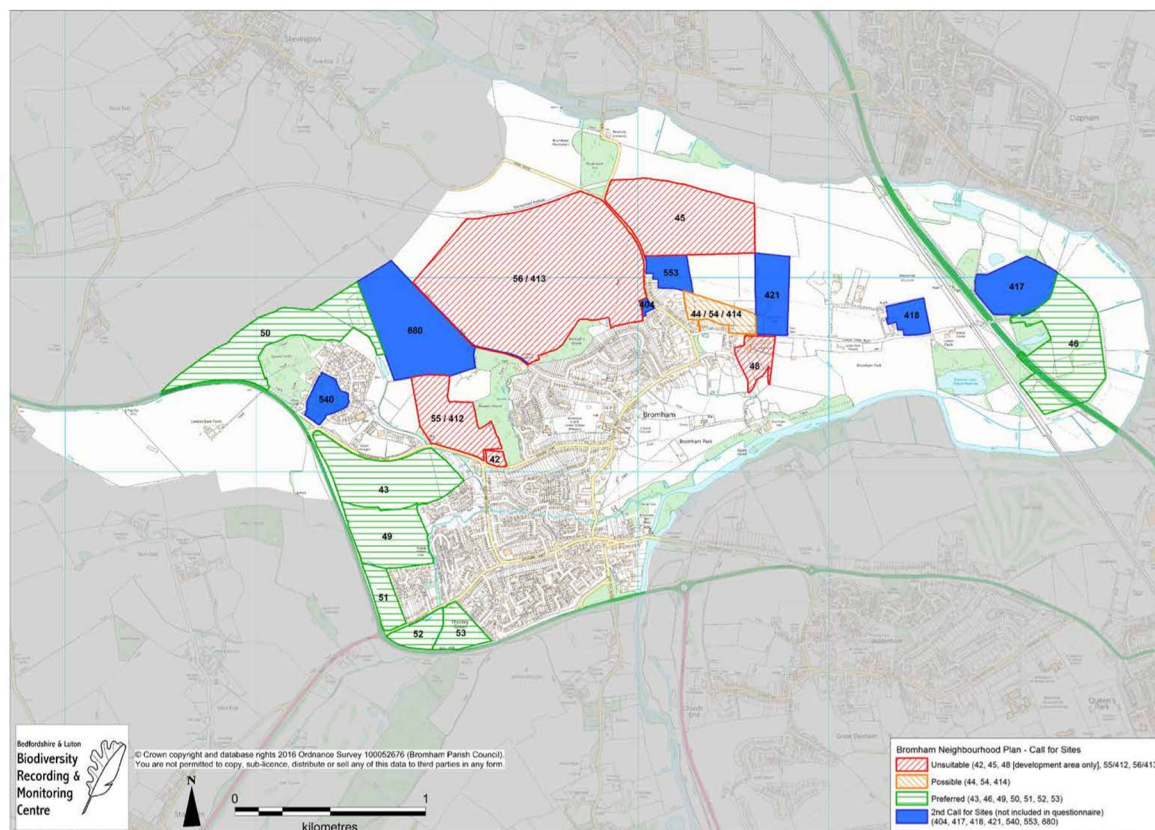


10. As part of the development of its draft Local Plan, Bedford Borough Council administered two Call for Sites exercises: one in 2014, the second in 2015. The 2014 exercise generated 15 sites in the Bromham Neighbourhood Area, one of which was later withdrawn. The 2015 exercise generated 10 sites, albeit some of these were sites included in the previous exercise but in a combined or revised format. Ultimately, the Steering Group assessed 18 sites in the Bromham Neighbourhood Area for their suitability for development, using Bedford Borough Council's site selection methodology.

11. The steering group fully considered the impacts of flooding and the constraint of land at risk of flooding on individual sites and, during the site assessment process, ascertained from developers with potential allocated sites which incorporated areas in flood zones 2 or 3 that the number of units they proposed to deliver, and any accesses to them, would be located in the areas of the site within Flood Zone

1. All of the sites which incorporate some land in flood zones 2 and 3 also contain substantial areas of land within flood zone 1.
12. As part of the Regulation 14 consultation exercise, the Steering Group also consulted the Environment Agency; the agency suggested that any comments it might have on any proposed development in the draft plan could be left until the planning application stage.
13. The sites that the sequential test were applied to are set out in Map 2 below.

Map 2 – Sites included in the 2014 and 2015 Call for Sites exercises



14. The site profiles for all of these sites, based on the information produced in the site selection process are at Annex 2.

SEQUENTIAL TEST ASSESSMENT

15. In carrying out the sequential test, each site was considered in terms of whether any of its area fell within a flood zone other than Flood Zone 1. The delineation of flood zones to individual sites in Bedford Borough Council's 2018 sequential test statement was used as the basis for this stage of the test and was checked against the Environment Agency Flood Map for Planning. Sites wholly within Flood Zone 1 were screened out as being suitable for all types of development vulnerability in flood risk terms.
16. Sites which intersected one or more other flood zones were screened in for additional issues to be considered and, where appropriate, for an exception test to be undertaken.

17. The outcome of the first stage of the process is set out in Table 3 below.

Table 3 -Outcome of sequential test screening

Call for Sites number	Name of Site	Area of Site	Flood Zone(s)	Outcome
43	Land south of Northampton Road		1	Screened out
45	Molivers Field, Oakley Road		1	Screened out
46	Bedford North Station, Lower Farm Road		1,2 & 3	Screened in
48	Hall Farm, Lower Farm Road		1	Screened out
49	Land at Northampton Road (1)		1&2	Screened in for further consideration
50	Land at Northampton Road (2)		1	Screened out
51	Land at Stagsden Road (North)		1	Screened out
52	Land at Stagsden Road (South)		1,2&3	Screened in for further consideration
53	Land South of Stagsden Road		1,2&3	Screened in for further consideration
404	Oakley Road		1	Screened out
412	Grange Lane and Northampton Road		1	Screened out
413	Land to the West Side of Oakley Road		1	Screened out
417	Next to A6, Paula Radcliff Way and Lower Farm Road		1	Screened out
418	'Guadalest', Lower Farm Road		1	Screened out
421	New Park Farm, Lower Farm Road		1	Screened out
540	Parklands Mansion, Old Northampton Road		1	Screened out
553	Land adjacent to Oakley Road		1	Screened out
680	Land rear of Molivers Lane		1	Screened out

18. For the four sites screened in for further consideration, we had already taken the view that Site 46 was not a sustainable option in that it is over a mile from the nearest bus stop in Bromham and there are no safe cycle and pedestrian routes between the site and the village.

19. For the three remaining sites, all of which are proposed to be allocated in the emerging Neighbourhood Plan, two further questions were considered to establish whether an exception test should be undertaken –

Could the proposed development be alternatively located in a site wholly within Flood Zone 1, taking into account other material planning conditions, including the achievement of sustainable development?

Could the numbers of residential units proposed, and accesses to them, be accommodated wholly within the part of the site within the part of the site that falls within Flood Zone 1?

20. The exception test needs to demonstrate that sites under consideration would provide sustainability benefits to the community that would outweigh the flood risks, and would be safe, in flood risk terms, over their lifetime without increasing flood risk elsewhere. Consideration also needs to be given to reducing the overall flood risk where possible. In terms of sustainability benefits, account has been taken of Bedford Borough Council's Sustainability Appraisal produced in support of the emerging Local Plan.

Profiles of the Three Allocated Sites Screened into the Exception Test

Site Number and Address	Site 49 - Land at Northampton Road (1) Sites 49, 51 and 52 taken together are proposed as Beauchamp Park – a development of 390 dwellings
Proposed use	Housing
Size of Site	11.69 hectares
Flood Risk data	Bedford Borough Council's flood-risk sequential test ¹ assesses the site as being Flood Zone 3b - 0%. Flood Zone 3a - 0% Flood Zone 2 - 1%. – 0.07 ha Flood Zone 1 - 99% - 11.62 ha

¹ Bedford Borough Council's sequential test works on the basis of aggregating flood risk: accordingly, the percentage of a site in Flood Zone 3b is incorporated in the percentage of the site in Flood Zone 3a, which in turn is incorporated in the percentage of the site within Flood Zone 2.

Could the proposed development be alternatively located in a site wholly within Flood Zone 1, taking into account other material planning conditions, including the achievement of sustainable development?	No
Could the number of residential units proposed, and access to them, be accommodated wholly within the part of the site within the part of the site that falls within Flood Zone 1?	All of the proposed development on this site would be located within Flood Zone 1. Only 0.07 of a hectare lies outside of Flood Zone 1.
Exception Test	Taken together with Sites 51 and 52 - with which this site is joined to form the Beauchamp Park development - and Site 53 this site relates best to the existing built-up area. The site, both in isolation and together with its sister sites, is well situated for safe, sustainable connections with village services both in the village centre and the shops and public houses in and around the Stagsden Road area and Bromham Mill. It is also convenient for the existing 41 bus route along Stagsden Road between Sites 51 and 52 which has frequent services throughout each day; it was suggested in para B.1.9. of the pre-submission draft of the neighbourhood plan that 'it may be possible to negotiate an additional stop to existing services within Beauchamp Park'. As part of the Beauchamp Park development this site would contribute to the delivery of playing fields and associated facilities as well as public open space. These would be sustainably accessible for both new and existing residents and so would contribute to providing strong vibrant and healthy communities as required by the NPPF. The site assessment procedure undertaken has already identified the flood risk potential of the site and the need to comply with Local Plan strategic policies relating to Flood Risk and Sustainable Drainage Systems has been specified in the draft Neighbourhood Plan. Accordingly, the Steering Group believes the sustainability benefits outweigh the flood risk.
Site Number and Address	Site 52 - Land at Stagsden Road (South) Forms part of Beauchamp Park with Sites 49 and 51
Proposed use	Housing, amenity open space and outdoor sports and recreation
Size of Site	3.49ha

Flood Risk data	Bedford Borough Council's flood risk sequential test assesses the site as being Flood Zone 3b - 4% Flood Zone 3a - 28% Flood Zone 2 - 41% Flood Zone 1 - 59%
Could the proposed development be alternatively located in a site wholly within Flood Zone 1, taking into account other material planning conditions, including the achievement of sustainable development?	No
Could the number of residential units proposed, and access to them, be accommodated wholly within the part of the site within the part of the site that falls within Flood Zone 1?	Housing development would be wholly within Flood Zone 1 and the open space, and outdoor sports and recreation area, which are water-compatible, would be in Flood Zones 2 and 3.
Exception Test	Together with Sites 49 and 51, with which this site is joined to form Beauchamp Park, and Site 53 this site relates best to the existing built-up area and would provide the most logical, sustainable extension to it. As part of the Beauchamp Park development this site would contribute to the delivery of playing fields and associated facilities as well as public open space. These would be sustainably accessible for both new and existing residents and so would contribute to providing strong, vibrant and healthy communities as required by the NPPF. The site, both in isolation and together with its sister sites, is well situated for safe, sustainable connections with village services both in the village centre and in and around the Stagsden Road area and Bromham Mill. As well as the scope for good cycle and pedestrian connections, the site is also convenient for the existing 41 bus route along Stagsden Road between this site and Site 51; we suggested in para B.1.9. of the pre-submission draft of the plan that 'it may be possible to negotiate an additional stop to existing services within Beauchamp Park'. The ability of the site to accommodate vehicular access onto Stagsden Road, with measures to encourage vehicular access westwards onto the strategic road network, would help to mitigate the impact of new residents on the roads within the village. This measure, in addition to enhancements to pedestrian and cycle infrastructure, would help to create an environment where new and existing residents are encouraged

	to carry out a greater number of journeys within the village on foot or by cycle. Accordingly, the Steering Group believes the sustainability benefits outweigh the flood risk.
Site Number and Address	Site 53 - Land South of Stagsden Road
Proposed use	Housing
Size of Site	4.2ha
Flood Risk data	Bedford Borough Council's flood risk sequential test assesses the site as being Flood Zone 3b - 0% Flood Zone 3a - 1% Flood Zone 2 - 17% Flood Zone 1 - 83%
Could the proposed development be alternatively located in a site wholly within Flood Zone 1, taking into account other material planning conditions, including the achievement of sustainable development?	No
Could the number of residential units proposed, and access to them, be accommodated wholly within the part of the site within the part of the site that falls within Flood Zone 1?	All of the proposed development on this site would be located within Flood Zone 1
Exception Test	Together with Beauchamp Park, this site together with the other south-west Bromham sites relates best to the existing built-up area of Bromham and creates an integrated extension to the village. It has good access to cycle and pedestrian routes and frequent public transport services, which will help to achieve sustainability. The site is well situated for safe, sustainable connections with village services both in the village centre and in and around the Stagsden Road area and Bromham Mill. There is a bus stop for the 41-bus route on both sides of Stagsden Road near the proposed entrance to the site, and it is well located for village services both in the village centre and in and around the Stagsden Road area and Bromham Mill.

CONCLUSION

21. The Steering Group considered whether the proposed development in these sites could have been located in sites wholly within Flood Zone 1 but take the view that as all of the built development proposed on Sites 49, 52 and 53 would be located in Flood Zone 1 and the only development proposed for Flood Zones 2 and 3 would be the water-compatible development of Amenity Space and outdoor sports and recreation on Site 52 the requirement of steering development to areas of low flood risk are met. The development of these sites would constitute the best use of available land, leaving other Grade 2 agricultural land on other sites within agricultural use or to maximise the scope for 'more vulnerable' development should it be required for development in the future.

22. In addition to the efficient use of land, these sites offer sustainability and community benefits through –

- the new amenity space and facilities they will accommodate, which will contribute to further developing a strong, vibrant community and will be well-related to new and existing homes;
- their location in relation to the existing built-up area will make for an integrated extension of the village with landscaped boundaries that will result in a clearly defined western boundary to the village
- the sites would provide good vehicular access westwards to the A428 and A422 for those residents travelling outside of Bromham, which would reduce the impact of vehicular traffic associated with new residents on the roads within the village and create a safer environment for pedestrians and cyclists;
- their location near the services and amenities within the village, and the enhancements to the pedestrian and routes from the sites to the village, would encourage greater cycle and pedestrian movements to access these services and amenities;
- all of the sites are located either on the sole existing regular bus route and could incorporate an additional stop within Beauchamp Park without a major deviation from the existing route.

These benefits seem to the Steering Group to outweigh the flood risk and so satisfy the requirements of the sequential test and the exception test in that built development will be steered to areas of the lowest flood risk i.e. Flood Zone 1.

23. Site-specific sequential tests would be required for each development at the planning application stage and we would also expect such an application to take account of advice from the Environment Agency in relation to mitigating the impact of climate change on flood risk.

Annex 1 – Flood Risk Vulnerability Classification

Essential infrastructure

- Essential transport infrastructure (including mass evacuation routes) which has to cross the area at risk.
- Essential utility infrastructure which has to be located in a flood risk area for operational reasons, including electricity generating power stations and grid and primary substations; and water treatment works that need to remain operational in times of flood.
- Wind turbines.

Highly vulnerable

- Police and ambulance stations; fire stations and command centres; telecommunications installations required to be operational during flooding.
- Emergency dispersal points.
- Basement dwellings.
- Caravans, mobile homes and park homes intended for permanent residential use.
- Installations requiring hazardous substances consent. (Where there is a demonstrable need to locate such installations for bulk storage of materials with port or other similar facilities, or such installations with energy infrastructure or carbon capture and storage installations, that require coastal or water-side locations, or need to be located in other high flood risk areas, in these instances the facilities should be classified as 'Essential Infrastructure').

More vulnerable

- Hospitals
- Residential institutions such as residential care homes, children's homes, social services homes, prisons and hostels.
- Buildings used for dwelling houses, student halls of residence, drinking establishments, nightclubs and hotels.
- Non-residential uses for health services, nurseries and educational establishments.
- Landfill* and sites used for waste management facilities for hazardous waste.
- Sites used for holiday or short-let caravans and camping, subject to a specific warning and evacuation plan.

Less vulnerable

- Police, ambulance and fire stations which are not required to be operational during flooding.
- Buildings used for shops; financial, professional and other services; restaurants, cafes and hot food takeaways; offices; general industry, storage and distribution; non-residential institutions not included in the 'more vulnerable' class; and assembly and leisure.
- Land and buildings used for agriculture and forestry.
- Waste treatment (except landfill* and hazardous waste facilities).
- Minerals working and processing (except for sand and gravel working).
- Water treatment works which do not need to remain operational during times of flood.
- Sewage treatment works, if adequate measures to control pollution and manage sewage during flooding events are in place.

Water-compatible development

- Flood control infrastructure.
- Water transmission infrastructure and pumping stations.
- Sewage transmission infrastructure and pumping stations.
- Sand and gravel working.
- Docks, marinas and wharves.
- Navigation facilities.
- Ministry of Defence defence installations.
- Ship building, repairing and dismantling, dockside fish processing and refrigeration and compatible activities requiring a waterside location.
- Water-based recreation (excluding sleeping accommodation).
- Lifeguard and coastguard stations.
- Amenity open space, nature conservation and biodiversity, outdoor sports and recreation and essential facilities such as changing rooms.
- Essential ancillary sleeping or residential accommodation for staff required by uses in this category, subject to a specific warning and evacuation plan.

Annex 2 – Site Profiles for the Sites in the Bromham Neighbourhood Area Assessed for Development

Ref	Site Location	Existing Use	Planned Use	Flood Risk	Size of site	Suitability
43	Land immediately south of the east-west section of Northampton Road	Agriculture Grade 2	Housing, some small-scale employment space if required, open space and recreational facilities.	Flood Zone 1	17 hectares	The site meets most technical criteria for development. A public right of way crosses the site and there are some slopes at the northern end of the site. It could be a logical extension to the village and sustainable cycle and pedestrian routes, one using Bridleway 16, could be created to link with the existing settlement. Bed BC's 2017 highways assessment concluded that safe access, which avoided 'significant traffic impacts in the village', could only be achieved if Sites 49 and 51 were also developed and provided access to Stagsden Road. Development should be subject to that caveat.
45	Molivers Field – East of Oakley Road	Agriculture Grade 2	School site and solar park	Flood Zone 1	24.18 hectares	There are no overriding technical constraints to development as a school site: access could be achieved but all school traffic would travel through the village. There are currently no pavements in this area, cycling in Oakley Road is challenging given the bends in the road, and the nearest bust stop is c.800 metres from the site. Accordingly, it is not really a sustainable site in transport terms.
46	Land between East Midlands mainline and Paula Radcliffe Way (A6) and towards the eastern border of the civil parish	Vacant – a former local authority rubbish tip	Railway station, some employment opportunities and an unspecified number of dwellings	Flood Zones 1, 2 and 3 Bedford BC's sequential test breaks the site down as –	23.5 hectares	The site appears technically suitable as a railway station site if acceptable given its former use - but it is not sustainable for housing given that It is over a mile from nearest bus stop in Bromham, and there are no safe cycle or pedestrian links. Access to the railway station via Lower Farm Road would increase traffic in Bromham very substantially.

				FZ 1 – 15% FZ 2 – 44% FZ 3a – 23% FZ 3b – 18%		The site is very close to Bromham Nature Reserve, which hosts Great Crested Newts.
48	Land to the south of Lower Farm Road	Partially brownfield plus Agriculture – Grade 3	Housing	Flood Zone 1	c.3 hectares -	Suitable for development and allocated in the draft Neighbourhood Plan - a cycle/ pedestrian path through Bromham Park would help achieve safety and sustainability, albeit the distance to the nearest bus stop at 350 metres applies only to some proposed dwellings. Some highways issues at the Lower Farm Road/Oakley Road may need to be mitigated
49	Land at Northampton Road (1) See also Site 51 and 52, which together with this site make up the proposed Beauchamp Park, an allocated site.	Agriculture – Grade 2	Housing	The Env. Agency Flood Map suggests a very small area of Flood Zone 3 on the eastern boundary of the site. However, Bedford BC's sequential test breaks the site down as FZ 1 – 99% FZ 2 – 1% FZ 3a – 0% FZ3b– 0%	12 hectares	Flood risk, sloping land and a public rights of way were all indicated in the Call for Sites submission but none are overriding environmental or physical constraints. In isolation, access would be through the Meadowfield Development only, but if joined with other sites – 51 and/or 43 - there could be access to Stagsden Road and/or Northampton Road, subject to acceptable access solutions becoming available for the latter. The site makes a logical extension of the current built up area. Good access can be secured via Stagsden Road to the A428. The site could be made sustainable in transport terms for cycling, pedestrians by connecting with Bridleways 5 and 16. It is also suitable for bus users as it has good access to existing bus service 41 at Stagsden Road and the site could accommodate a short extension of the service to take in sites 49 and 51 before resuming its route along Stagsden Road. Flood mitigation measures will be needed as the south-eastern corner of the site is in Flood Zone 2 and 3.

						The site is contiguous with site 51, which lies opposite to Site 52 across Stagsden Road.
50	Land at Northampton Road (2)	Agriculture – Grade 2 and amenities	Housing	Flood Zone 1	19.4 hectares	Access and sustainability issues identified in the Bedford BC's Highways report and the potential environmental issues identified in the wildlife trust's survey report make this site a low priority for development. The site is a considerable distance from the existing village and would not be a logical extension of the existing built-up areas
51	Land at Stagsden Road (North) See also Site 51 and 52, which together with this site make up the proposed Beauchamp Park, an allocated site.	Agriculture – Grade 2	Housing	Flood Zone 1	3.8 hectares	The site would have some visual impact on existing residents living immediately east of the site but makes a logical extension of the existing built-up section of Stagsden Road and offers good potential access options to Stagsden Road. With similar scope for achieving sustainability in transport terms as Site 49. It's main access would be on the existing bus route 41 and could form part of the short route extension suggested for Site 49. Taken together with Site 49 (and Site 52) the site provides potential for a co-ordinated development with good access to the A428.
52	Land at Stagsden Road (South) See also Site 51 and 52, which together with this site make up the proposed Beauchamp Park, an allocated site.	Agriculture – Grade 2	Housing	Part of the site is in Flood Zone 3. Bedford BC's sequential test breaks the site down as FZ 1 – 27% FZ 2 – 41% FZ 3a – 28%	3.3 hectares	The site lies opposite Site 51. There are no overriding environmental or physical constraints declared in the Call for Sites submission, albeit the eastern margin of the site lies in Flood Zone 3 and will need mitigation measures. There is good potential for access to Stagsden Road and then the A428. Taken together with Site 53 on its eastern border, it would make a logical extension of the built environment on the south of Stagsden Road

				FZ 3b– 4%		The site is technically suitable for development. Its location by the A428 means it provides good access potential and should avert unnecessary traffic impacts in the village. It is well located for sustainable transport options, including the existing 41 bus route and has good access to village services. Its treatment as a single development with Sites 49 and 51 provides scope for a co-ordinated approach to transport, access and achieving sustainability.
53	Land south of Stagsden Road Now referred to as Stagsden Rise, an allocated site	Agriculture – Grade 2	Housing	Part of the site immediately adjacent to Bromham Brook is in Flood Zone 3. Bedford BC's sequential test breaks the site down as FZ 1 – 82% FZ 2 – 17% FZ 3a – 1% FZ 3b – 0%	4.15 hectares	The site is technically suitable for development and has a good level of residents' support. The site slopes both north to south and west to east and the western north western border of the site is in Flood Zone 3, but neither factor would impede development. It has good access potential because of its proximity to the A428. It is well located for sustainable transport options, including the 41-bus service with bus stops on either side of the carriageway near the proposed site access, and has good access to village services. With SUDS, the flood risk should be mitigatable.

Ref	Site Location	Existing Use	Planned Use	Flood Risk	Size of site	Suitability
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404	Land to the west of Oakley Road	Unused paddock	Housing	Flood Zone 1	0.5 hectare	This small site is technically suitable for development <u>if</u> safe access to Oakley Road could be achieved. The 2017 highways and access survey suggested a 90m visibility splay ' <u>may just</u> ' be achieved from a point near the middle of the site. Most of the roadside boundary of the site is on a bend and there is currently no pavement connection with the village. The site would make a logical extension of the built-up part of the village but the nearest operating bus stop is 650 metres from the site making sustainability questionable, and the highways safety concerns would need to be overcome.
412	Land to the north of Grange Lane and Northampton Road	Agricultural – Grade 2	Housing	Flood Zone 1	10.7 hectares	Bowel's Wood (ancient woodland) on the site's eastern margin contains some TPOs and historic monuments. Safe access could be secured into Grange Lane and/or Northampton Road and, but for the intervention of Bowel's Wood, the development would make a logical extension of the built environment on the north side of Grange Lane. Could be substantial traffic impact in the village. Although technically suitable for development, the site would have an environmental impact on the ancient woodland of Bowels Wood, and overlook the large Scout and Guide Campus.
413	Land north of Molivers Lane and Molivers Wood and west of Oakley Road (Site 53 in the 2014 Call for Sites exercise)	Agricultural - Grade 2	Housing	Flood Zone 1	66 hectares	No overriding environmental constraints. There are high-voltage electricity cables running across the site requiring a cordon sanitaire, the southern boundary of the site abuts Molivers Wood, a fragment of ancient woodland and there are two historic monuments on the site as shown by cropmarks. Satisfactory highway access is clearly a problem as would be downstream traffic impacts in the village. Accordingly, although the site is technically suitable for development it is not a preferred site. The site could impact adversely on Molivers Wood ancient woodland and is also adjacent to the Bowells Wood fragment of ancient woodland.

414	Land to the North of Lower Farm Road. (Sites 44 and 54 in the 2014 Call for Sites exercise)	Agricultural – Grade 2 and 3	Housing	Flood Zone 1	4.45 hectares	Not a preferred site. The combined sites make a medium sized site of rural character on Grade 3 agricultural land containing ridge and furrow are technically suitable for development. Some sustainability concerns about safe pedestrian and cycle access and distance to the nearest dwelling for most houses on the site. 90 dwellings would generate too much additional traffic for Lower Farm Road and its junction with Oakley Road, as well as impacting on the rest of the village. A planning appeal relating to the site in October 2017 was dismissed, partly because the site contains good evidence of ridge and furrow.
417	Land to the East of Paula Radcliffe Way immediately north of Site 46	Agriculture – Grade 3	Housing and commercial (but no details provided)	Flood Zone 1 and 2 FZ 1 – 99% FZ 2 – 1% FZ 3a – 0% FZ3b– 0%	9.14 hectares	This is a remote site on the eastern fringe of the civil parish – it is Grade 3 agricultural land. The Call for Sites literature is not clear about numbers of dwellings – site big enough for circa.200 dwellings. The site is too remote to be sustainable in pedestrian, cycling and public transport terms and access would need to be to Paula Radcliffe way rather than to Lower Farm Road. It would not relate at all to the existing built-up section of ` Bromham Not a preferred site. This is a medium sized site or rural – even remote – character on Grade 3 agricultural land. Unless the railway station went ahead on Site 46, and so created effectively a new mini settlement – and the Call for Sites submission is vague as to numbers - it would not be a sustainable site in terms of travel options.
418	Land to the north of the eastern end of Lower Farm Road	Agriculture – Grades 2/3	Housing and commercial (but no details provided)	Flood Zone 1	3.15 hectares	This medium sized site is located to the north of Lower Farm Road, near the railway line. The site meets Bedford BC's size criterion but no details of dwelling numbers are given in the Call for Sites submission. There are no pavements in this part of Lower Farm Road which is also too narrow to take the higher density of traffic such a development would generate. Not a preferred site. The site is a relatively remote rural site is on Grade 3 agricultural land but does not have adequate highway access

						or sustainable travel options. The lack of details in the Call for Sites submission raise concerns about access and sustainability. The development would also not relate well to the existing built-up areas of Bromham
421	Land to the north of Lower Farm Road contiguous with Site 412	Agriculture – Grade 2	Housing	Flood Zone 1	7.24 hectares	No known overriding environmental physical constraints. Highway access should be feasible but absence of pavements in Lower Farm Road make sustainable transport options difficult. The number of proposed dwellings would have a significant impact on traffic through the village The site is technically suitable for development, and is a partly brownfield site, but it shares many of the issues with site 414. It is Grade 2 agricultural land and given the number of dwellings proposed (150) would cause even more traffic to go through Bromham village than site 414. There are also sustainability issues for pedestrian, cycle journeys and public transport. Other sites can provide the number and range of housing required without the traffic impacts within the village.
540	Land at Parklands, east of Northampton Road	Non-agricultural land	Housing	Flood Zone 1	3.6 hectares	This site is towards the western edge of the civil parish but is not currently agricultural land. The site has no known overriding physical or environmental constraints, although it does have over 70 TPOs within the site. The relationship with the existing built up area would be satisfactory This medium sized site has an arboreal character. It is technically suitable for development, subject to the TPOs not being an issue. But it is not a preferred site because there are sufficient sites with safer access to the A428 (i.e. via the traffic-island mediated access to the A428 on Stagsden Road) and there is no clarity about the number of dwellings proposed.

553	Land to the east of Oakley Road, adjacent to no 52 Oakley Road	Agriculture – Grade 2	Housing	Flood Zone 1	3.65 hectares	This site is on the northern edge of the built-up area of the east side of Oakley Road on Grade 2 agricultural land. No known overriding environmental or physical constraints. A 30m easement has been obtained either side of the electricity pylon on the site. No access concerns identified but there are no footways or cycle-ways accessing the site and the nearest operational bus stop is 650 metres from the site. The site is technically suitable for development. Its location in the north-eastern part of the village means that almost all of the traffic generated would have to travel via a number of the village through-roads to access the A428. An application for outline planning permission on the site was refused in January 2018 – See application number 17/02753/MAO There are sites within the village that would provide the scope for a development this size without the significant impact on traffic in the village that this site would cause.
680	Land to the rear and east of Molivers Lane	Agriculture – Grade 2	Housing, commercial school site extension	Flood Zone 1	21 hectares	This large site is in the northern sector of the village on Grade 2 agricultural land but is somewhat remote from the existing built-up area. The site meets Bedford BC's size and numbers criteria and there are no overriding environmental or physical constraints. However, there are clear highway and access constraints. As well Not a preferred site. It is a large tract of Grade 2 agricultural land and development on the site would be remote from the existing built-up areas. It is technically viable as a development site but highway access is problematic. Unless there is a radical proposal for traffic access, traffic would be routed through Molivers Lane and then Village through roads. Other sites avoid that issue.