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# 1 Ash Court, Park Place

Report

on

Flood Risk Assessment

for

Retirement Villages Group Ltd

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Flood Risk Assessment

## **Document Control**

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## References

Flood Risk and Coastal Change Guidance, Published 6 March 2014 (Ministry of Housing, Communities & Local Government)

Strategic Flood Risk Assessment for Boston County Council, Published October 2010 (AECOM Ltd for Boston County Council)

## Abbreviations

EA	Environment Agency
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SFRA Strategic Flood Risk Assessment



### 1.0 INTRODUCTION

- 1.1 The site concerned at Ash Court, Park Place, Sleaford Road, Boston is part of a retirement community, housing residents within self-contained flats as well as 2 onsite care homes.
- 1.2 Under a separate planning application, Flat 1, Ash Court was recently converted from residential accommodation to a Manager's Office.

The need for management offices was an urgent temporary provision, to provide an increased management presence on site to support residents at a time when they were locked down due to Covid 19 restrictions.

Now that those restrictions have been lifted Retirement Villages Ltd is looking at other ways to meet that need, and 1 Ash Court can revert back to its original use as a residential property

- 1.3 This assessment will review whether the change of use will have an impact upon the flood risk to the site.
- 1.4 Site Address: 1 Ash Court, Park Place, 88-90 Sleaford Road, Boston, PE21 8EY



Figure 1 - Location Plan Drawn by Barton Willmore



## 2.0 FLOODING MAPS INFORMATION

- 2.1 Using the Environment Agency (EA) flooding development map, the site is situated within a Flood Zone 3 which means that the site can be vulnerable to flooding for storm events with 1:100 or less year return periods and tidal flooding for 1:200 or less year return periods.
- 2.2 Zone 3 is split into 3a and 3b, with the latter being functional floodplains. No distinction is made between these below, but the site is known to not be on a regular floodplain and so is zone 3a.

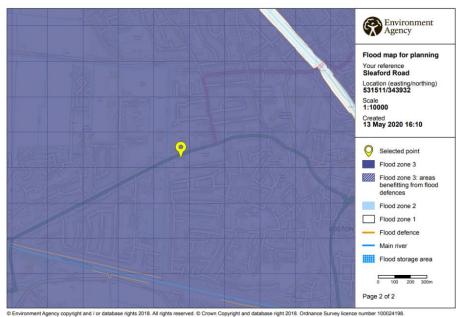


Figure 2 - Environment Agency (EA) Planning Flood Map

2.3 Strategic Flood Risk Assessment (SFRA) published in October 2010 places the site within a Medium probability/ Zone 2 for tidal flooding as shown below.

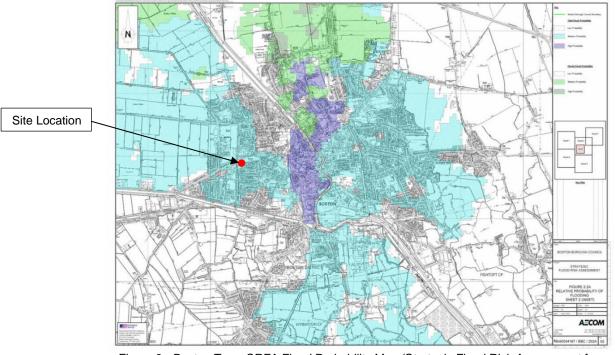


Figure 3 - Boston Town SRFA Flood Probability Map (Strategic Flood Risk Assessment for Boston Borough Council, Oct 2010)

# 1 Ash Court, Park Place



- 2.4 The SFRA classification of the site being within a Medium Probability / Zone 2 area for tidal flooding, indicates that the area is vulnerable to tidal flooding for 1:200 to 1:1000 year return period events.
- 2.5 It can be understood from this information that the site does have risk from tidal flooding, with the SFRA showing that the probability of flooding to be lower than the Environment Agency map.
- 2.6 Considering the location of the site and the existing information available, we can assume that there is a medium probability of flooding for the site.
- 2.7 Referring to Table 1 from the Flood Risk and Coastal Change Guidance (shown below), the site is considered in Zone 2-3a.

### Table 1: Flood Zones

These Flood Zones refer to the probability of river and sea flooding, ignoring the presence of defences. They are shown on the Environment Agency's <u>Flood Map for Planning (Rivers and Sea</u>), available on the Environment Agency's web site, as indicated in the table below.

Flood Zone	Definition
	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)

Note: The Flood Zones shown on the Environment Agency's Flood Map for Planning (Rivers and Sea) do not take account of the possible impacts of climate change and consequent changes in the future probability of flooding. Reference should therefore also be made to the <u>Strategic Flood Risk</u> <u>Assessment</u> when considering location and potential future flood risks to developments and land uses.

Paragraph: 065 Reference ID: 7-065-20140306

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Figure 4 - Table 1 from the Flood Risk and Coastal Change Guidance



### 3.0 FLOOD VULUNERABILITY CLASSIFICATION

- 3.1 As the proposed change of use does not involve any amendments to the existing infrastructure of the site it is classed as a minor development.
- 3.2 The existing use of the unit is commercial / offices which would be considered as 'Less Vulnerable'. However, the site itself is a Care Home with Extra Care Apartments, that would be classified as being 'More Vulnerable'.
- 3.3 The unit was classed as 'More Vulnerable' up to recent, temporary changes. It is our understanding that as Flat 1, Ash Court Place was considered more vulnerable approximately 12 months ago, this classification would again be acceptable.

#### Table 2: 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.

"\* " Landfill is as defined in <u>Schedule 10 of the Environmental Permitting</u> (England and Wales) <u>Regulations 2010</u>.

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### Figure 5 - Table 2 from the Flood Risk and Coastal Change Guidance

- 3.4 Table 3 from the Flood Risk and Coastal Change Guidance can be used to show whether developments are appropriate depending on their scale and the probability of flooding. As can be seen from below, the proposed development / alteration is appropriate for the site in Flood Zone 2.
- 3.5 Within Flood Zone 3a an Exception test would be required, this we believe would be covered by its previous use and the remainder of the site / retirement community

Flood Zones	Flood Risk Vulnerability Classification				
	Essential infrastructure	Highly vulnerable	More vulnerable	Less vulnerable	Water compatible
Zone 1	$\checkmark$	1	1	1	1
Zone 2	1	Exception Test required	✓	1	1
Zone 3a †	Exception Test required †	×	Exception Test required	1	1
Zone 3b *	Exception Test required *	x	x	×	✓*

Key:

- ✓ Development is appropriate
- X Development should not be permitted.

#### Notes to table 3:

- This table does not show the application of the <u>Sequential Test</u> which should be applied first to guide development to Flood Zone 1, then Zone 2, and then Zone 3; nor does it reflect the need to avoid flood risk from sources other than rivers and the sea;
- The Sequential and <u>Exception Tests</u> do not need to be applied to <u>minor</u> <u>developments</u> and changes of use, except for a change of use to a caravan, camping or chalet site, or to a mobile home or park home site;
- Some developments may contain different elements of vulnerability and the highest vulnerability category should be used, unless the development is considered in its component parts.

† In Flood Zone 3a essential infrastructure should be designed and constructed to remain operational and safe in times of flood.

" \* " In Flood Zone 3b (functional floodplain) essential infrastructure that has to be there and has passed the Exception Test, and water-compatible uses, should be designed and constructed to:

- · remain operational and safe for users in times of flood;
- result in no net loss of floodplain storage;

Figure 6 - Table 3 from the Flood Risk and Coastal Change Guidance

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## 4.0 EXISTING INFRASTRUCTURE AND PROCEDURES

- 4.1 The existing layout and structures on the site including floor levels are not to be changed. Therefore, the current flood defence and resilience measures in place for the site will not be affected and there is no increased risk of flooding.
- 4.2 No changes to the existing surface water system are proposed or required as there is no increase in impermeable areas, therefore not affecting the fluvial flood risk.
- 4.3 Evacuation procedures would not need to be changed as evacuation plans which previously accounted for Flat 1 are still in place and implemented across the development / retirement community.

### 5.0 SUMMARY

- Site situated within a medium-high probability flood zone (Zone 2/3a).
- Change of use will simply re-instate vulnerability to those prior to recent temporary provisions
   made for the Covid / Lock Down requirements.
- There are no increases in flood risk that would be presented by the proposed change of use.

### 6.0 CONCLUSION

6.1 This Assessment concludes that the proposed change in use will not adversely affect the flood risk to the development or the surrounding area.