



# Flood Risk Assessment and Drainage & SUDs Strategy In support of Residential Development at

Regal House  
Shripney Road  
Bognor Regis  
PO22 9NP

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### Amendments

Revision	Date	Description
0	9 <sup>th</sup> September 2024	Planning Issue

### References

Reference	Title
A	CIRIA Publication 753 – The SUDS Manual (2015)
B	Sewers for Adoption 7 <sup>th</sup> Edition (Wrc 2012)
C	Part H of the Building Regulations (2015)
D	The Soakaway Design Guide (KCC 2000)
E	Planning Practice Guidance (2016)
F	West Sussex Sustainable Drainage Design (2020)
G	RSPD Sequential Test at Regal House (2024)



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## Introduction

This Flood Risk Assessment and Drainage Strategy has been developed in support of a planning application for a scheme of up to 7 new residential dwellings, located at Regal House, Shripney Road, Bognor Regis, PO22 9NP. This document aims to identify any flood risk areas, offering suggested mitigation where appropriate and outline the methods of drainage available for the Surface Water and Foul Water Drainage. A Location Plan and layout of the proposed scheme has been included within the appendices of this document.

## Development Description and Location

The development proposal is for the erection of 7 new residential dwellings, situated on Shripney Road, Bognor Regis, PO22 9NP which is in the County of West Sussex.

The location of the proposed site is at grid reference 493916, 101969 as shown in the location plans in the appendices.

## Development Classification

The flood risk vulnerability classification for this type of development in this location is considered as More Vulnerable which is defined in Table 2 of the Technical Guidance to the National Planning Policy Framework.

## Sequential Test

As set out in the National Planning Policy Framework, the aim of the Sequential Test is to direct new development to areas with the lowest probability of flooding. The starting point to the Sequential Test is the Flood Zones, which can be seen in the appendices. The map key clearly shows Zones 2 and 3, whereas Zone 1 is the remainder of the land not hatched.

These flood zones refer to the probability of river and coastal flooding, ignoring the presence of any existing flood defences.



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The Strategic Flood Risk Assessments and Surface Water Management Plans for West Sussex County Council, refines the information on the probability of flooding and also takes into account other sources of flooding which have been assessed in more detail further into this flood risk assessment.

The proposed development is situated within Zone 1, 2 & 3, and is classified as More Vulnerable in accordance with Table 2 of the Technical Guidance to the National Planning Policy Framework.

Following an assessment of Table 3 of the Technical Guidance to the National Planning Policy Framework, it states that development in this situation, would require an exception test, as seen in the table below:

**Table 3: Flood risk vulnerability and flood zone 'compatibility'**

Flood risk vulnerability classification (see table 2)		Essential infrastructure	Water compatible	Highly vulnerable	More vulnerable	Less vulnerable
Flood zone (see table 1)	Zone 1	✓	✓	✓	✓	✓
	Zone 2	✓	✓	Exception Test required	✓	✓
	Zone 3a	Exception Test required	✓	*	Exception Test required	✓
	Zone 3b functional floodplain	Exception Test required	✓	*	*	*

**Key:** ✓ Development is appropriate.  
 \* Development should not be permitted.

If the application of the Sequential Test is not possible to comply with, a site-specific flood risk assessment must demonstrate that the development will be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, will reduce flood risk overall.

As parts of the development are flood zone 1, 2 & 3, a sequential test would be required. This has been submitted as a separate report.



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It should be clarified however, that all proposed dwellings are actually positioned entirely within Flood Zone 1, Flood Zone 2 only affects a small part of the green open space, where Flood Zone 3 is limited to the existing watercourse and does not encroach onto the development or green space land.

On the basis that all dwellings are positioned in Flood Zone 1, sequentially, this should be deemed as acceptable. However, for completeness a sequential test has been undertaken, which is annexed to this report.

In respect of the exception test, it should be demonstrated that the development will be safe for the lifetime of the development. As the dwellings are positioned in Flood Zone 1, minimal flood mitigation is required (See Flood Risk Management Measures on Page 7).

The second part of the Exception Test discusses the sustainability benefits of the site that outweigh the flood risk shown on the site, which would be elaborated on the design & access statement. It should be noted however, that this development provides much needed housing in this area of West Sussex and the flood risk associated with the proposed development does not present a high enough flood risk that should outweigh the need for housing in this part of the district.

### Definition of the Flood Hazard

For the preparation of this Flood Risk Assessment, it is necessary to consider all of the potential sources of flooding and how this may affect the site. A checklist has been provided below to help identify these areas which can be discussed in greater detail in this section.



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Possible Source of Flooding	Applicable to this Site?
Fluvial Flooding from nearby rivers or streams	<input checked="" type="checkbox"/>
Coastal Flooding	<input checked="" type="checkbox"/>
Surface Water Runoff from the Site, Adjacent or Nearby Land	<input checked="" type="checkbox"/>
Flooding from Surface Water Sewers	<input checked="" type="checkbox"/>
Flooding from Foul Water Sewers	<input checked="" type="checkbox"/>
Flooding from Reservoirs	<input checked="" type="checkbox"/>
Flooding from Groundwater	<input checked="" type="checkbox"/>
Flooding from other Sources	<input checked="" type="checkbox"/>

A risk from fluvial flooding is shown on the flood maps for planning, from a nearby river to the East of the application site. However, after reviewing this alongside the base plan for the site, it is clear that only a small section of the proposed dwellings are within flood zone 2 and not flood zone 3.

Flood maps for the site show flood zones 1, 2 & 3, however, it should be noted that Flood Zones 2 & 3 are only located on the fringes of the Water course at the Eastern boundary. No dwellings or garden amenities fall within either of these Flood zones.

There are no risks of coastal flooding at the proposed site.

Surface water flooding maps have been checked (also contained in the appendices) and there are no risks of surface water flooding identified from on or off-site sources.

There is a public foul sewer that runs past the entrance to the site, but this is not considered a risk to the proposed site.

When checking the flood maps for planning in relation to reservoir flooding, this also confirms there is no risk to the development site.

Following a review of a local borehole record which states the water was not struck within the 5m borehole, it is unlikely that groundwater flooding would occur on this site. The nearby watercourse will also regulate the levels of the ground water on the development.