

Hornsea Project Three  
Offshore Wind Farm



## Hornsea Project Three Offshore Wind Farm

Environmental Statement:  
Volume 6, Annex 2.2 – Environment Agency and Internal Drainage Board Watercourses and Flood Zones

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APFP Regulation 5(2)(a)

Date: May 2018

**Environmental Impact Assessment**

**Environmental Statement**

**Volume 6**

**Annex 2.2 – Environment Agency and Internal Drainage Board Watercourses and Flood Zones**

**Liability**

This report has been prepared by RPS, with all reasonable skill, care and diligence within the terms of their contract with Orsted Power (UK) Ltd.

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This report is also downloadable from the Hornsea Project Three offshore wind farm website at:

[www.hornseaproject3.co.uk](http://www.hornseaproject3.co.uk)

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Front cover picture: Kite surfer near a UK offshore wind farm © Orsted Hornsea Project Three (UK) Ltd., 2018.

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## Acronyms

Acronym	Description
EA	Environment Agency
HVAC	High Voltage Alternating Current
HVDC	High Voltage Direct Current
IDB	Internal Drainage Board

## Units

Unit	Description
m	Metre (distance)



## 1. Introduction

### 1.1 Purpose

- 1.1.1.1 This annex (annex 2.2) presents the Environment Agency (EA) indicative Flood Zone information for the hydrology and flood risk study area for Hornsea Three (as defined in volume 3, chapter 2: Hydrology and Flood Risk). EA Flood Zone mapping has been used to inform the baseline and impact assessment of flood risk associated with Hornsea Three presented in volume 3, chapter 2: Hydrology and Flood Risk.
- 1.1.1.2 The EA indicative Flood Zones show the probability of river and sea flooding, and do not consider the presence of defences. They are shown on the EA's Flood Map for Planning (Rivers and Sea) (<http://environment.data.gov.uk/ds/catalogue/index.jsp#/catalogue>). Flood Zone definitions are presented below:
- Zone 1 Low Probability Land which has a less than 1 in 1,000 annual probability of river or sea flooding;
  - Zone 2 Medium Probability Land which has 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;
  - Zone 3a High Probability Land which has 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; and
  - Zone 3b The Functional Floodplain which 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 EA.
- 1.1.1.3 The majority of the hydrology and flood risk study area is categorised as Zone 1, with the exception of those area marked as Zone 2 – 3b in Figure 1.1.
- 1.1.1.4 Figure 1.1 also shows the location of main rivers, and ordinary watercourses, including Internal Drainage Board (IDB) watercourses within the hydrology and flood risk study area. They are defined as:
- Main rivers – watercourses where the EA has permissive powers over their management; and
  - Ordinary watercourses – includes rivers, streams, ditches, drains which do not form part of a main river and are managed by either Norfolk County Council, as Lead Local Flood Authority, or Norfolk Rivers IDB.
- 1.1.1.5 The main rivers and IDB watercourses are listed in Table 1.1 and labelled (for ease of reference) on Figure 1.1.

Table 1.1: Main Rivers or IDB watercourses in the hydrology and flood risk study area.

Watercourse name	EA main river or IDB watercourse
Spring Beck	IDB watercourse
River Glaven	IDB watercourse
River Bure	EA main river
Blackwater Drain	IDB watercourse
Swannington Beck	IDB watercourse
River Wensum	EA main river
River Tud	EA main river
River Yare	EA main river
Intwood Stream	IDB watercourse



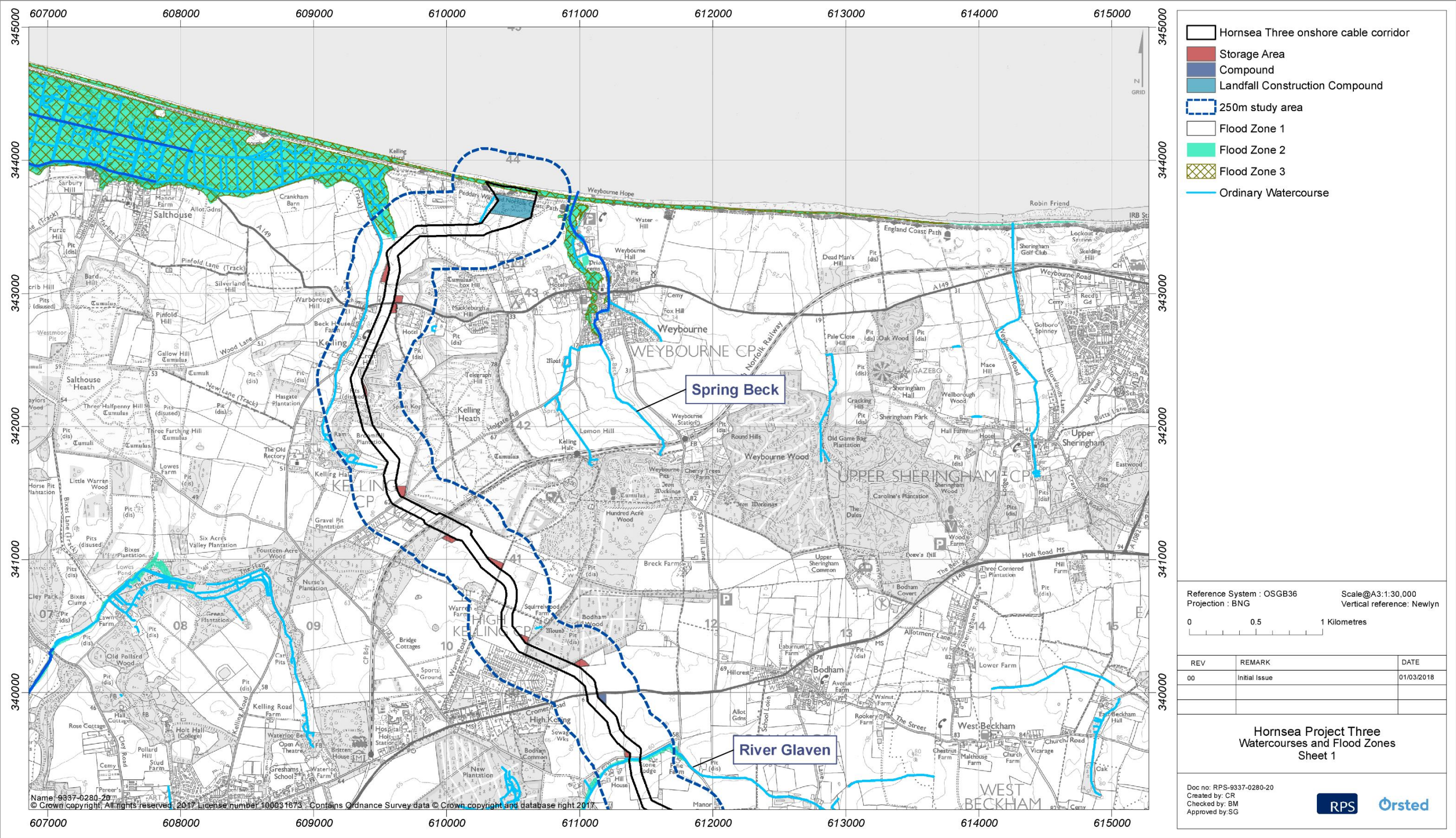


Figure 1.1: Watercourses and Flood Zones.



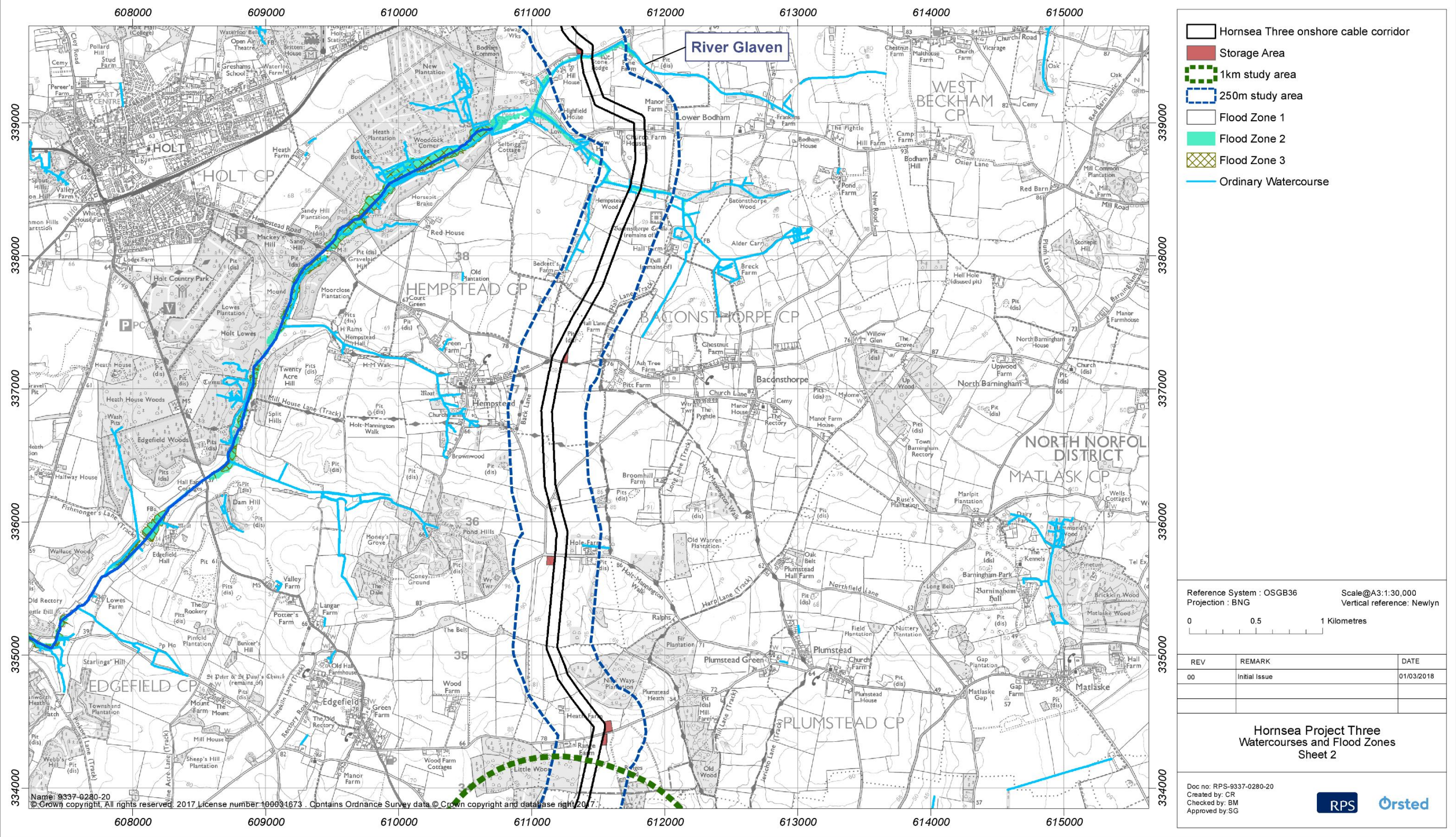


Figure 1.1: Watercourses and Flood Zones.



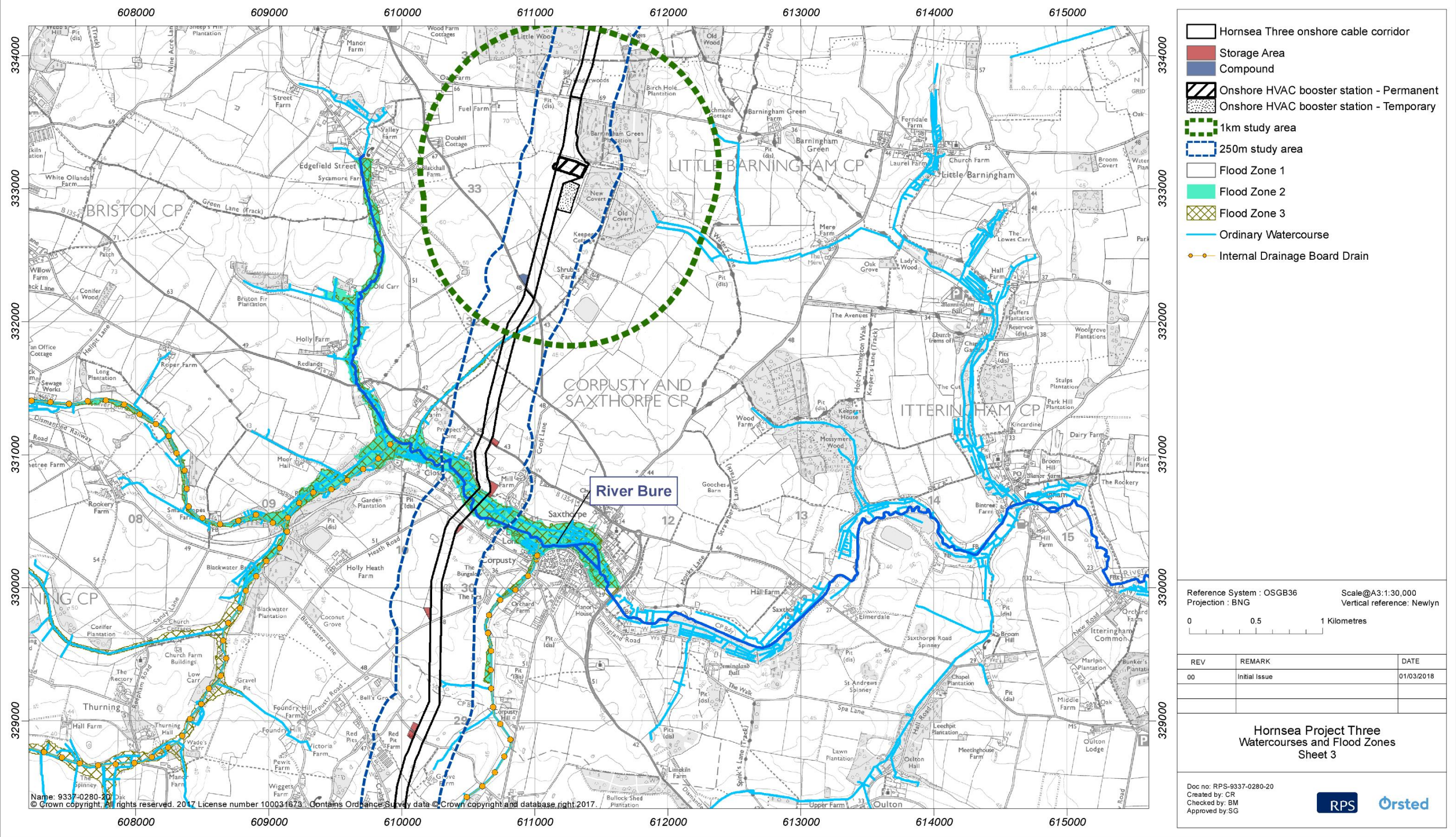


Figure 1.1: Watercourses and Flood Zones.



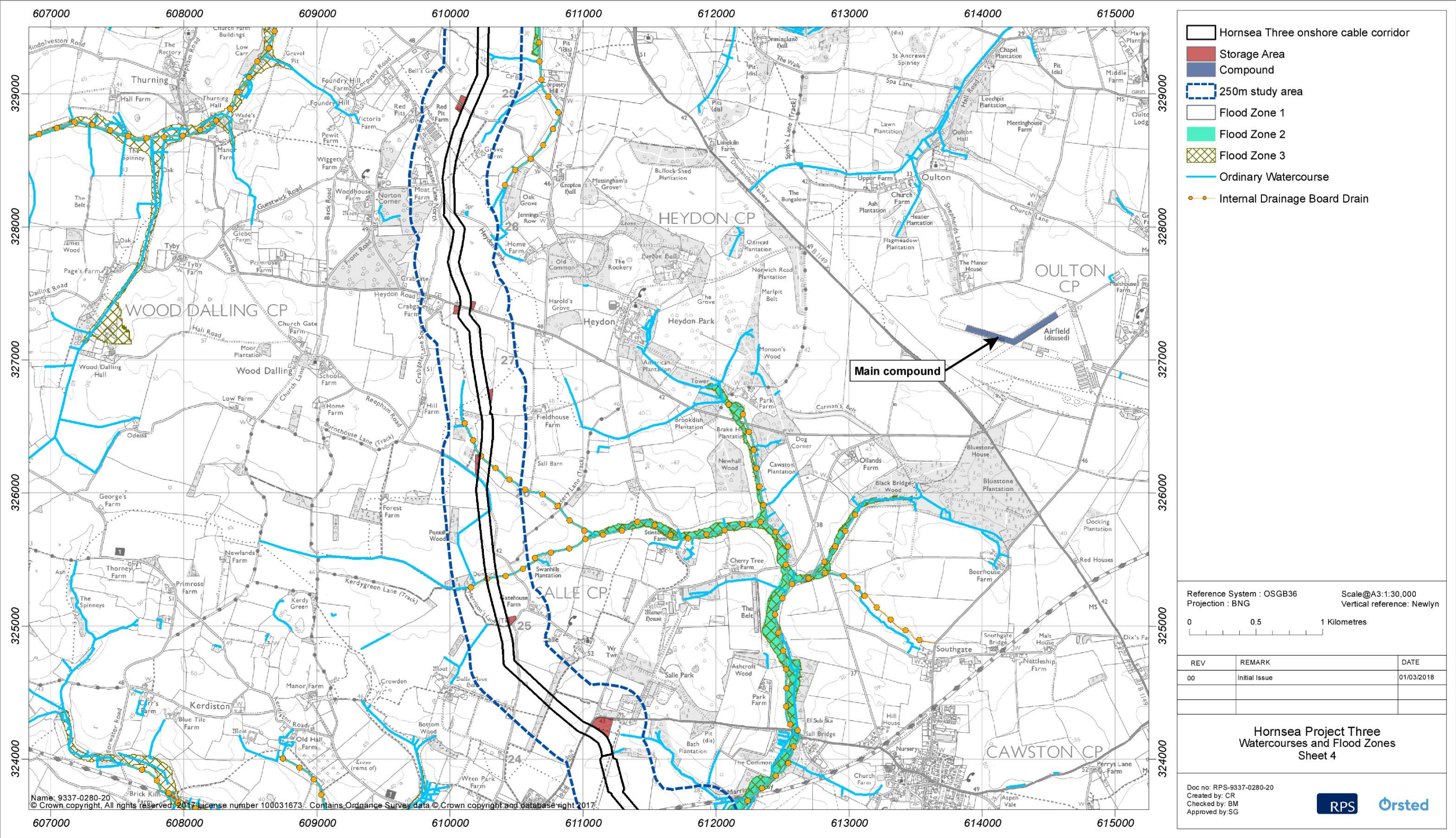


Figure 1.1: Watercourses and Flood Zones.



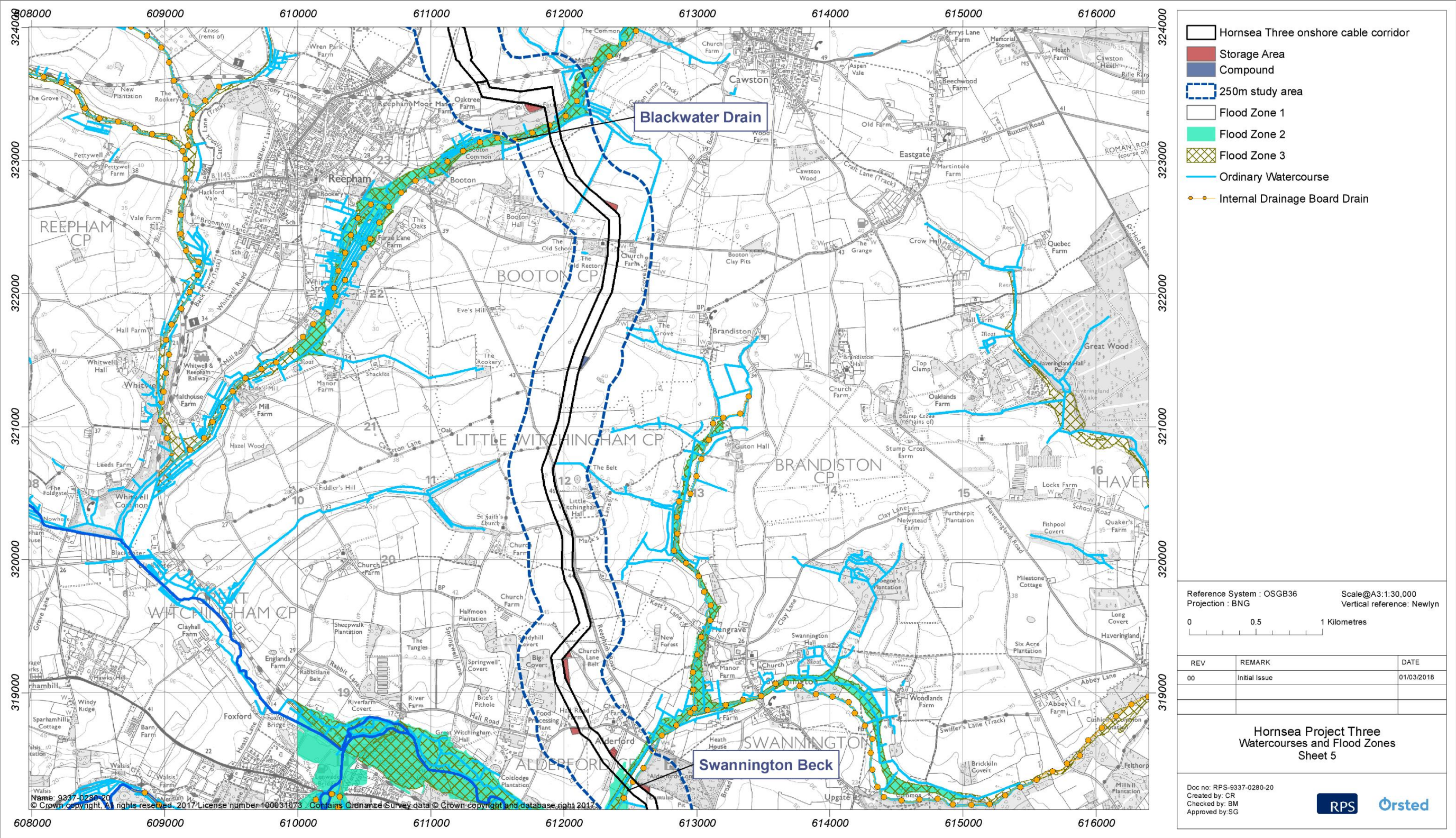


Figure 1.1: Watercourses and Flood Zones.



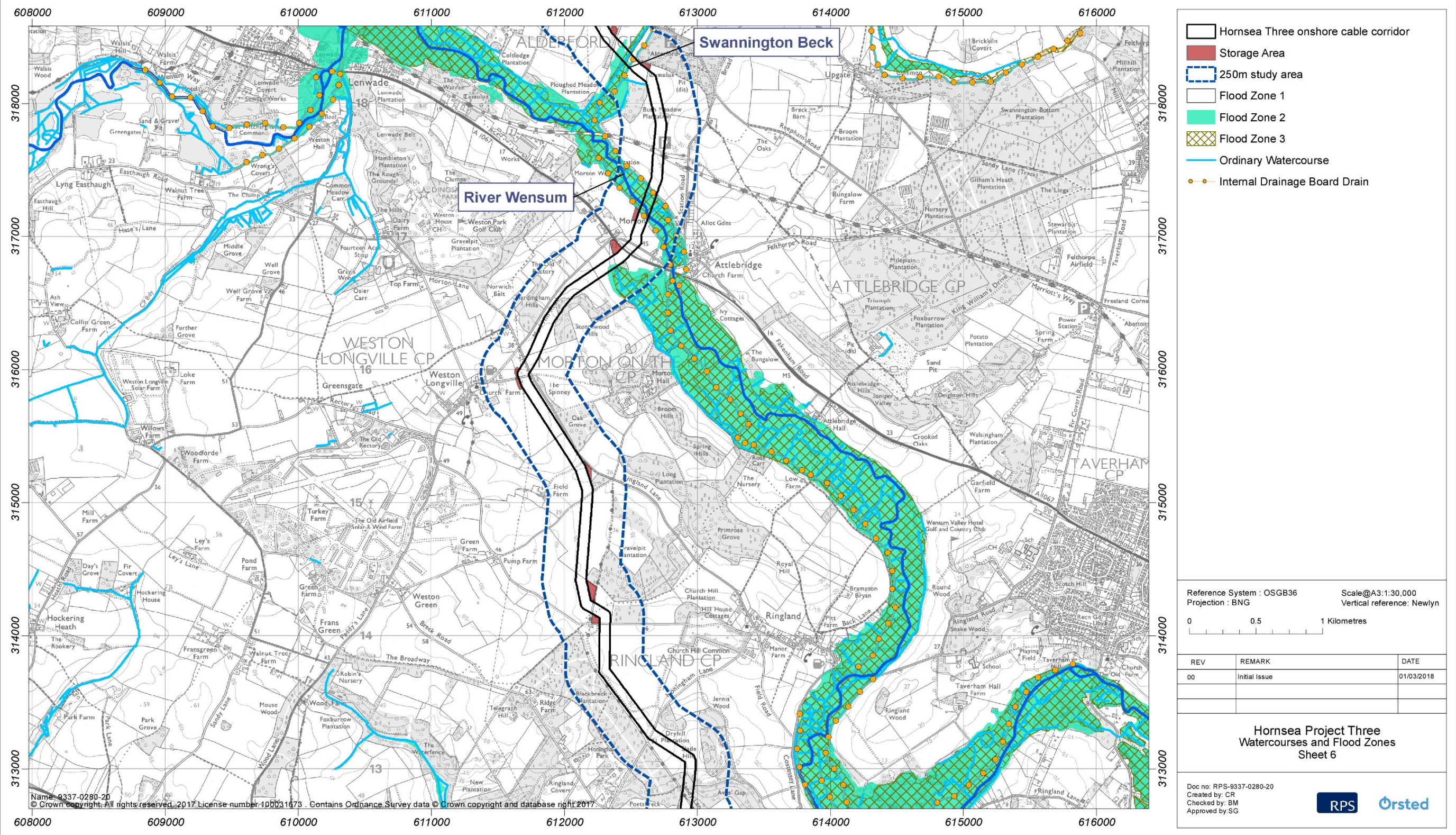


Figure 1.1: Watercourses and Flood Zones.



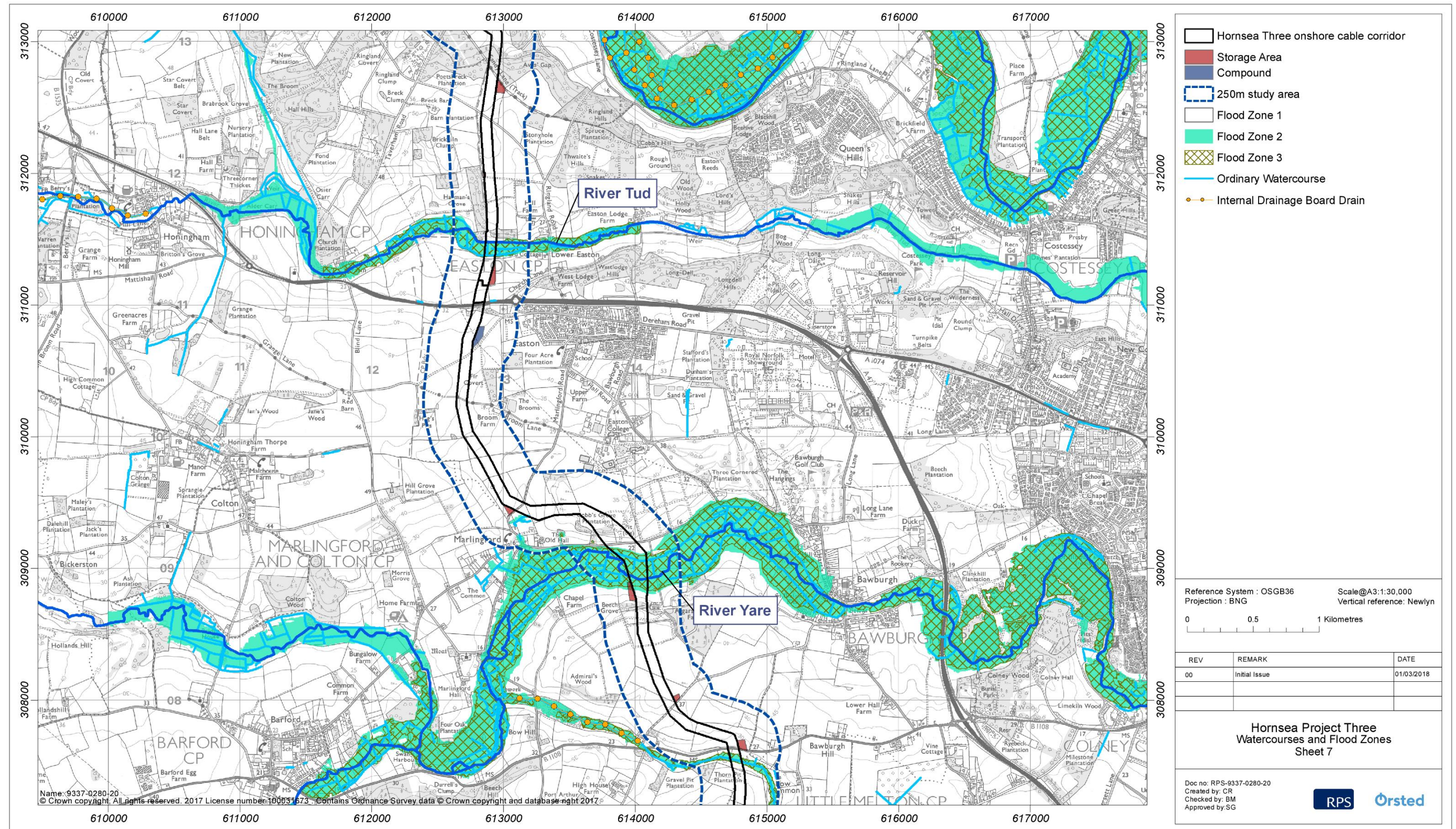


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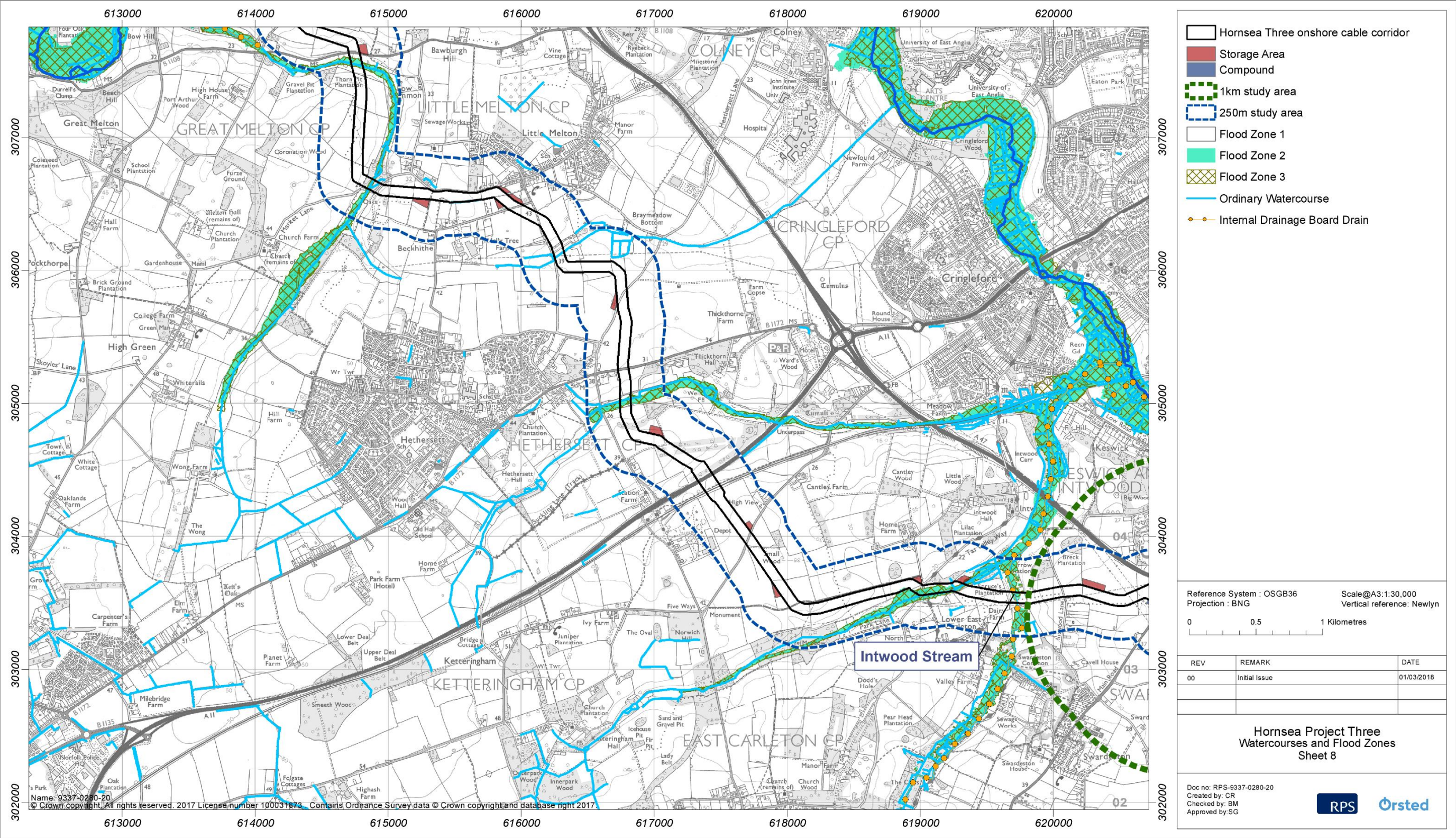


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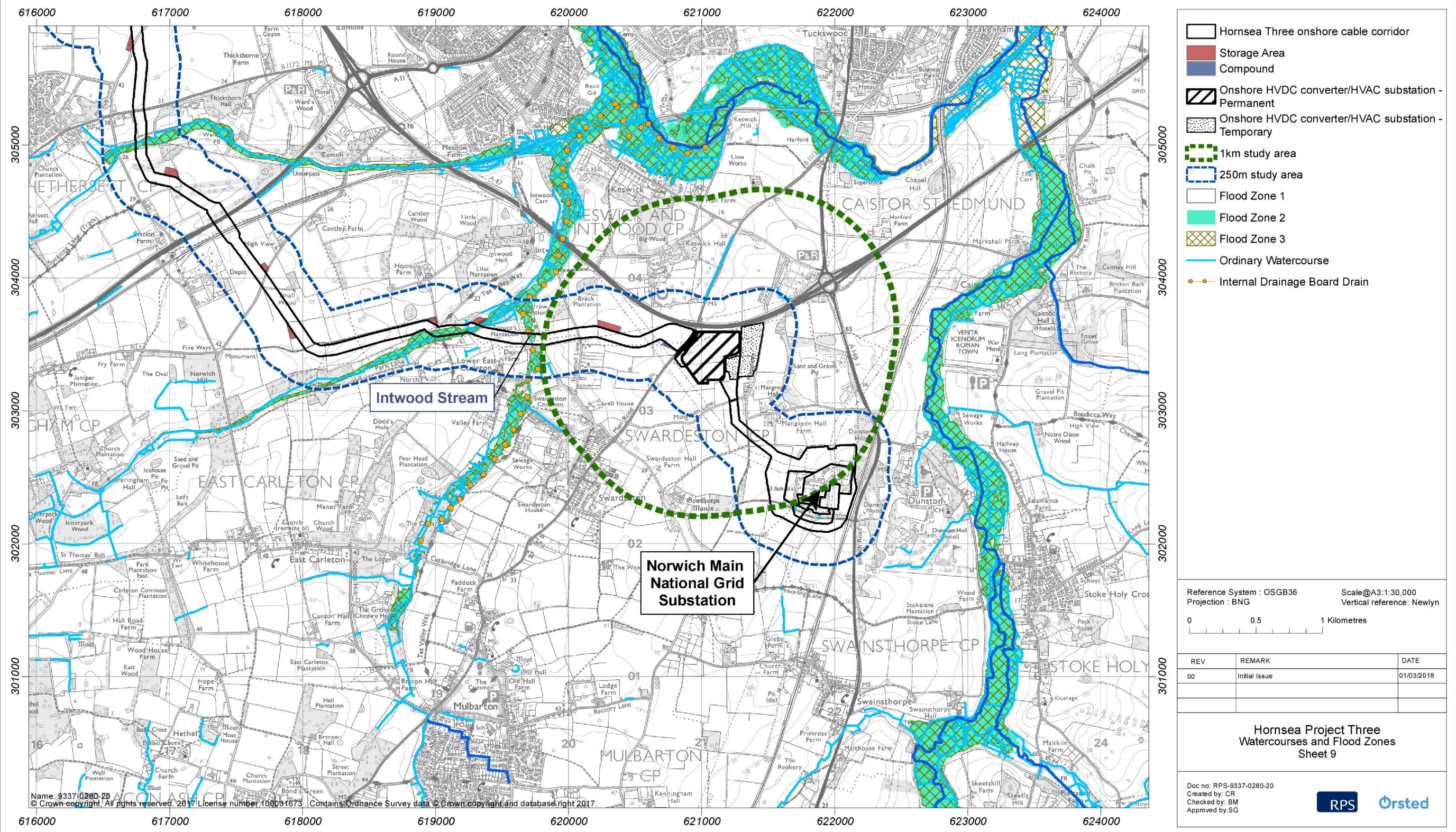


Figure 1.1: Watercourses and Flood Zones.