

**Preliminary Environmental Information Report:** Annex 2.2 – Environment Agency and IDB Watercourses and Flood Zones

Date: July 2017



#### **Offshore Wind Farm**





**Environmental Impact Assessment** 

**Preliminary Environmental Information Report** 

Volume 6

Annex 2.2 – Environment Agency and IDB 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 DONG Energy Power (UK) Ltd.

Report Number: P6.6.2.2

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Date: July 2017

This report is also downloadable from the Hornsea Project Three offshore wind farm website at: www.dongenergy.co.uk/hornsea-project3

DONG Energy Power (UK) Ltd. 5 Howick Place, Prepared by: RPS London, SW1P 1WG Checked by: Jennifer Brack and Sarah Drljaca © DONG Energy Power (UK) Ltd, 2017. All rights reserved Accepted by: Sophie Banham Front cover picture: Kite surfer near one of DONG Energy's UK offshore wind farms © DONG Energy Hornsea Approved by: Sophie Banham Project Three (UK) Ltd., 2016.







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#### Introduction 1.

#### 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. EA Flood Zone mapping has been used to inform the preliminary assessment of flood risk associated with Hornsea Three presented in volume 3 chapter 2: Hydrology and Flood Risk.
- 1.1.1.2 The Flood Zones refer to the probability of river and sea flooding, and do not consider the presence of defences. They are shown on the Environment Agency'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 having a less than 1 in 1,000 annual probability of river or sea flooding.
  - 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.
  - 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.
  - 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.
- The annex also identifies the main rivers, other watercourses and Internal Drainage Board (IDB) 1.1.1.3 watercourses within the hydrology and flood risk study area.
- 1.1.1.4 Figure 1.1 Sheets 1 to 7, below, illustrate the EA defined Flood Zones, main river and ordinary watercourses and the IDB watercourses within the hydrology and flood risk study area.







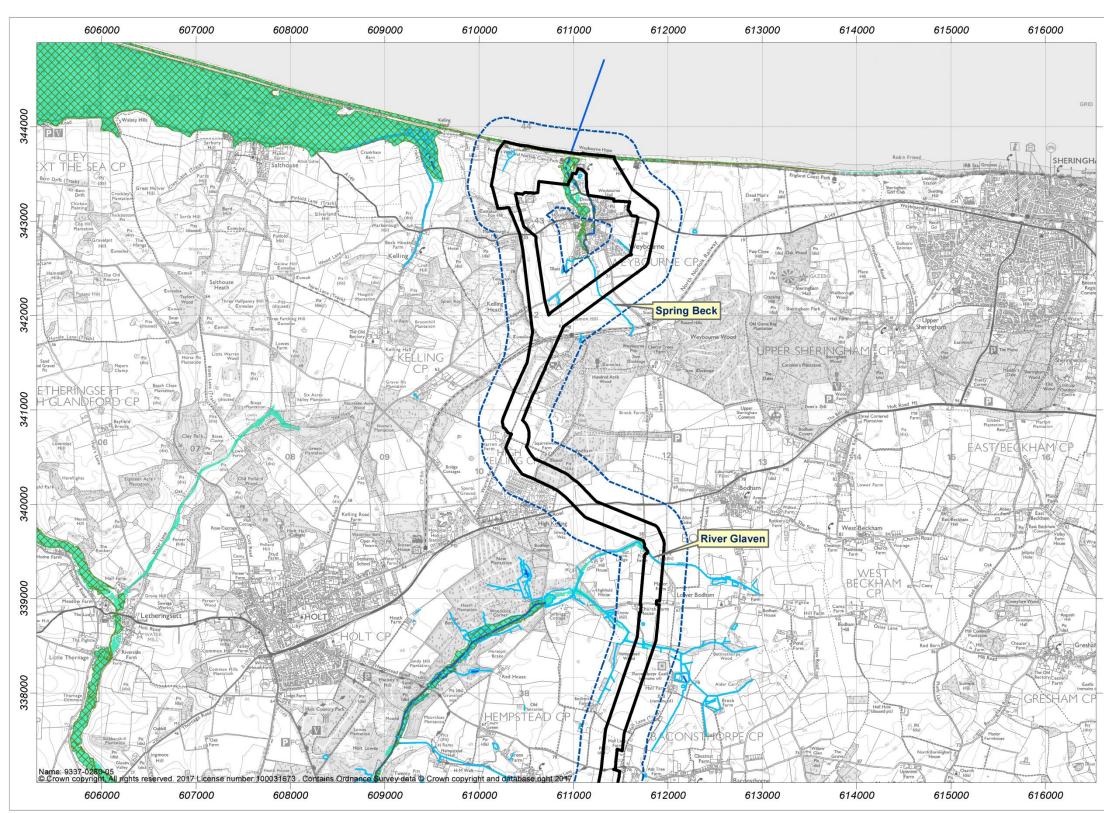


Figure 1.1: Environment Agency and IDB Watercourses and Flood Zones.



	Onshor	re cable corridor se	arch area			
	250m Buffer from Onshore cable corridor search area					
	Flood Z					
344000	Flood Zone 3					
34	<ul> <li>Internal Drainage Board Drain</li> </ul>					
	EA Detailed River Network					
	- Lake/R	eservoir				
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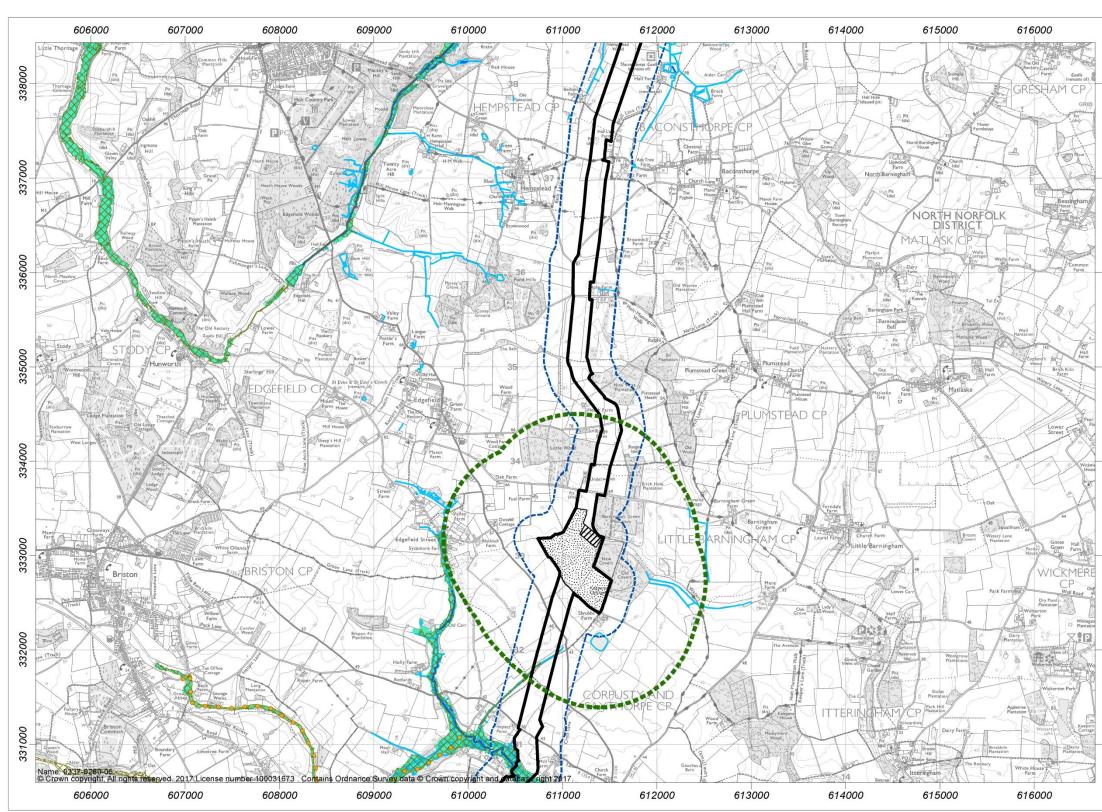


Figure 1.1: Environment Agency and IDB Watercourses and Flood Zones.



	r						
	Onsho	re cable corrido	or search area				
000	Onshore HVAC booster station - permanent						
338000	Onsho	re HVAC booste	er station - temp	orary			
		250m Buffer from Onshore cable corridor					
	Buffer		shore HVAC boo	oster			
337000	Flood Zone 2						
337	Flood	Zone 3					
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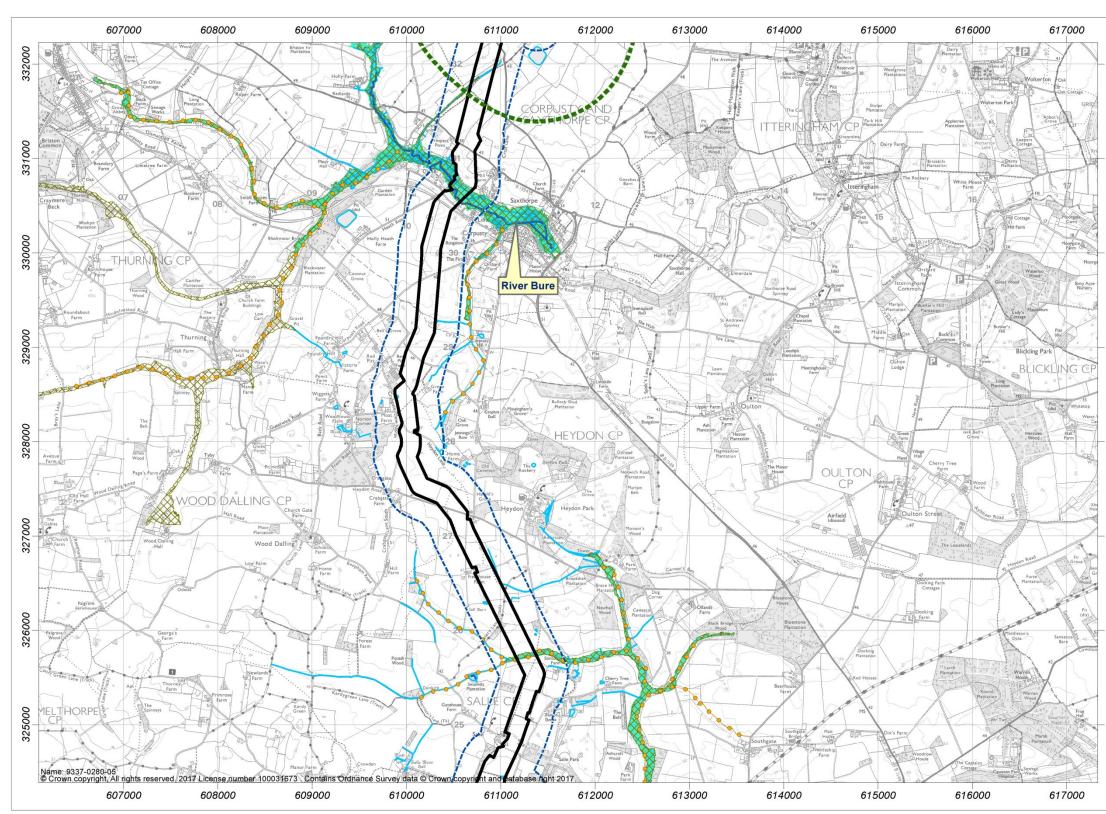


Figure 1.1: Environment Agency and IDB Watercourses and Flood Zones.



000	Onsho	re cable corridor sea	rch area				
332000	250m Buffer from Onshore cable corridor						
	Buffer of station	Buffer of 1km from onshore HVAC booster					
	Flood Zone 2						
331000	Flood Zone 3						
331	Internal Drainage Board Drain						
	EA Detaile	EA Detailed River Network					
	- Lake/R	eservoir					
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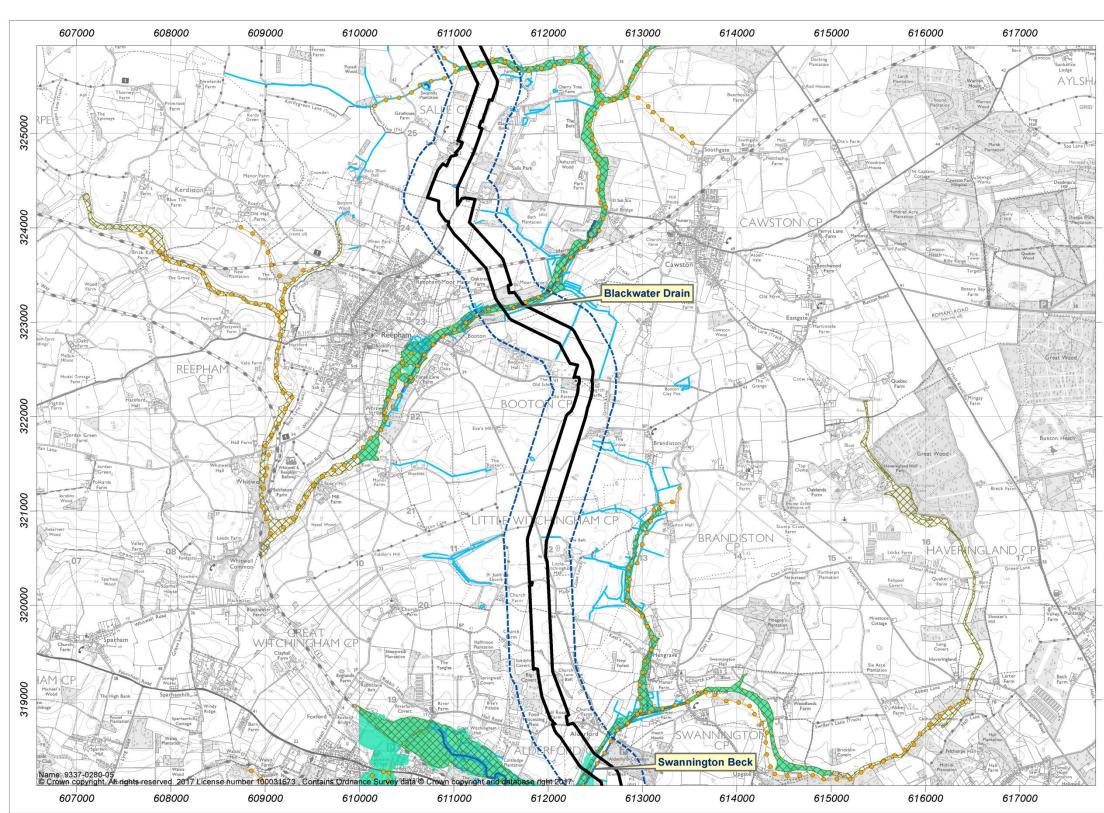


Figure 1.1: Environment Agency and IDB Watercourses and Flood Zones.



	Onsho	re cable corridor s	search area					
	250m Buffer from Onshore cable corridor							
	Flood 2							
325000	Flood 2	Flood Zone 3						
325	● Internal Drainage Board Drain							
	EA Detailed River Network							
	- Lake/R							
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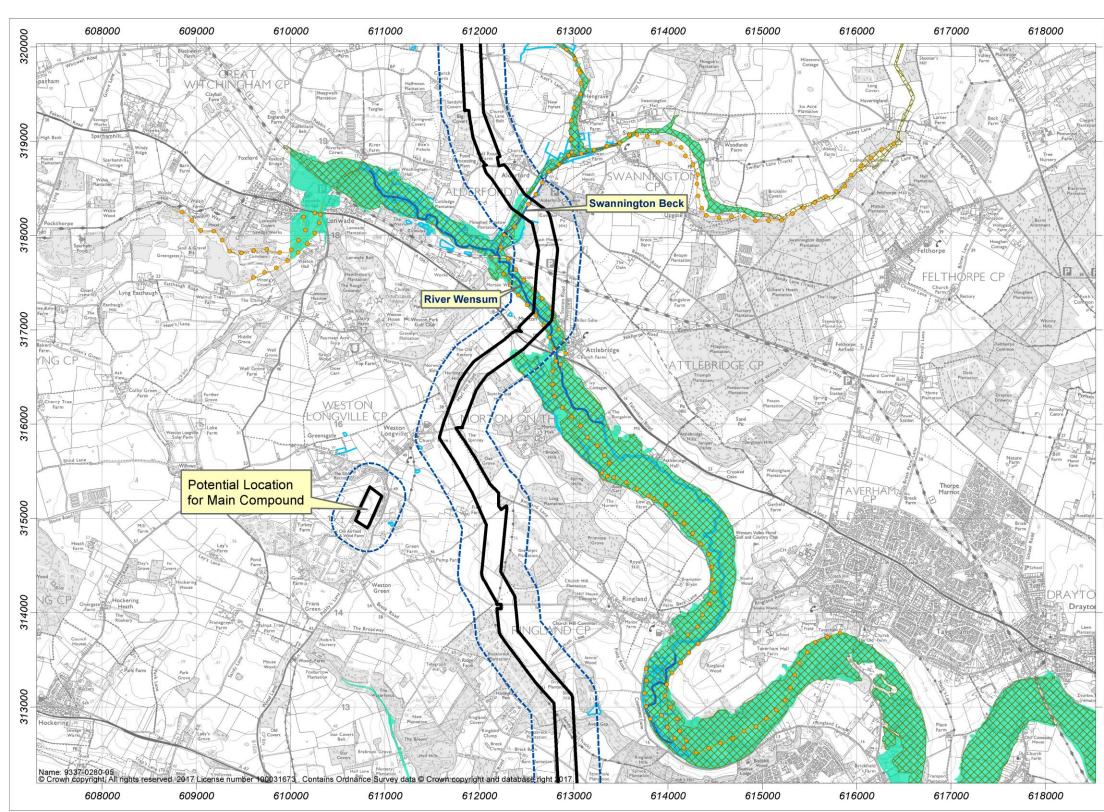


Figure 1.1: Environment Agency and IDB Watercourses and Flood Zones.



320000	Onsho	re cable corridor sea	arch area					
	250m Buffer from Onshore cable corridor							
	Flood 2	Zone 2						
00	Flood 2	Zone 3						
319000	- Internal Drainage Board Drain							
	EA Detailed River Network							
	- Lake/Reservoir							
	— Main R	iver						
318000	- Other \	Watercourse						
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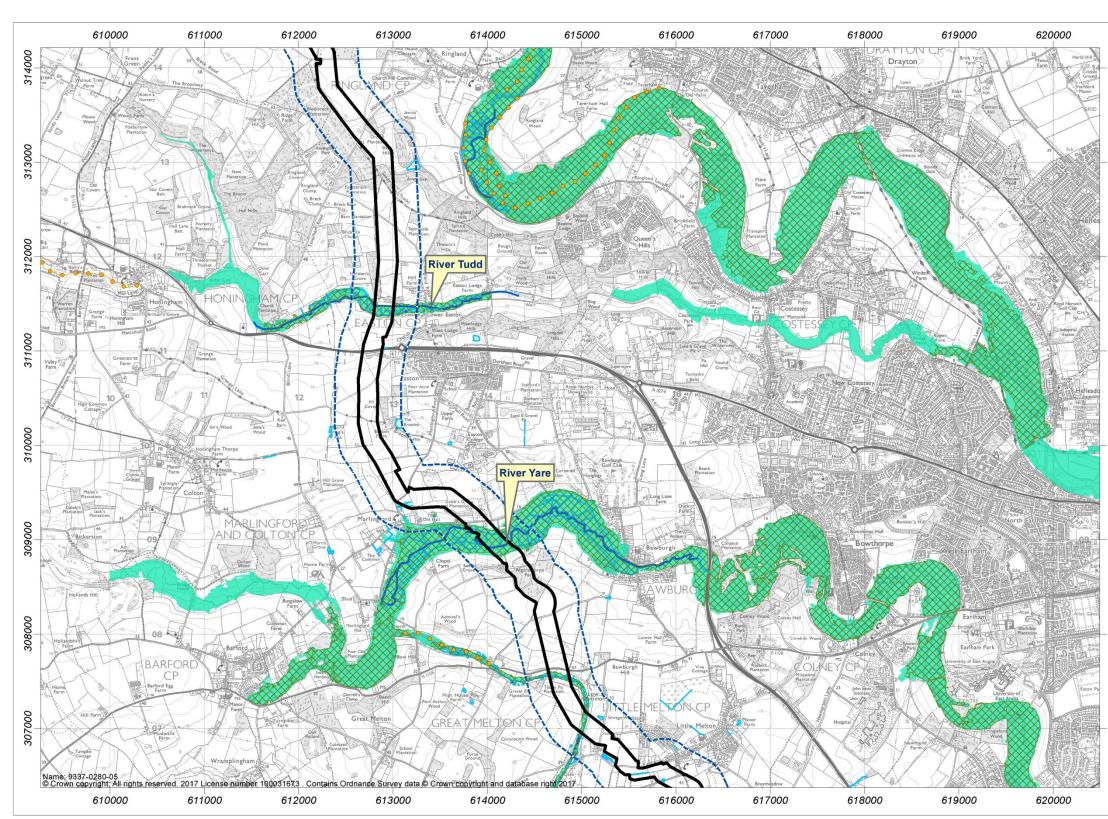


Figure 1.1: Environment Agency and IDB Watercourses and Flood Zones.



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314000	250m Buffer from Onshore cable corridor search area						
	-						
	Flood Zone 2						
	Flood Zone 3						
313000	<ul> <li>Internal Drainage Board Drain</li> </ul>						
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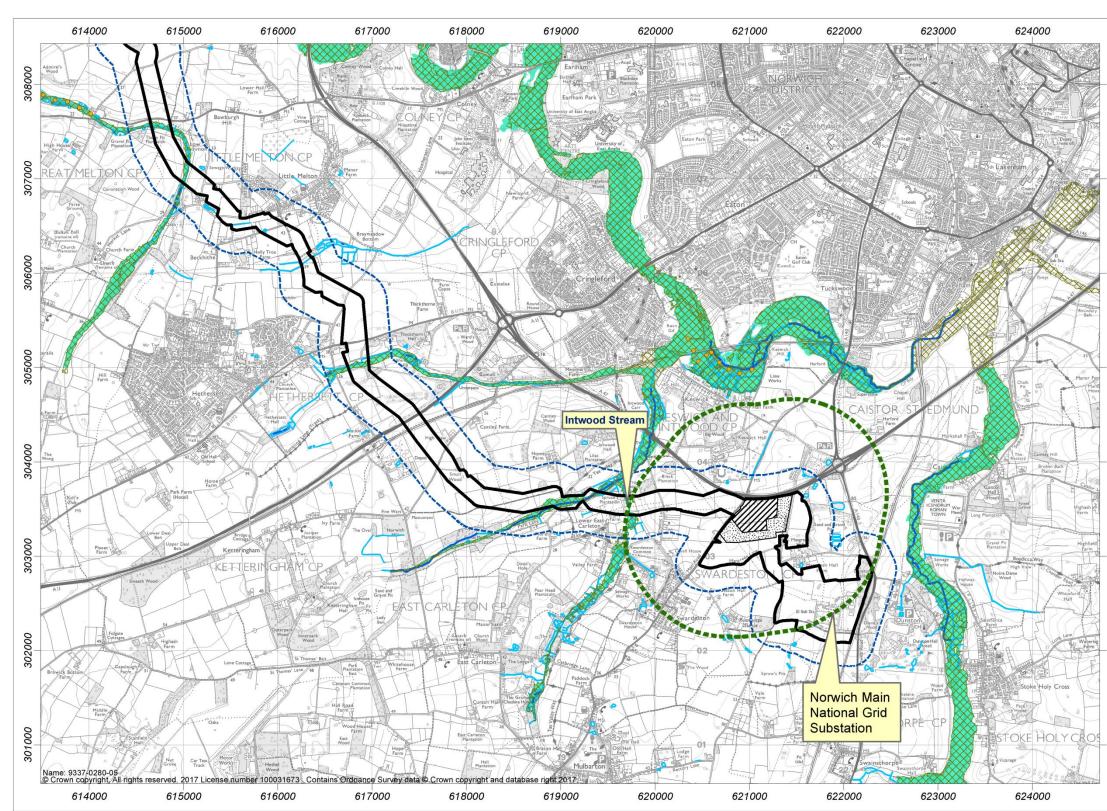


Figure 1.1: Environment Agency and IDB Watercourses and Flood Zone.



	Onsho	re cable corrido	or search area	1		
308000	Onshore HVDC converter/HVAC substation -					
		Onshore HVDC converter/HVAC substation - temporary				
	250m Buffer from Onshore cable corridor search area					
0	Buffer of 1km from onshore HVDC					
307000	Flood Zone 2					
	Flood 2	Zone 3				
	●─ Interna	l Drainage Boa	rd Drain			
~	EA Detaile	d River Netwo	ork			
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