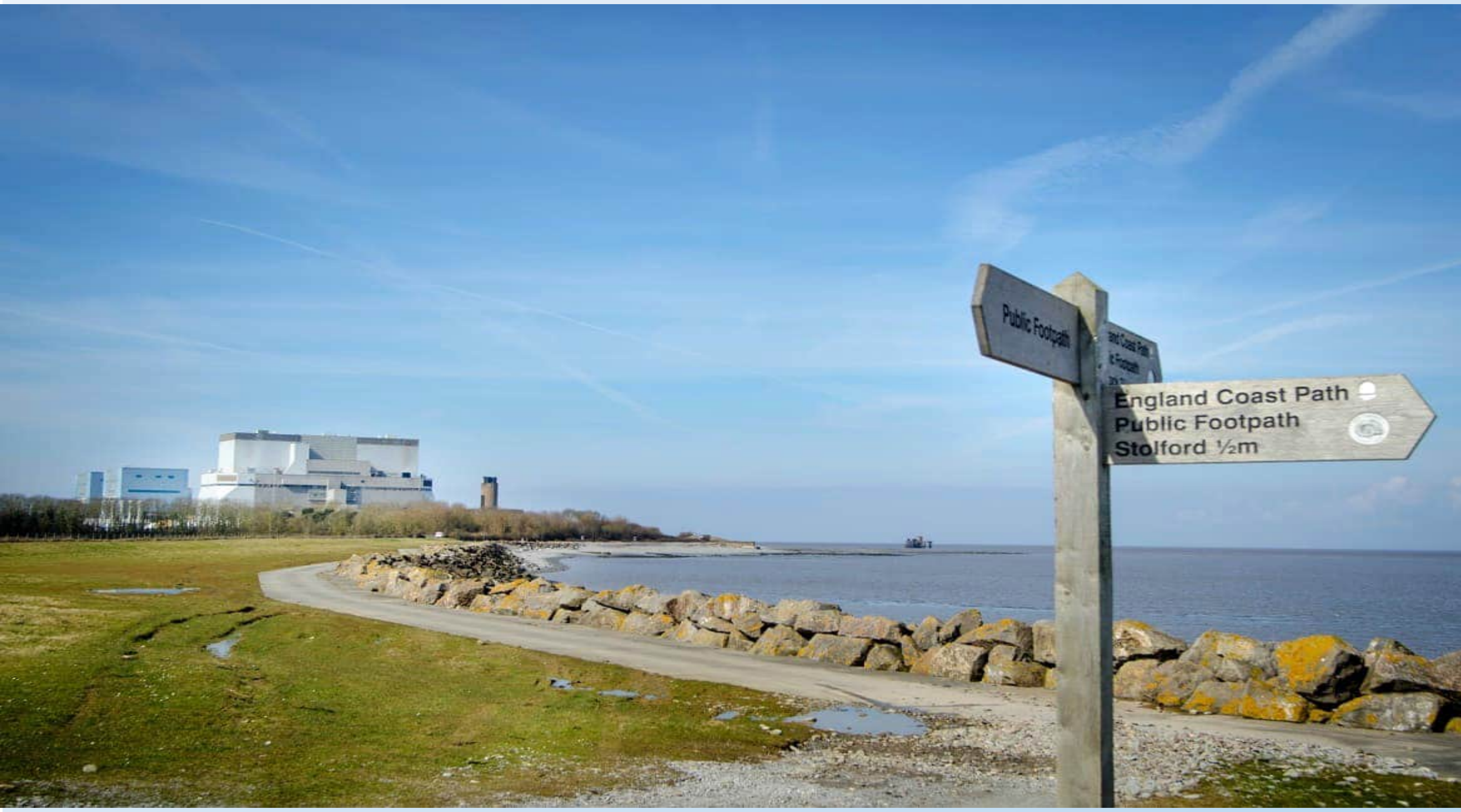
EDF Energy Nuclear Generation Ltd

Decommissioning of Hinkley Point B Nuclear Power Station

Environmental Statement

Volume III: Appendices - Part 2



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Marine biodiversity

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Hinkley Point B Intertidal Survey Report

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Hinkley Point B Nuclear Power Station

Intertidal Habitat Validation Survey Results October 2022

WSP Environment & Infrastructure Solutions UK Limited – February 2023

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Management systems

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1. Introduction

1.1 Overview

1.1.1 EDF Energy Nuclear Generation Limited (hereafter referred to as EDF) commissioned a marine habitat validation survey as part of the Environmental Impact Assessment (EIA) process underway to support the decommissioning of Hinkley Point B Nuclear Power Station (HPB) (the 'Site'). The survey has focused on the intertidal area adjacent to the Indicative Dismantling Works Area (hereafter referred to as the 'Works Area') (see **Figure 1.1**).

1.1.2 The survey provided an update of habitats, against which decommissioning activities will be assessed, to ensure any environmental impact is minimised while complying with regulatory requirements.

1.1.3 This report presents the results of the survey (undertaken in October 2022) which validates the marine biological baseline that was undertaken during the Phase 1 intertidal habitat survey in September 2020, along the shoreline adjacent to HPB. The information contained within this report is designed to inform the preparation of the EIA and Habitats Regulations Assessment (HRA) for the decommissioning works at HPB.

1.2 Site Description

1.2.1 The HPB Advanced Gas-cooled Reactor (AGR) power station is located on the north coast of Somerset on the shores of the Severn Estuary (see **Figure 1.1**). It is approximately 12 km north-west of the largest settlement Bridgwater. Smaller settlements of Wick, Burton, Shurton, Stogursley and Stolford are within 3 km of the Site. The Site is currently within the jurisdiction of Somerset West and Taunton Council (SWT), which will be replaced by the establishment of a new unitary authority for Somerset from April 2023.

1.2.2 HPB is to the east and adjacent to the Hinkley Point A (HPA) Nuclear Power Station which ceased generation in 1999 and is currently undergoing decommissioning. Immediately to the west of HPA is the Hinkley Point C (HPC) New Nuclear Build site, a European Pressurised Water Reactor under construction and expected to commence generation of the first unit in 2027 and the second unit in 2028. Collectively these sites are referred to as the Hinkley Point Complex.

1.2.3 The Hinkley Point Complex is largely surrounded by land in agricultural use with regular medium sized fields divided by fence-lines and hedges. HPB is bounded to the south and east by a belt of woodland which screens the lower buildings within the Works Area from view. Beyond this, its surroundings are predominantly open, gently rolling, lowland with the land rising from the coast and then down into the Holford valley, before again rising and falling towards Bum Brook and the village of Shurton.

1.2.4 The main features surrounding the Site and its immediate foreshore are mudflats to the north and east. The intertidal mudflats of Bridgwater Bay are separated from the Site by a low cliff, of around 5-10 m in height. At low tide the shore adjacent to the Site comprises a narrow rock platform, interspersed with and fringed by mudflats; while to the east, the mudflats extend up to 500 m from the shoreline at low water. Bridgwater Bay forms part of the Severn Estuary, a designated estuary, including the Severn Estuary Special Area of Conservation (SAC), Special Protection Area (SPA) and Ramsar site.

1.2.5 To the south of the station is a 400 kV substation which connects the station to the national transmission network. Beyond this lies a sewage treatment plant servicing foul water from HPA and the Site.

1.3 Purpose of this Report

1.3.1 The report provides a summary of the findings of the intertidal habitat validation survey and identifies any changes in habitat from the 2020 Phase 1 habitat survey. The findings of this report will be used to inform the baseline for the decommissioning EIA.

1.3.2 The report is a factual presentation of these findings and does not seek to identify potentially sensitive receptors or potential effects which might arise on these receptors as a result of decommissioning activities. However, any sensitive or notable species, habitats and features of conservation of interest recorded during the survey are highlighted and are discussed within the remainder of this report.

2. Methodology

2.1.1 A habitat validation survey of the intertidal area between 1 km east and 1 km west of HPB, extending from the upper limit of the intertidal zone (MHWS) to mean low water springs (MLWS) was completed (see **Figure 2.1** in **Appendix 2A**). The survey was carried out on Wednesday 26 and Thursday 27 October 2022.

2.1.2 On 26 October, following high water at 08:03h BST, access was gained to the foreshore at 11:00h and surveying continued until 15:45h, following low water at 14:16h. On 27 October, following high water at 08:39h BST, access was gained to the foreshore at 11:30h and surveying continued until 16:30h, following low water at 14:53h.

2.1.3 Predicted low water levels were 0.99 m above chart datum on both days, representing spring tides.

2.1.4 The weather was dry during the surveys with cloud cover varying from 10-50%. During the week before the survey the temperature in the daytime ranged from 8-17°C and the weather was relatively dry with occasional showers. Wind was mainly from the east, which reached 30km/h with gusts of 47km/h on the days of the survey. On the days of the survey the air pressure ranged from 1,003 to 1,014 hPa.

2.1.5 The survey was carried out in accordance with the following guidance:

- Handbook for Intertidal Phase 1 Surveys[1];
- Guidance on Assigning Benthic Biotopes using EUNIS or the Marine Habitat Classification of Britain and Ireland (revised 2019)[2]; and
- JNCC Marine Monitoring Handbook procedural guidance 1.1 and 3.6[3].

2.1.6 Using a hand-held Global Positioning System (GPS) receiver and guided by aerial photographs and the 2020 Phase 1 intertidal habitat map, the extent of each habitat and species complex present (referred to as a 'biotope') was recorded, noting the dominant species present, extent of cover and condition of the habitat in each case. Biotope boundaries were recorded, *in-situ*, on the aerial photographs and by marking points and polygons electronically using the 'Collector for ArcGIS' App which provides live position fixing from GPS signals. Due to the size of the survey area, three transects perpendicular to the shoreline were surveyed. This aimed to capture the variation between the limestone layers and allow for extrapolation of these biotopes using satellite imagery.

2.1.7 The validation survey commenced at the western boundary of the survey area on the 26 October and the biotopes were recorded in a straight line from the upper to the lower shore, finishing around low water. On the 27 October a transect close to the eastern boundary and in between the eastern and western boundary was completed from the upper to the lower shore (see **Figure 2.1** in **Appendix 2A**).

[1] Wyn, G., Brazier, P., Birch, K., Bunker, A., Cooke, A., Jones, M., Lough, N., McMath, A. and Roberts, S. (2000). Handbook for Marine Intertidal Phase 1 Biotope Mapping Survey, 114 pp Countryside Council for Wales, ISBN 1 86169 144 0

[2] Parry, M.E.V. (2019) Guidance on Assigning Benthic Biotopes using EUNIS or the Marine Habitat Classification of Britain and Ireland (revised 2019), JNCC Report No. 546, JNCC, Peterborough, ISSN 0963-8091

[3] Davies, J., Baxter, J., Bradley, M., Connor, D., Khan, J., Murray, E., Sanderson, W., Turnbull, C. and Vincent, M. (2001). Joint Nature Conservation Committee Marine Monitoring Handbook, 405 pp, ISBN 185716 550 0

2.1.8 Access was gained from the western boundary by walking along the seawall and down a concrete ramp which provides safe access to a steep part of the shore.

2.1.9 The eastern and westernmost part of the survey area is made up of soft mud that is completely submerged during high tide. Due to these conditions, and observations made on the days of the survey, it was concluded during the surveys that this was unsafe to walk on, and the area was excluded. Additional visual observations of the area were made from adjacent safe ground.

2.1.10 During the habitat validation survey, the range and distribution of broadscale habitats, species of conservation interest and the characteristic and notable biotopes were recorded. Biotope classifications were determined using the JNCC Marine Habitat Classification System[4] to a minimum of Level 3 of the system. All information following surveys and analysis was digitised using ArcGIS to produce an updated intertidal habitat map for the HPB survey area.

2.1.11 It should be noted that the initial survey, completed in September 2020, was undertaken whilst HPB was operational, compared to the October 2022 visit, when this was no longer the case, with the power station having ceased generation. As a result, since summer 2022, there has been reduced water flow released through the cooling water outfall and a reduction in the associated discharged thermal load. The aim of this report, as described within **Section 1.3**, is to describe the key habitats and species present in the intertidal area adjacent to HPB but it does not discuss any changes to habitats and species present (if identified). This information will be presented in the subsequent impact assessment reporting.

[4] JNCC (2022) The Marine Habitat Classification for Britain and Ireland Version 22.04. [Accessed 9 November 2022]. Available from: https://mhc.jncc.gov.uk/

3. Results

3.1 Overview

3.1.1 Using the results of the 2020 Phase 1 habitat survey, biotopes present and their extents were confirmed and recorded using the GIS-based Collector App (see **Chapter 2: Methodology**). Due to the large area, google satellite images were used to extrapolate the intertidal biotopes. Only littoral biotopes selected from the JNCC Marine Habitat Classification System[4] were recorded, as subtidal biotopes could not be confirmed from a walkover survey. **Appendix 3A** provides the reference list for littoral biotopes. Biotope maps produced from the 2020 Phase 1 habitat survey are reproduced for comparison in **Appendix 3B**.

3.1.2 Only intertidal biotopes could be recorded definitively. The shoreline in the central part of the survey area is distinctive as there are inclined layers of limestone blocks that form the littoral area, creating a unique pattern where movement towards the sea in punctuated by a series of upward steps followed by a gradual slope then a level area where water is often retained by the next step (see **Diagram 3.1** and **Photos 3.1** and **3.2**). Some of the broader channels are divided by smaller steps, barely submerged at low water, which support lines of fucoid algae (see **Photo 3.6**). Erosion of the blocks can create small rockpools and where multiple blocks within a layer have been removed, small channels have been created. This creates a patten of blocks with potential macroalgae growth, then a channel or dip, where the blocks have been eroded. Rockpools are present, where one or two limestone blocks have been eroded, however these are numerous further from the shore and therefore, not all small rockpools were recorded during the survey.

Diagram 3.1 – Typical transect sequence down the central shore (not to scale)

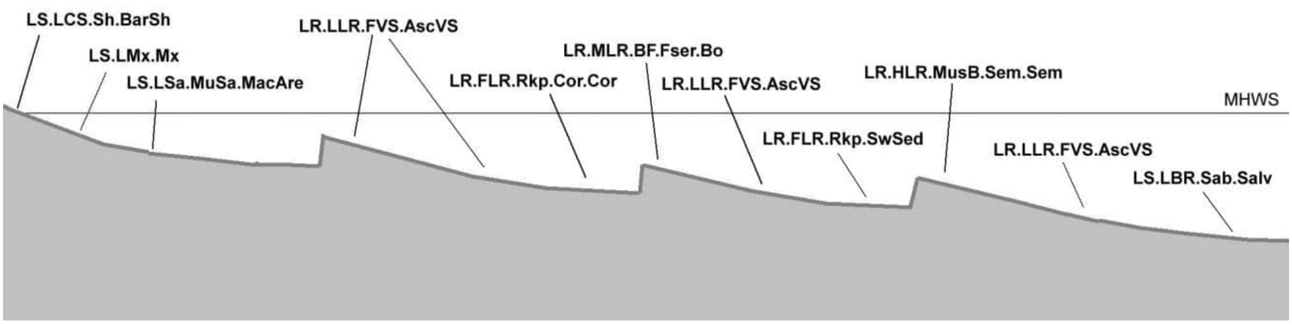


Photo 3.1 View down the shore showing sequence of limestone steps and slopes, some ending in broad channels

3.1.3 Observations on each biotope recorded within the survey area during the habitat validation survey are detailed below. Photographs taken of different biotopes during the habitat validation survey are also presented, illustrating the representative habitats and species present in the survey area. The observations are described in the order in which the survey was conducted (i.e. starting at the western limit of the survey area and working eastwards). The spatial distribution of the biotopes recorded is shown on **Figure 3.3** and **Figure 3.4** in **Appendix 3C**.

3.2 JNCC biotopes recorded

LS.LCS.Sh.BarSh - Barren littoral shingle

3.2.1 Towards the western boundary of the survey area, the shore comprises almost exclusively limestone rocks, which slope gently towards the sea. At the top of the shore throughout this section the shallow gradient of this sheltered intertidal bay area allows the accumulation of small rocks (biotope **LS.LCS.Sh.BarSh**) on the upper shore.

3.2.2 This sedimentary biotope, comprising littoral coarse sediment made up of shingle (typically with particle size ranging from 4-256 mm), supports virtually no macrofauna or macroflora in its very mobile and freely draining substratum.

3.2.3 The extent of this band of barren shingle has extended seaward since the 2020 Phase 1 habitat survey. However, this is typically a mobile feature, and the changes are not regarded as significant.

Photo 3.2 Biotope LS.LCS.Sh.BarSh on upper shore

LS.LSa.MuSa.MacAre- *Macoma balthica* and *Arenicola marina* in littoral muddy sand

3.2.4 There were extensive areas of fine sand and muddy sand, with scattered stone, boulders and cobbles. Large areas of this biotope were found towards the eastern boundary of the survey area on the upper shore and additionally, there was a small area of this biotope close to the cooling water outlet channel. The biotope was also found near the western boundary on the upper shore as well as further down the shore towards the sea in the larger channels. Areas near the western boundary with this biotope present, often had rippled surfaces.

3.2.5 This biotope is subject to variable salinity conditions and was characterised by the casts of the lugworm *Arenicola marina*, which were visible on the sediment surface. The areas with this biotope on the upper shores had scattered boulders and rocks with attached fucoids.

3.2.6 The previous 2020 Phase 1 habitat survey recorded this biotope extending from the upper shore towards the sea on both the western and eastern boundaries. During the habitat validation survey, these areas were not possible to reach due to the tidal regime and the sediment underfoot. Consequently, characterisation of these areas up to 200m down the shore was undertaken from a distance using digital zoom photography as part of the habitat validation survey. On this basis, it was recorded that there is no evidence of significant change in these areas since the 2020 Phase 1 habitat survey.

Photo 3.3 Biotope LS.LSa.MuSa.MacAre with lugworm casts and rippled surface on the upper shore

LS.LMx.Mx- Species-rich mixed sediment shores

3.2.7 Towards the western boundary on the upper shore there was an extensive area of extremely mixed habitat, including patches of muddy sand with stone, cobbles and boulders, areas of sand with scattered cobbles and boulders and areas of dense boulder cover over a sandy substrate. As the area contains many patches of sand and areas of varying degrees of cover by cobbles and boulders, it was recorded during the habitat validation survey as the biotope complex **LS.LMx.Mx**.

3.2.8 Recording of this biotope during the habitat validation survey when it was not recorded in 2020 Phase 1 habitat survey may represent a real change (for example, loss of fine sediment or movement of cobbles and boulders in a major storm). Examination of historic aerial photos shows that this mixed substrate area has been present in the past.

Photo 3.4 Biotope LS.LMx.Mx on the upper shore

LR.LLR.FVS.AscVS - *Ascophyllum nodosum* and *Fucus vesiculosus* on variable salinity mid eulittoral rock

3.2.9 This biotope was found across the survey area between the eastern and western boundaries and from the upper shore to the lower shore. The habitat validation survey recorded an area of sheltered (low energy) biotope comprising fucoids (*Fucus* spp and *Ascophyllum nodosum*) on boulder and cobble habitat, with a limited understorey of green algae of the Ulvaceae, corresponding to the biotope **LR.LLR.FVS.AscVS** (see **Photo** 3.6).

3.2.10 This biotope was often observed on top of the limestone layers lower down the slope, which due to the sloping nature of the blocks, provides a sheltered environment allowing for extensive macroalgae cover. Both species of wracks (*Ascophyllum nodosum* and *Fucus vesiculosus*) has a lot of air bladders further indication of a sheltered environment.

3.2.11 The presence and extent of this biotope during the habitat validation survey corresponded very closely to its presence recorded in the 2020 Phase 1 habitat survey, with no indication of any significant change

Photo 3.5 Biotope LR.LLR.FVS.AscVS on the mid shore

LR.FLR.Eph.EphX - Ephemeral green and red seaweeds on variable salinity and/or disturbed eulittoral mixed substrata

3.2.12 In the western upper to mid shore environment and the eastern lower shore there were areas of ephemeral green algae, with a few red macroalgae, typical of shores exposed to variable salinity. This biotope was recorded in the shallower channels between the limestone layers.

3.2.13 The observations during the habitat validation survey were broadly consistent with the presence and extent of this biotope recorded during the 2020 Phase 1 habitat survey, indicating no significant change. Some areas in the previous survey were classified as **LR.LLR.FVS.FvesVS**, however, the habitats observed in the habitat validation survey resembled the **LR.FLR.Eph.EphX.** This change in biotopes is probably a result of seasonal change and the general dynamic nature of this area of the coast. The channels allow for more water to be retained and therefore species associated with the **LR.FLR.Eph.EphX** biotope are more likely to thrive.

3.2.14 On this basis, there is no evidence of significant change in these areas since the 2020 Phase 1 habitat survey.

Photo 3.6 Biotope LR.FLR.Eph.EphX observed in one of the lower shore channels

LR.FLR.Rkp.Cor.Cor - Coralline crusts and *Corallina officinalis* in shallow eulittoral rockpools

3.2.15 In the western upper to mid shore environment and the eastern mid shore there were areas of Coralline crusts and *Corallina officinalis*. This biotope was recorded in shallower rockpools/channels between the limestone layers. Some of the rockpools had *Ulva* spp. as well as winkle *Littorina littorea* and the anemone *Actinia equina* present.

3.2.16 The observations during the habitat validation survey were broadly consistent with the presence and extent of this biotope recorded during the 2020 Phase 1 habitat survey, indicating no significant change.

Photo 3.7 Biotope LR.FLR.Rkp.Cor.Cor observed in rockpools

LR.FLR.Rkp.SwSed- Seaweeds in sediment-floored eulittoral rockpools

3.2.17 In the western and eastern mid to upper shore environment there were areas of seaweed in sediment-floored eulittoral rockpools. This biotope was recorded in larger and deeper rockpools/channels between the limestone layers. Some of the rockpools had a mix of different macroalgae present including greens from the *Ulva* family and red algae including *Corallina officinalis*.

3.2.18 The observations during the habitat validation survey were broadly consistent with the presence and extent of this biotope recorded during the 2020 Phase 1 habitat survey, indicating no significant change.

Photo 3.8 Biotope LR.FLR.Rkp.SwSed observed in sediment floored rockpools

LR.MLR.BF.Fser.Bo - *Fucus serratus* and under-boulder fauna on exposed to moderately exposed lower eulittoral boulders

3.2.19 By the western survey area boundary in the mid shore, exposed to moderately exposed (moderate energy) shoreline with a reasonably shallow slope with areas of lower eulittoral boulders supporting fucoids (mainly *Fucus serratus*) and the barnacle *Semibalanus balanoides*. Other invertebrates recorded included the limpet *Patella vulgate.*

3.2.20 Due to a higher tidal level, this biotope was not distinguished in the 2020 Phase 1 habitat survey from the lower energy biotope **LR.LLR.FVS.AscVS**, which also typically has fucoid species present. The greater visibility during the habitat validation survey enabled identification of the presence of the **LR.MLR.BF.Fser.Bo** littoral biotope, which occurred in the same locations where the presence of **LR.LLR.FVS.AscVS** was recorded in the 2020 Phase 1 habitat survey.

3.2.21 On this basis, there is no evidence of significant change in these areas since the 2020 Phase 1 habitat survey.

Photo 3.9 Biotope LR.MLR.BF.Fser.Bo on mid shore

LR.LLR.FVS.FvesVS- *Fucus vesiculosus* on variable salinity mid eulittoral boulders and stable mixed substrata

3.2.22 The western and eastern survey area boundaries in the mid and upper shore, have layers of sheltered to extremely sheltered shoreline, which supports the growth of *Fucus vesiculosus.* This biotope has variable salinity and the barnacle *Semibalanus balanoides*was also present.

3.2.23 Due to a higher tidal level, this biotope was not distinguished in the 2020 Phase 1 habitat survey from the **LR.LLR.FVS.AscV** biotope which also typically has fucoid species present. The greater visibility during the habitat validation survey enabled identification of the presence of the **LR.LLR.FVS.FvesVS** littoral biotope, which occurred in the same locations where the presence of **LR.LLR.FVS.AscV** was recorded in the 2020 Phase 1 habitat survey.

3.2.24 On this basis, there is no evidence of significant change in these areas since the 2020 Phase 1 habitat survey.

Photo 3.10 Biotope LR.LLR.FVS.FvesVS on mid shore

LR.MLR.BF.FvesB - *Fucus vesiculosus* and barnacle mosaics on moderately exposed mid eulittoral rock

3.2.25 The western survey area boundary in the mid shore to upper shore had areas of exposed to moderately exposed (moderate energy) shoreline with areas of mid eulittoral boulders and bedrock supporting fucoids (mainly *Fucus vesiculosus*) and the barnacle *Semibalanus balanoides*. Other invertebrates recorded included the limpet *Patella vulgate.*

3.2.26 Due to a higher tidal level, this biotope was not distinguished to a level 5 biotope classification, in the 2020 Phase 1 habitat survey. The greater visibility during the habitat validation survey enabled identification of the presence of the **LR.MLR.BF.FvesB** littoral biotope, which occurred in the same locations, where the presence of **LR.MLR** was recorded in the 2020 Phase 1 habitat survey.

3.2.27 On this basis, there is no evidence of significant change in these areas since the 2020 Phase 1 habitat survey.

Photo 3.11 Biotope LR.MLR.BF.FvesB on mid shore

LR.HLR.MusB.Sem.Sem- *Semibalanus balanoides, Patella vulgata* and *Littorina* spp. on exposed to moderately exposed eulittoral rock

3.2.28 Across the survey area, in the lower shore environment, in the high energy, exposed areas at the top of the slope above each step barnacle dominated boulders and limestone blocks were present. The boulders were characterised by dense cover of barnacles *Semibalanus balanoides* and the limpet *Patella vulgate* was also present. In between some of the boulders and in crevices there was some maroalgal growth and the beadlet anemone *Actinia equina*.

3.2.29 This biotope was not recorded during the 2020 Phase 1 habitat survey, however areas in the previous survey classified as **LR.MLR** are correspond with the **LR.HLR.MusB.Sem.Sem** biotope.

3.2.30 On this basis, there is no evidence of significant change in these areas since the 2020 Phase 1 habitat survey.

Photo 3.12 Biotope LR.HLR.MusB.Sem.Sem on the lower shore

LS.LBR.Sab.Salv- *Sabellaria alveolata* reefs on sand-abraded eulittoral rock

3.2.31 In the lower shore environment across the survey area *Sabellaria alveolata* reefs were present. This biotope was found in the exposed environment at the end of the limestone block layers.

3.2.32 Lower tidal levels available during the habitat validation survey revealed a large area of littoral sediment and further inspection showed it to be colonised by *Sabellaria alveolata* rather than littoral mud. This reclassification as part of the intertidal zone does not indicate any likely significant change in this polychaete dominated area since the 2020 Phase 1 habitat survey.

3.2.33 On this basis, there is no evidence of significant change in these areas since the 2020 Phase 1 habitat survey.

Photo 3.13 Biotope LS.LBR.Sab.Salv in the lower shore

4. Summary

4.1.1 A total of twelve biotopes (eight hard substrate and four sedimentary) were recorded during the intertidal validation survey of the foreshore adjacent to HPB on 26 and 27 October 2022.

4.1.2 Biotopes recoded ranged from those typical of a more sheltered shores in the upper shore, with a transition to sedimentary biotopes in the more exposed environments further out in the Severn Estuary. A summary of biotopes recorded is given in **Table 4.1**. Compared with the 2020 Phase 1 habitat survey, there have been a few changes in the upper shores of the survey area. The habitat validation survey was able to access more of the intertidal area due to the lower tide. This allowed for more of the limestone layers to be exposed and access to the lower shore. Due to this there were more observations of the biotopes **LS.LBR.Sab.Salv** and **LR.Rkp.Cor.Cor** recorded compared to the 2020 Phase 1 habitat survey.

4.1.3 Further up the shore there was barren shingle (**LS.LCS.Sh.BarSh**), which extended further down the shore compared to the 2020 Phase 1 habitat survey, which had a range of biotopes in this area.

4.1.4 Apart from the instances noted above, more suitable water levels during the habitat validation survey compared with the 2020 Phase 1 habitat survey allowed better discrimination of biotopes in some areas of the lower shore, resulting in some changes to the list of biotopes recorded. However, these were consistent with the results of the 2020 Phase 1 habitat survey and the overall conclusion is that there has been no significant change in the intertidal biotopes presence and distribution since 2020, except for changes noted above.

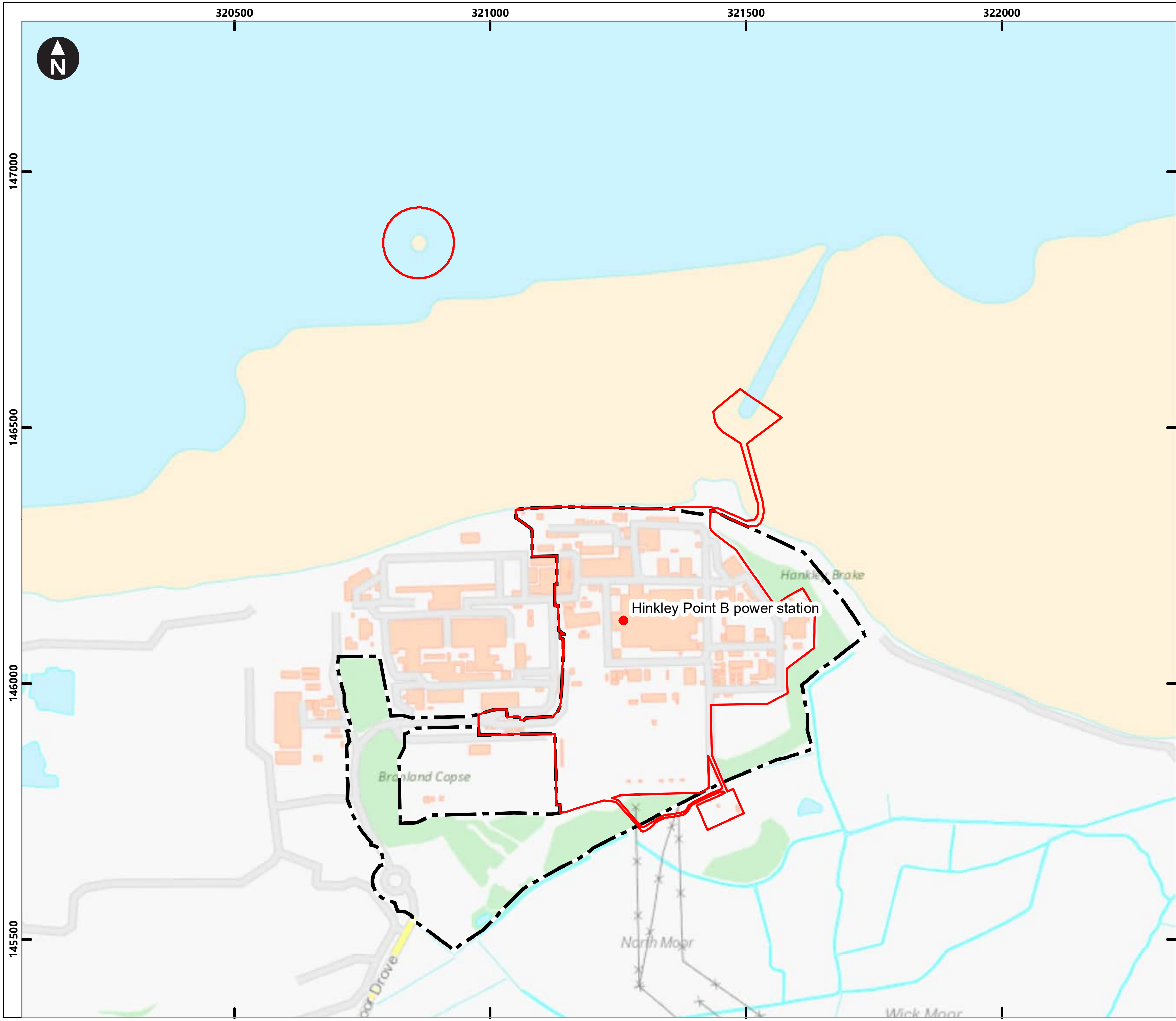
4.1.5 No priority marine features, protected species or other notable fauna or flora were recorded during the habitat validation survey.

Table 4.1 Summary of biotopes recorded during the HPB intertidal validation survey

Biotope code	Biotope name	Species recorded
Hard Substrate Biotopes		
LR.LLR.FVS.AscVS	*Ascophyllum nodosum* and *Fucus vesiculosus* on variable salinity mid eulittoral rock.	*Ascophyllum nodosum* *Fucus vesiculosus* *Ulva intestinalis* *Littorina littorea*
LR.FLR.Eph.EphX	Ephemeral green and red seaweeds on variable salinity and/or disturbed eulittoral mixed substrata.	*U. intestinalis*
LR.MLR.BF.Fser.Bo	*Fucus serratus* and under-boulder fauna on exposed to moderately exposed lower eulittoral boulders.	*Fucus serratus* *Semibalanus balanoides* *Patella vulgata*

Biotope code	Biotope name	Species recorded
LR.FLR.Rkp.Cor.Cor	Shallow and smaller rockpools throughout the eulittoral zone in a wide range of wave exposures characterised by a covering of encrusting coralline algae on which *Corallina officinalis* often forms a dense turf.	*Corallina officinalis*
LR.FLR.Rkp.SwSed	Rockpools with sediment (mud, sand, gravel) floors supporting distinct communities of scour-tolerant seaweeds.	*Fucus serratus* *Corallina officinalis* *Ulva intestinalis* *Ulva lactuca*
LR.HLR.MusB.Sem.Sem	Very exposed to sheltered mid to upper eulittoral bedrock and large boulders characterised by dense barnacles *Semibalanus balanoides* and the limpet *Patella vulgata*.	*Semibalanus balanoides* *Patella vulgate* *Actinia equina* *Crassostea* sp.
LR.MLR.BF.FvesB	Exposed to moderately exposed mid eulittoral bedrock and boulders are frequently characterised by a mosaic of the barnacle *Semibalanus balanoides* and the wrack *Fucus vesiculosus.*	*Fucus vesiculosus.* *Semibalanus balanoides*
LR.LLR.FVS.FvesVS	Sheltered to extremely sheltered mid eulittoral pebbles and cobbles lying on sediment subject to variable salinity and characterised by the wrack *Fucus vesiculosus.*	*Fucus vesiculosus.* *Semibalanus balanoides*
Sedimentary Biotopes		
LS.LCS.Sh.BarSh	Barren Littoral Shingle.	n/a
LS.LSa.MuSa.MacAre	Polychaete/bivalve-dominated muddy sand shores.	*Macoma balthica* *Arenicola marina*
LS.LMx.Mx	Littoral mixed sediment.	*Fucus serratus* *Fucus vesiculosus* *Ascophyllum nodosum* *Ulva intestinalis*
LS.LBR.Sab.Salv	*Sabellaria alveolata* reefs.	*Sabellaria alveolate* *Semibalanus balanoides* *Patella vulgata*

Appendix 1A
Figure 1.1 Hinkley Point B "Site Area" and "Works Area"



Key

- Hinkley Point B power station
- Indicative Dismantling Works Area ("Works Area")
- Nuclear Site Licence Boundary ("The Site")

Meters
0 40 80 160 240 320
1:10,000

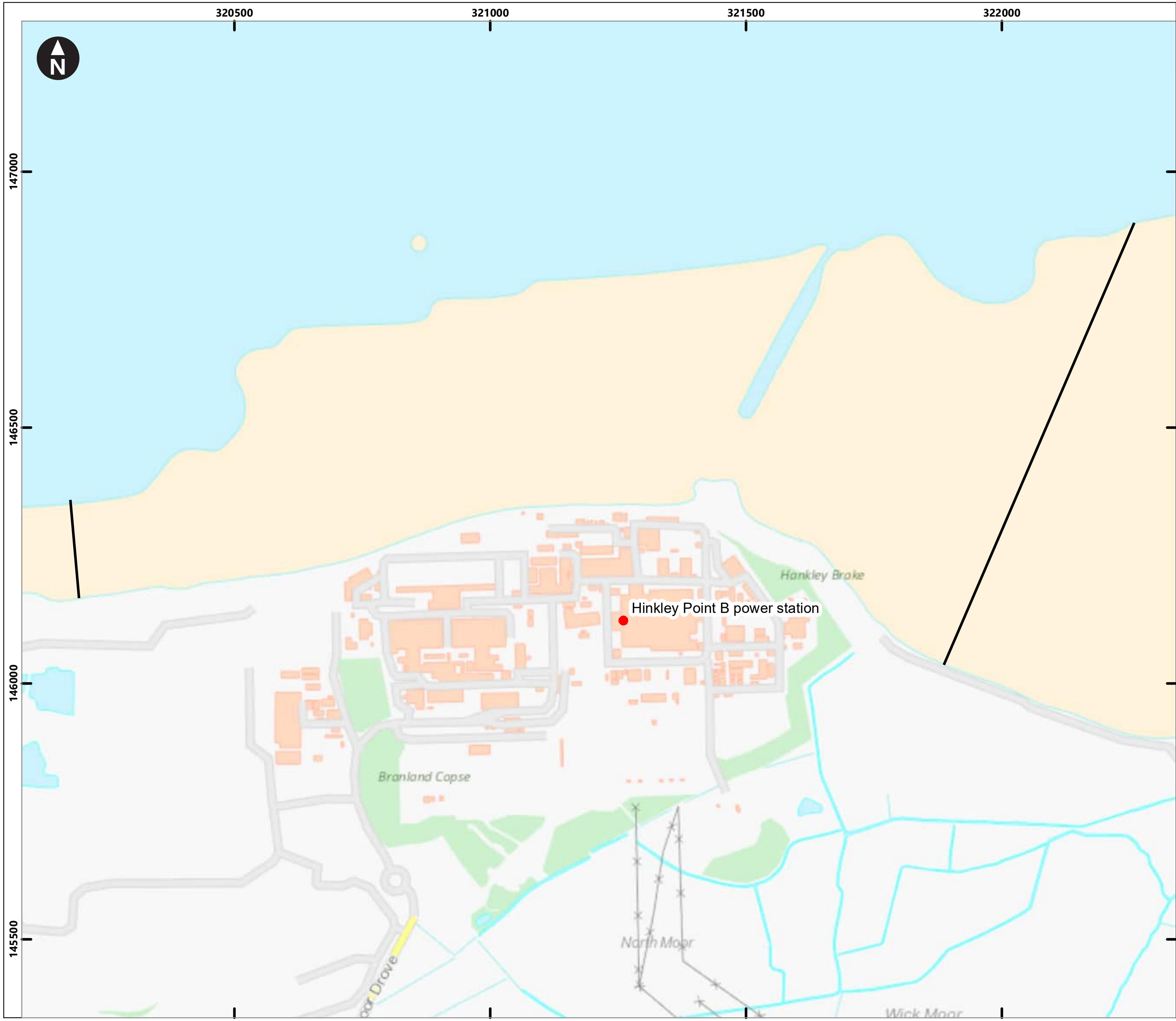
Intertidal Validation Survey October 2022 for Hinkley Point B Nuclear Power Station

Figure 1.1

Figure showing HPB "Site" boundary and "Works Area"

System Identifier:				Version:
852351-WSPE-XX-XX-FG-OE-00014_S0_P01.1				1.0
Company: WSP	Drawn By: SUTET	Chk/Aprvd: MCCOC	Drawn Date: 13/01/2023	Status: FINAL

Appendix 2A
Figure 2.1 Hinkley Point B intertidal survey area



Key

- Hinkley Point B power station
- Extent of HPB intertidal validation survey area

Meters
0 40 80 160 240 320
1:10,000

Intertidal Validation Survey October 2022 for Hinkley Point B Nuclear Power Station

Figure 2.1

Figure showing HPB intertidal survey area

System Identifier:				Version:
852351-WSPE-XX-XX-FG-OE-00015_S0_P01.1				1.0
Company: WSP	Drawn By: SUTET	Chk/Aprvd: MCCOC	Drawn Date: 13/01/2023	Status: FINAL

Appendix 3A
JNCC intertidal biotopes

Table 3A12 Summary of the hierarchy for intertidal biotopes from the JNCC marine habitat classification system (The Marine Habitat Classification for Britain and Ireland - Version 04.05 – updated 2022)

Level 2 Broad habitat type	Level 3 Habitat complexes	Level 4 Biotope complexes	Level 5 Biotopes	Level 6 Sub-biotopes	Code
LR Littoral rock (and other hard substrata)	**HLR** High energy littoral rock	**MusB** Mussel and/or barnacle communities	**MytB** - *Mytilus edulis* and barnacles on very exposed eulittoral rock		**LR.HLR.MusB.MytB**
			Cht - *Chthamalus* spp. on exposed eulittoral rock	**Cht** - *Chthamalus* spp. on exposed upper eulittoral rock	**LR.HLR.MusB.Cht.Cht**
				Lpyg - *Chthamalus* spp. and *Lichina pygmaea* on steep exposed upper eulittoral rock	**LR.HLR.MusB.Cht.Lpyg**
			Sem - *Semibalanus balanoides* on exposed to moderately exposed or vertical sheltered eulittoral rock	**Sem** - *Semibalanus balanoides*, *Patella vulgata* and *Littorina* spp. on exposed to moderately exposed or vertical sheltered eulittoral rock	**LR.HLR.MusB.Sem.Sem**
				FvesR - *Semibalanus balanoides*, *Fucus vesiculosus* and red seaweeds on exposed to moderately exposed eulittoral rock	**LR.HLR.MusB.Sem.FvesR**

Level 2 Broad habitat type	**Level 3 Habitat complexes**	**Level 4 Biotope complexes**	**Level 5 Biotopes**	**Level 6 Sub-biotopes**	**Code**
				LitX - *Semibalanus balanoides* and *Littorina* spp. on exposed to moderately exposed eulittoral boulders and cobbles	**LR.HLR.MusB.Sem.LitX**
		FR Robust fucoid and/or red seaweed communities	**Fdis** - *Fucus distichus* and *Fucus spiralis* f. *nana* on extremely exposed upper shore rock		**LR.HLR.FR.Fdis**
			Coff - *Corallina officinalis* on exposed to moderately exposed lower eulittoral rock	**Coff** - *Corallina officinalis* and *Mastocarpus stellatus* on exposed to moderately exposed lower eulittoral rock	**LR.HLR.FR.Coff.Coff**
				Puly - *Corallina officinalis*, *Himanthalia elongata* and *Patella ulyssiponensis* on very exposed lower eulittoral rock	**LR.HLR.FR.Coff.Puly**
			Him - *Himanthalia elongata* and red seaweeds on exposed to moderately exposed lower eulittoral rock		**LR.HLR.FR.Him**
			Pal - *Palmaria palmata* on very exposed to moderately exposed lower eulittoral rock		**LR.HLR.FR.Pal**
			Mas - *Mastocarpus stellatus* and *Chondrus crispus* on very exposed to moderately exposed lower eulittoral rock		**LR.HLR.FR.Mas**
			Osm - *Osmundea pinnatifida* on moderately exposed mid eulittoral rock		**LR.HLR.FR.Osm**

Level 2 Broad habitat type	Level 3 Habitat complexes	Level 4 Biotope complexes	Level 5 Biotopes	Level 6 Sub-biotopes	Code
			RPid - *Ceramium* sp. and piddocks on eulittoral fossilised peat		**LR.HLR.FR.RPid**
		FT Fucoids in tide-swept conditions	**AscT** - *Ascophyllum nodosum*, sponges and ascidians on tide-swept mid eulittoral rock		**LR.HLR.FT.AscT**
			FserT - *Fucus serratus*, sponges and ascidians on tide-swept lower eulittoral rock		**LR.HLR.FT.FserT**
			FserTX - -*Fucus serratus* with sponges, ascidians and red seaweeds on tide-swept lower eulittoral mixed substrata		**LR.HLR.FT.FserTX**
	MLR Moderate energy littoral rock	**MusF** Mussels and fucoids on moderately exposed shores	**MytFves** - *Mytilus edulis* and *Fucus vesiculosus* on moderately exposed mid eulittoral rock		**LR.MLR.MusF.MytFves**
			MytFR - *Mytilus edulis*, *Fucus serratus* and red seaweeds on moderately exposed lower eulittoral rock		**LR.MLR.MusF.MytFR**
			MytPid - *Mytilus edulis* and piddocks on eulittoral firm clay		**LR.MLR.MusF.MytPid**
		BF Barnacles and fucoids on moderately exposed shores	**PelB** - *Pelvetia canaliculata* and barnacles on moderately exposed littoral fringe rock		**LR.MLR.BF.PelB**
			FspiB - *Fucus spiralis* on exposed to moderately exposed upper eulittoral rock		**LR.MLR.BF.FspiB**

Level 2 Broad habitat type	**Level 3 Habitat complexes**	**Level 4 Biotope complexes**	**Level 5 Biotopes**	**Level 6 Sub-biotopes**	**Code**
			FvesB - *Fucus vesiculosus* and barnacle mosaics on moderately exposed mid eulittoral rock		**LR.MLR.BF.FvesB**
			Fser - *Fucus serratus* on moderately exposed lower eulittoral rock	**R** - *Fucus serratus* and red seaweeds on moderately exposed lower eulittoral rock	**LR.MLR.BF.Fser.R**
				Bo - *Fucus serratus* and under-boulder fauna on exposed to moderately exposed lower eulittoral boulders	**LR.MLR.BF.Fser.Bo**
				Pid - *Fucus serratus* and piddocks on lower eulittoral soft rock	**LR.MLR.BF.Fser.Pid**
			Rho - *Rhodothamniella floridula* on sand-scoured lower eulittoral rock		**LR.MLR.BF.Rho**
	LLR Low energy littoral rock	**F** Fucoids on sheltered marine shores	**Pel** - *Pelvetia canaliculata* on sheltered littoral fringe rock		**LR.LLR.F.Pel**
			Fspi - *Fucus spiralis* on sheltered upper eulittoral rock	**FS** - *Fucus spiralis* on full salinity sheltered upper eulittoral rock	**LR.LLR.F.Fspi.FS**
				X - *Fucus spiralis* on full salinity upper eulittoral mixed substrata	**LR.LLR.F.Fspi.X**
			Fves - *Fucus vesiculosus* on moderately exposed to sheltered mid eulittoral rock	**FS** - *Fucus vesiculosus* on full salinity moderately exposed to sheltered mid eulittoral rock	**LR.LLR.F.Fves.FS**

Level 2 **Broad habitat type**	**Level 3** **Habitat complexes**	**Level 4** **Biotope complexes**	**Level 5** **Biotopes**	**Level 6** **Sub-biotopes**	**Code**
				X - *Fucus vesiculosus* on mid eulittoral mixed substrata	**LR.LLR.F.Fves.X**
			Asc - *Ascophyllum nodosum* on very sheltered mid eulittoral rock	**FS** - *Ascophyllum nodosum* on full salinity mid eulittoral rock	**LR.LLR.F.Asc.FS**
				X - *Ascophyllum nodosum* on full salinity mid eulittoral mixed substrata	**LR.LLR.F.Asc.X**
			Fserr - *Fucus serratus* on sheltered lower eulittoral rocks	**FS** - *Fucus serratus* on full salinity sheltered lower eulittoral rock	**LR.LLR.F.Fserr.FS**
				X - *Fucus serratus* on full salinity lower eulittoral mixed substrata	**LR.LLR.F.Fserr.X**
		FVS Fucoids in variable salinity	**PelVS** - *Pelvetia canaliculata* on sheltered variable salinity littoral fringe rock		**LR.LLR.FVS.PelVS**
			FspiVS - *Fucus spiralis* on sheltered variable salinity upper eulittoral rock		**LR.LLR.FVS.FspiVS**
			FvesVS - *Fucus vesiculosus* on variable salinity mid eulittoral boulders and stable mixed substrata		**LR.LLR.FVS.FvesVS**
			AscVS - *Ascophyllum nodosum* and *Fucus vesiculosus* on variable salinity mid eulittoral rock		**LR.LLR.FVS.AscVS**

Level 2 Broad habitat type	Level 3 Habitat complexes	Level 4 Biotope complexes	Level 5 Biotopes	Level 6 Sub-biotopes	Code
			Ascmac - *Ascophyllum nodosum* ecad *mackaii* beds on extremely sheltered mid eulittoral mixed substrata		**LR.LLR.FVS.Ascmac**
			FserVS - *Fucus serratus* and large *Mytilus edulis* on variable salinity lower eulittoral rock		**LR.LLR.FVS.FserVS**
			Fcer - *Fucus ceranoides* on reduced salinity eulittoral rock		**LR.LLR.FVS.Fcer**
	FLR Features of littoral rock	**Lic** - Lichens or small green algae on supralittoral and littoral fringe rock	**YG** - Yellow and grey lichens on supralittoral rock		**LR.FLR.Lic.YG**
			Pra - *Prasiola stipitata* on nitrate-enriched supralittoral or littoral fringe rock		**LR.FLR.Lic.Pra**
			Ver - *Verrucaria maura* on littoral fringe rock	**B** - *Verrucaria maura* and sparse barnacles on exposed littoral fringe rock	**LR.FLR.Lic.Ver.B**
				Ver - *Verrucaria maura* on very exposed to very sheltered upper littoral fringe rock	**LR.FLR.Lic.Ver.Ver**
			Bli - *Blidingia* spp. on vertical littoral fringe soft rock		**LR.FLR.Lic.Bli**
			UloUro - *Ulothrix flacca* and *Urospora* spp. on freshwater-influenced vertical littoral fringe soft rock		**LR.FLR.Lic.UloUro**

Level 2 Broad habitat type	Level 3 Habitat complexes	Level 4 Biotope complexes	Level 5 Biotopes	Level 6 Sub-biotopes	Code
		Rkp Rockpools	**G** - Green seaweeds (*Ulva* spp. and *Cladophora* spp.) in shallow upper shore rockpools		**LR.FLR.Rkp.G**
			Cor - Coralline crust-dominated shallow eulittoral rockpools	**Cor** - Coralline crusts and *Corallina officinalis* in shallow eulittoral rockpools	**LR.FLR.Rkp.Cor.Cor**
				Par - Coralline crusts and *Paracentrotus lividus* in shallow eulittoral rockpools	**LR.FLR.Rkp.Cor.Par**
				Bif - *Bifurcaria bifurcata* in shallow eulittoral rockpools	**LR.FLR.Rkp.Cor.Bif**
				Cys - *Cystoseira* spp. in eulittoral rockpools	**LR.FLR.Rkp.Cor.Cys**
			FK - Fucoids and kelp in deep eulittoral rockpools	**Sar** - *Sargassum muticum* in eulittoral rockpools	**LR.FLR.Rkp.FK.Sar**
			SwSed - Seaweeds in sediment-floored eulittoral rockpools		**LR.FLR.Rkp.SwSed**
			H - Hydroids, ephemeral seaweeds and *Littorina littorea* in shallow eulittoral mixed substrata pools		**LR.FLR.Rkp.H**
		CvOv Littoral caves and overhangs	**GCv** - Green algal films on upper and mid-shore cave walls and ceilings		**LR.FLR.CvOv.GCv**
			RpurPil - *Rhodochorton purpureum* and *Pleurocladia lacustris* crusts on upper and mid-shore cave walls and ceilings		**LR.FLR.CvOv.RpurPil**

Level 2 Broad habitat type	Level 3 Habitat complexes	Level 4 Biotope complexes	Level 5 Biotopes	Level 6 Sub-biotopes	Code
			ChrHap - Chrysophyceae and Haptophyceae on vertical upper littoral fringe soft rock		**LR.FLR.CvOv.Chr.Hap**
			BarCv - Barren and/or boulder-scoured littoral cave walls and floors		**LR.FLR.CvOv.BarCv**
			VmucHil - *Verrucaria mucosa* and/or *Hildenbrandia rubra* on upper to mid shore cave walls		**LR.FLR.CvOv.VmucHil**
			SpR - Sponges and shade-tolerant red seaweeds on overhanging lower eulittoral bedrock and in cave entrances	**Den** - Sponges, shade-tolerant red seaweeds and *Dendrodoa grossularia* on wave-surged overhanging lower eulittoral bedrock and caves	**LR.FLR.CvOv.SpR.Den**
			SpByAs - Sponges, bryozoans and ascidians on deeply overhanging lower shore bedrock or caves		**LR.FLR.CvOv.SpByAs**
			RpurCla - *Rhodochorton purpureum* and *Cladophora rupestris* on upper to mid-shore cave walls		**LR.FLR.CvOv.RpurCla**
			ScrFa - Sparse fauna (barnacles and spirorbids) on sand/pebble-scoured rock in littoral caves		**LR.FLR.CvOv.ScrFa**
			FaCr - Faunal crusts on wave-surged littoral cave walls		**LR.FLR.CvOv.FaCr**

Level 2 Broad habitat type	Level 3 Habitat complexes	Level 4 Biotope complexes	Level 5 Biotopes	Level 6 Sub-biotopes	Code
		Eph Ephemeral green or red seaweed communities (freshwater or sand-influenced)	**EphX** - Ephemeral green and red seaweeds on variable salinity and/or disturbed eulittoral mixed substrata		**LR.FLR.Eph.EphX**
			Ulv - *Ulva* spp. on freshwater-influenced and/or unstable upper eulittoral rock		**LR.FLR.Eph.Ulv**
			UlvPor - *Porphyra purpurea* and *Ulva* spp. on sand-scoured mid or lower eulittoral rock		**LR.FLR.Eph.UlvPor**
			BLitX - Barnacles and *Littorina* spp. on unstable eulittoral mixed substrata		**LR.FLR.Eph.BLitX**
LS - Littoral sediment	**LCS** Littoral coarse sediment	**Sh** - Shingle (pebble) and gravel shores	**BarSh** - Barren littoral shingle		**LS.LCS.Sh.BarSh**
			Ech - *Echinogammarus incertae sedis planicrurus* in mid shore well-sorted gravel or coarse sand		**LS.LCS.Sh.Ech**
	LSa Littoral sand	**St** Strandline	**Tal** - Talitrids on the upper shore and strand-line		**LS.LSa.St.Tal**
			MytFab - *Mytilus edulis* and *Fabricia stellaris* in littoral mixed sediment		**LS.LSa.St.MytFab**
		MoSa Barren or amphipod-dominated mobile sand shores	**BarSa** - Barren littoral coarse sand		**LS.LSa.MoSa.BarSa**
			Ol - Oligochaetes in littoral mobile sand	**FS** - Oligochaetes in full salinity littoral mobile sand	**LS.LSa.MoSa.Ol.FS**
				VS - Oligochaetes in variable salinity littoral mobile sand	**LS.LSa.MoSa.Ol.VS**

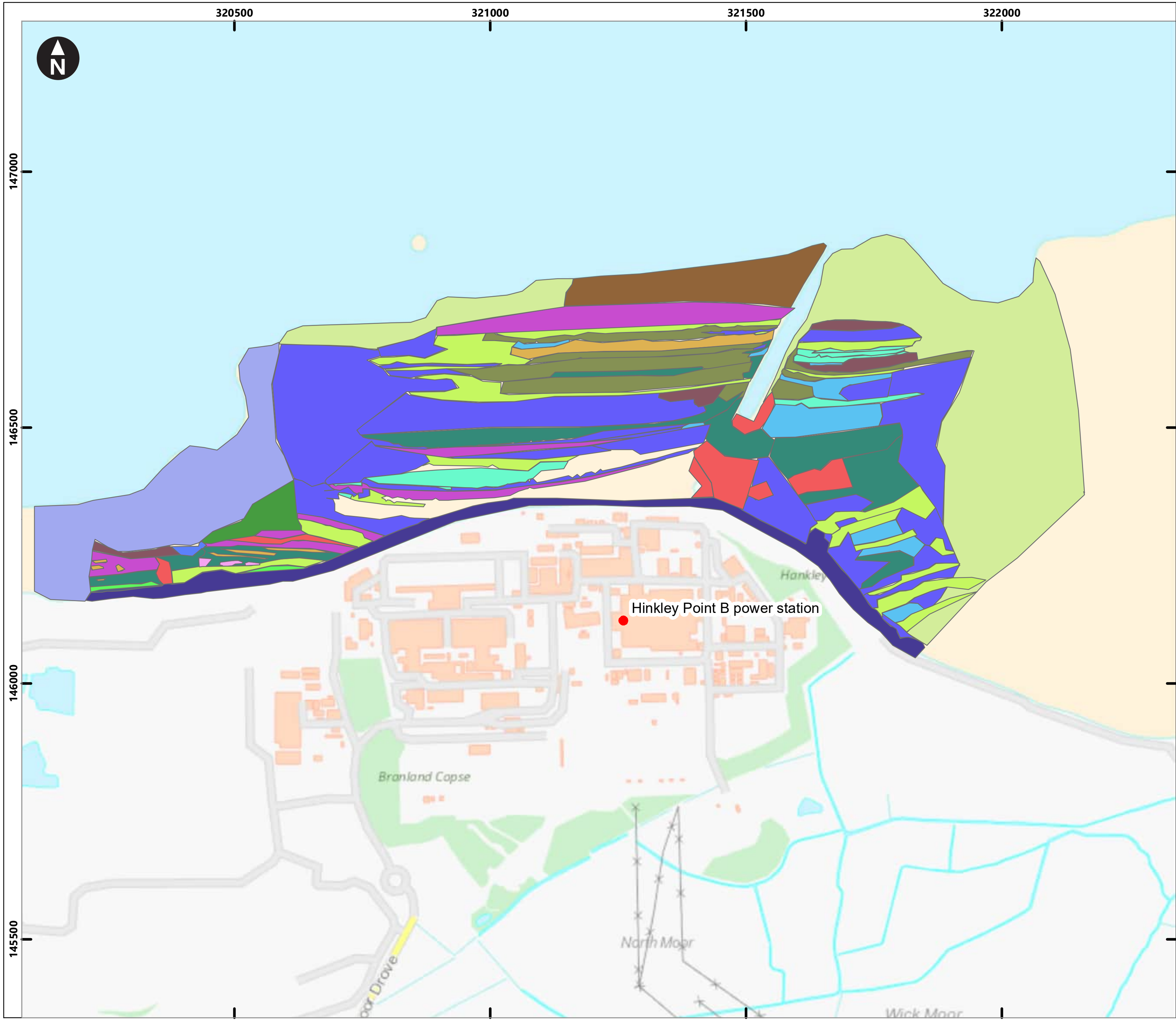
Level 2 Broad habitat type	**Level 3 Habitat complexes**	**Level 4 Biotope complexes**	**Level 5 Biotopes**	**Level 6 Sub-biotopes**	**Code**
			AmSco - Amphipods and *Scolelepis* spp. in littoral medium-fine sand	**Sco** - *Scolelepis* spp. in littoral mobile sand	**LS.LSa.MoSa.AmSco.Sco**
				Eur - *Eurydice pulchra* in littoral mobile sand	**LS.LSa.MoSa.AmSco.Eur**
				Pon - *Pontocrates arenarius* in littoral mobile sand	**LS.LSa.MoSa.AmSco.Pon**
		FiSa Polychaete/amphipod-dominated fine sand shores	**Po** - Polychaetes in littoral fine sand	**Pful** - Polychaetes, including *Paraonis fulgens*, in littoral fine sand	**LS.LSa.FiSa.Po.Pful**
				Mten - Polychaetes and *Macomangulus tenuis* in littoral fine sand	**LS.LSa.FiSa.Po.Mten**
				Ncir - *Nephtys cirrosa*-dominated littoral fine sand	**LS.LSa.FiSa.Po.Ncir**
		MuSa Polychaete/bivalve-dominated muddy sand shores	**MacAre** - *Macoma balthica* and *Arenicola marina* in littoral muddy sand		**LS.LSa.MuSa.MacAre**
			CerPo - *Cerastoderma edule* and polychaetes in littoral muddy sand		**LS.LSa.MuSa.CerPo**
			HedMacEte - *Hediste diversicolor*, *Macoma balthica* and *Eteone longa* in littoral muddy sand		**LS.LSa.MuSa.HedMacEte**
			BatCare - *Bathyporeia pilosa* and *Corophium arenarium* in littoral muddy sand		**LS.LSa.MuSa.BatCare**
			Lan - *Lanice conchilega* in littoral sand		**LS.LSa.MuSa.Lan**

Level 2 Broad habitat type	**Level 3 Habitat complexes**	**Level 4 Biotope complexes**	**Level 5 Biotopes**	**Level 6 Sub-biotopes**	**Code**
	LMu Littoral mud	**MEst** - Polychaete/bivalve-dominated mid estuarine mud shores	**NhomMacStr** - *Nephtys hombergii*, *Macoma balthica* and *Streblospio shrubsolii* in littoral sandy mud		**LS.LMu.MEst.NhomMacStr**
			HedMac - *Hediste diversicolor* and *Macoma balthica* in littoral sandy mud		**LS.LMu.MEst.HedMac**
			HedMacScr - *Hediste diversicolor*, *Macoma balthica* and *Scrobicularia plana* in littoral sandy mud		**LS.LMu.MEst.HedMacScr**
		UEst Polychaete/ oligochaete-dominated upper estuarine mud shores	**NhomStr** - *Nephtys hombergii* and *Streblospio shrubsolii* in littoral mud		**LS.LMu.UEst.NhomStr**
			Hed - *Hediste diversicolor* in littoral mud	**Str** - *Hediste diversicolor* and *Streblospio shrubsolii* in littoral sandy mud	**LS.LMu.UEst.Hed.Str**
				Cvol - *Hediste diversicolor* and *Corophium volutator* in littoral mud	**LS.LMu.UEst.Hed.Cvol**
				Ol - *Hediste diversicolor* and oligochaetes in littoral mud	**LS.LMu.UEst.Hed.Ol**
			Tben - *Tubificoides benedii* and other oligochaetes in littoral mud		**LS.LMu.UEst.Tben**
	LMx Littoral mixed sediment	**GvMu**	**HedMx** - *Hediste diversicolor* in littoral gravelly muddy sand and gravelly sandy mud	**Mac** - *Hediste diversicolor* and *Macoma balthica* in littoral gravelly mud	**LS.LMx.GvMu.HedMx.Mac**

Level 2 Broad habitat type	Level 3 Habitat complexes	Level 4 Biotope complexes	Level 5 Biotopes	Level 6 Sub-biotopes	Code
		Hediste-dominated gravelly sandy mud shores		**Scr** - *Hediste diversicolor* and *Scrobicularia plana* in littoral gravelly mud	**LS.LMx.GvMu.HedMx.Scr**
				Str - *Hediste diversicolor* and *Streblospio shrubsolii* in littoral gravelly sandy mud	**LS.LMx.GvMu.HedMx.**
				Cir - *Hediste diversicolor*, cirratulids and *Tubificoides* spp. in littoral gravelly sandy mud	**LS.LMx.GvMu.HedMx.Cir**
				Cvol - *Hediste diversicolor* and *Corophium volutator* in littoral gravelly sandy mud	**LS.LMx.GvMu.HedMx.Cvol**
		Mx Species-rich mixed sediment shores	**CirCer** - Cirratulids and *Cerastoderma edule* in littoral mixed sediment		**LS.LMx.Mx.CirCer**
	LMp Littoral macrophyte-dominated sediment	**Sm** - Saltmarsh			**LS.LMp.Sm**
		LSgr - Littoral seagrass beds	**Znol** - *Zostera noltei* beds in littoral muddy sand		**LS.LMp.LSgr.Znol**
	LBR Littoral biogenic reefs	**Sab** - Littoral *Sabellaria* honeycomb worm reefs	***Salv*** - *Sabellaria alveolata* reefs on sand-abraded eulittoral rock		**LS.LBR.Sab.Salv**
		LMus - Littoral mussel beds on sediment	**Myt** - *Mytilus edulis* beds on littoral sediments		**LS.LBR.LMus.Myt**

Note: Level 1 = Marine environment

Appendix 3B
Figure 3.1 Biotope mapping from 2020 Phase 1 habitat survey



Key

- Hinkley Point B power station

Biotopes

- LS.LCS.Sh.BarSh
- CR.MCR.SfR
- LR.FLR.Eph.BLitX
- LR.FLR.Eph.Ent
- LR.FLR.Rkp.Cor.Cor
- LR.FLR.Rkp.G
- LR.FLR.Rkp.SwSed
- LR.LLR.FVS
- LR.LLR.FVS.AscVS
- LR.LLR.FVS.FserVS
- LR.LLR.FVS.FspiVS
- LR.LLR.FVS.FvesVS
- LR.LLR.FVS.PelVS
- LR.MLR
- LR.MLR.BF.PelB
- LS.LBR.Sab.Salv
- LS.LMu
- LS.LSa.MuSa.MacAre
- SS.SMu

Meters
0 40 80 160 240 320
1:10,000

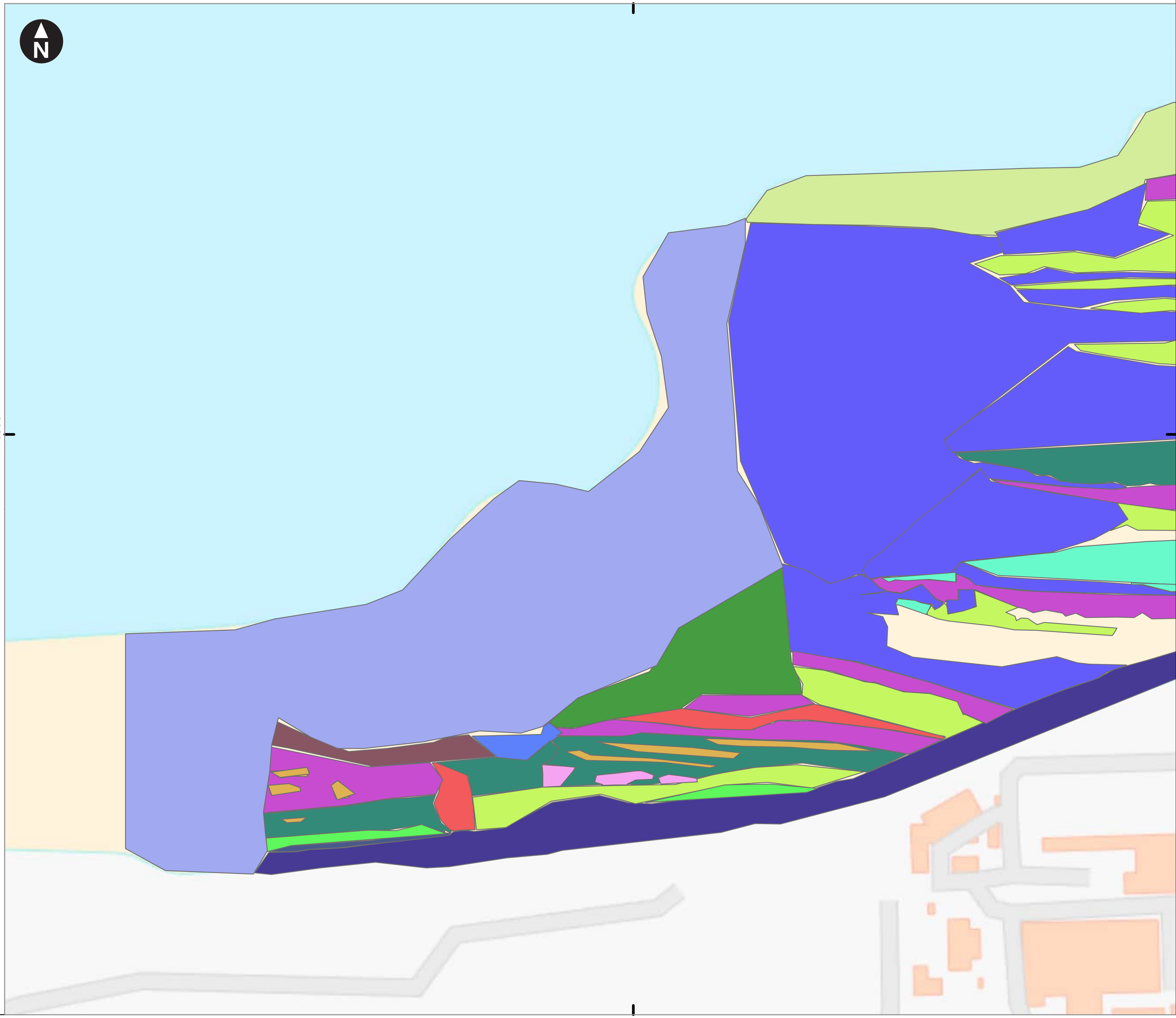
Phase 1 Habitat Survey August 2020 for Hinkley Point B Nuclear Power Station

Figure 3.1

Overall biotope map

System Identifier:				Version:
852351-WSPE-XX-XX-FG-OE-00016_S0_P01.1				1.0
Company: WSP	Drawn By: SUTET	Chk/Aprvd: MCCOC	Drawn Date: 13/01/2023	Status: FINAL

Appendix 3B
Figure 3.2 Biotope mapping from 2020 Phase 1 habitat survey (zoomed in version)



Key

Biotopes

- LS.LCS.Sh.BarSh
- CR.MCR.SfR
- LR.FLR.Eph.BLitX
- LR.FLR.Eph.Ent
- LR.FLR.Rkp.Cor.Cor
- LR.FLR.Rkp.G
- LR.FLR.Rkp.SwSed
- LR.LLR.FVS
- LR.LLR.FVS.AscVS
- LR.LLR.FVS.FserVS
- LR.LLR.FVS.FspiVS
- LR.LLR.FVS.FvesVS
- LR.LLR.FVS.PelVS
- LR.MLR
- LR.MLR.BF.PelB
- LS.LBR.Sab.Salv
- LS.LMu
- LS.LSa.MuSa.MacAre
- SS.SMu

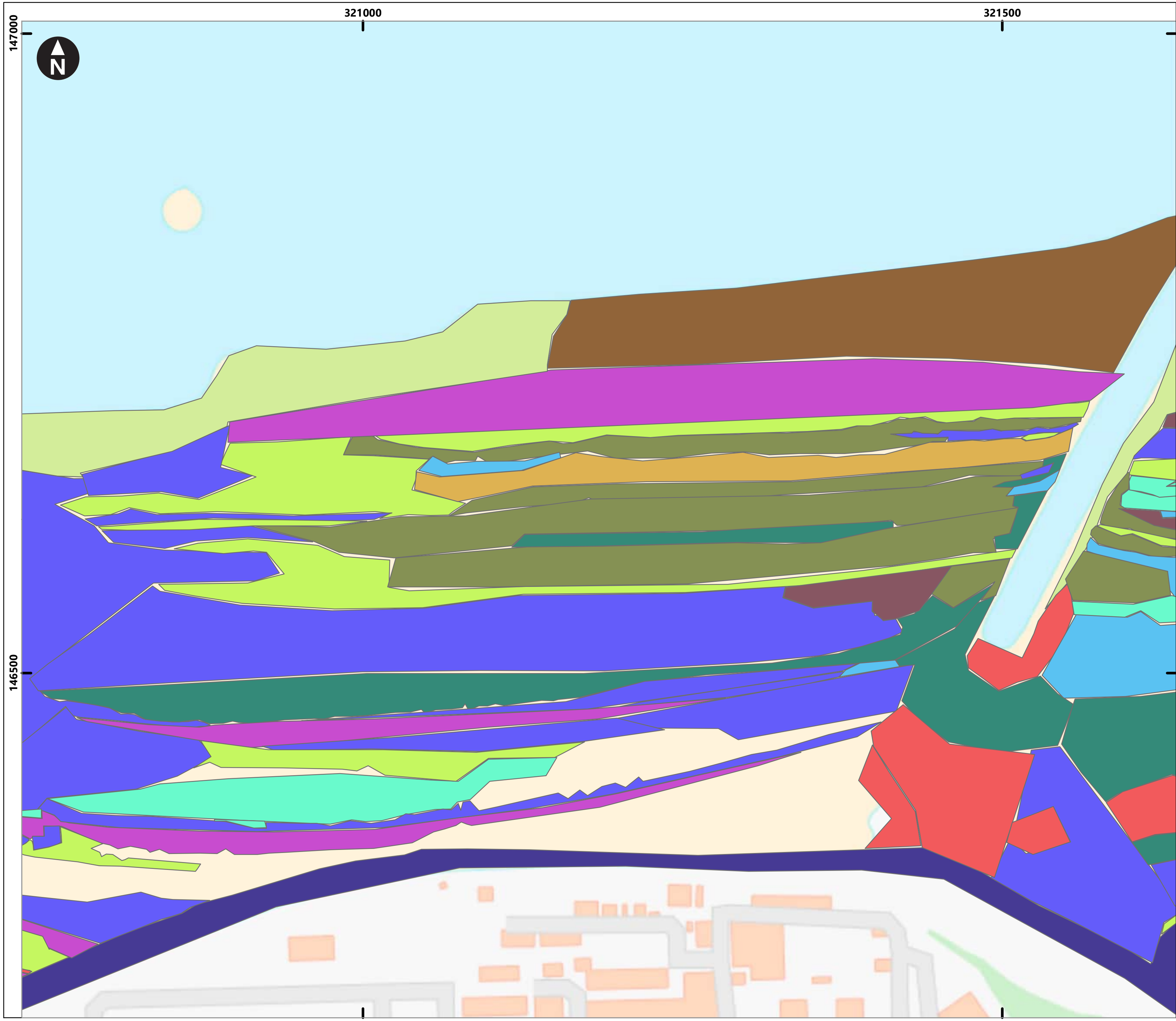
Meters
0 15 30 60 90 120
1:4,000

Phase 1 Habitat Survey August 2020 for Hinkley Point B Nuclear Power Station

Figure 3.2

Detailed biotope map (3 pages)

System Identifier:				Version:
852351-WSPE-XX-XX-FG-OE-00017_S0_P01.1				1.0
Company: WSP	Drawn By: SUTET	Chk/Aprvd: MCCOC	Drawn Date: 13/01/2023	Status: FINAL



Key

Biotopes

- LS.LCS.Sh.BarSh
- CR.MCR.SfR
- LR.FLR.Eph.BLitX
- LR.FLR.Eph.Ent
- LR.FLR.Rkp.Cor.Cor
- LR.FLR.Rkp.G
- LR.FLR.Rkp.SwSed
- LR.LLR.FVS
- LR.LLR.FVS.AscVS
- LR.LLR.FVS.FserVS
- LR.LLR.FVS.FspiVS
- LR.LLR.FVS.FvesVS
- LR.LLR.FVS.PelVS
- LR.MLR
- LR.MLR.BF.PelB
- LS.LBR.Sab.Salv
- LS.LMu
- LS.LSa.MuSa.MacAre
- SS.SMu

Meters
0 15 30 60 90 120
1:4,000

Phase 1 Habitat Survey August 2020 for Hinkley Point B Nuclear Power Station

Figure 3.2

Detailed biotope map (3 pages)

System Identifier:				Version:
852351-WSPE-XX-XX-FG-OE-00017_S0_P01.1				1.0
Company: WSP	Drawn By: SUTET	Chk/Aprvd: MCCOC	Drawn Date: 13/01/2023	Status: FINAL

Key

Biotopes

- LS.LCS.Sh.BarSh
- CR.MCR.SfR
- LR.FLR.Eph.BLitX
- LR.FLR.Eph.Ent
- LR.FLR.Rkp.Cor.Cor
- LR.FLR.Rkp.G
- LR.FLR.Rkp.SwSed
- LR.LLR.FVS
- LR.LLR.FVS.AscVS
- LR.LLR.FVS.FserVS
- LR.LLR.FVS.FspiVS
- LR.LLR.FVS.FvesVS
- LR.LLR.FVS.PelVS
- LR.MLR
- LR.MLR.BF.PelB
- LS.LBR.Sab.Salv
- LS.LMu
- LS.LSa.MuSa.MacAre
- SS.SMu

Meters
0 20 40 80 120 160
1:5,000

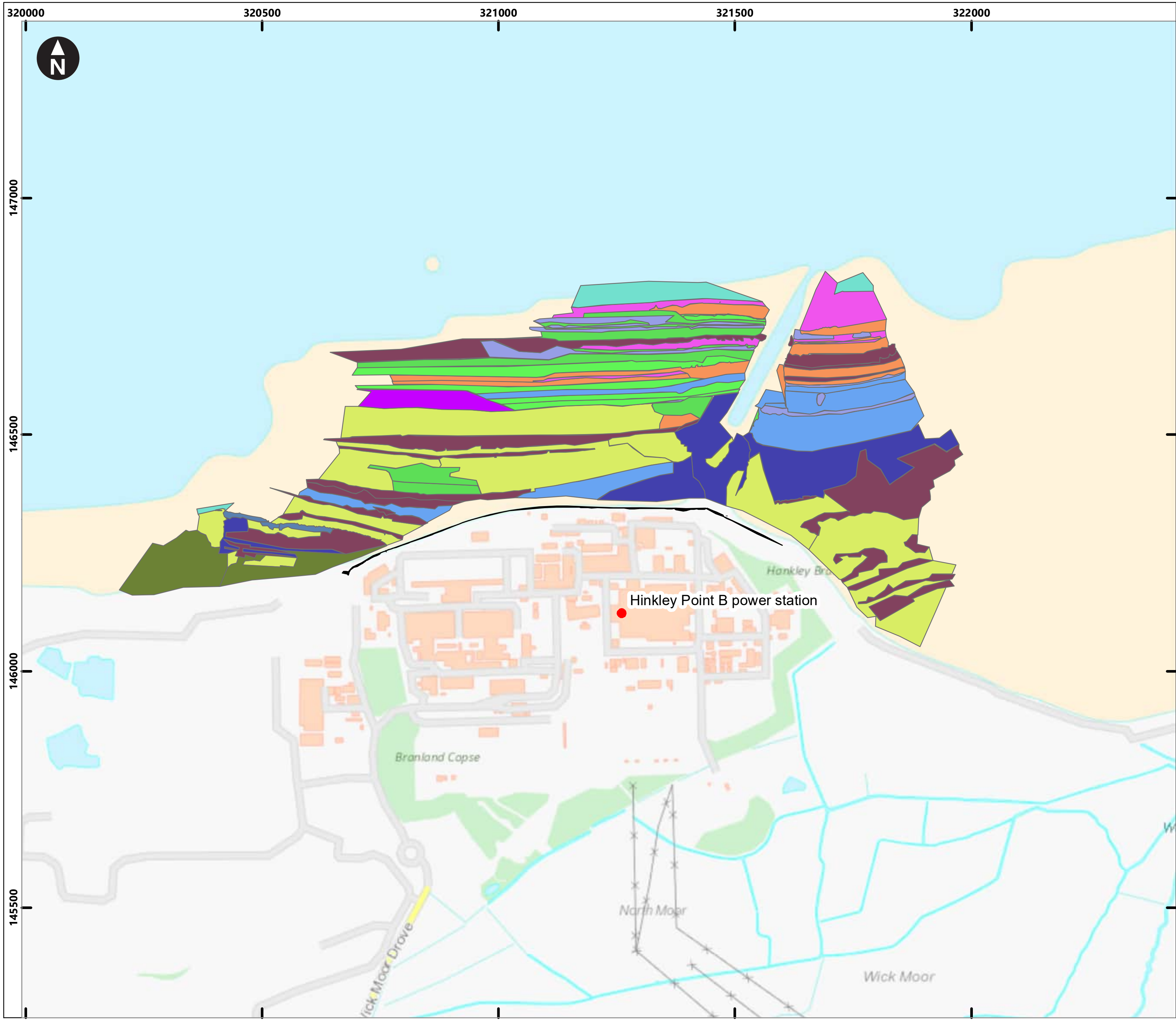
Phase 1 Habitat Survey August 2020 for Hinkley Point B Nuclear Power Station

Figure 3.2

Detailed biotope map (3 pages)

System Identifier:				Version:
852351-WSPE-XX-XX-FG-OE-00017_S0_P01.1				1.0
Company: WSP	Drawn By: SUTET	Chk/Aprvd: MCCOC	Drawn Date: 13/01/2023	Status: FINAL

Appendix 3C
Figure 3.3 Biotope mapping from 2022 intertidal habitat validation survey



Key

- Hinkley Point B power station
- Sea wall

Biotopes

- LR.FLR.Eph.EphX
- LR.FLR.Rkp.Cor.Cor
- LR.FLR.Rkp.SwSed
- LR.HLR.MusB.Sem.Sem
- LR.LLR.FVS.AscVS
- LR.LLR.FVS.FserVS
- LR.LLR.FVS.FvesVS
- LR.MLR.BF.Fser.Bo
- LR.MLR.BF.FvesB
- LS.LBR.Sab.Salv
- LS.LCS.Sh.BarSh
- LS.LMx.Mx
- LS.LSa.MuSa.MacAre

Meters
0 45 90 180 270 360
1:10,820

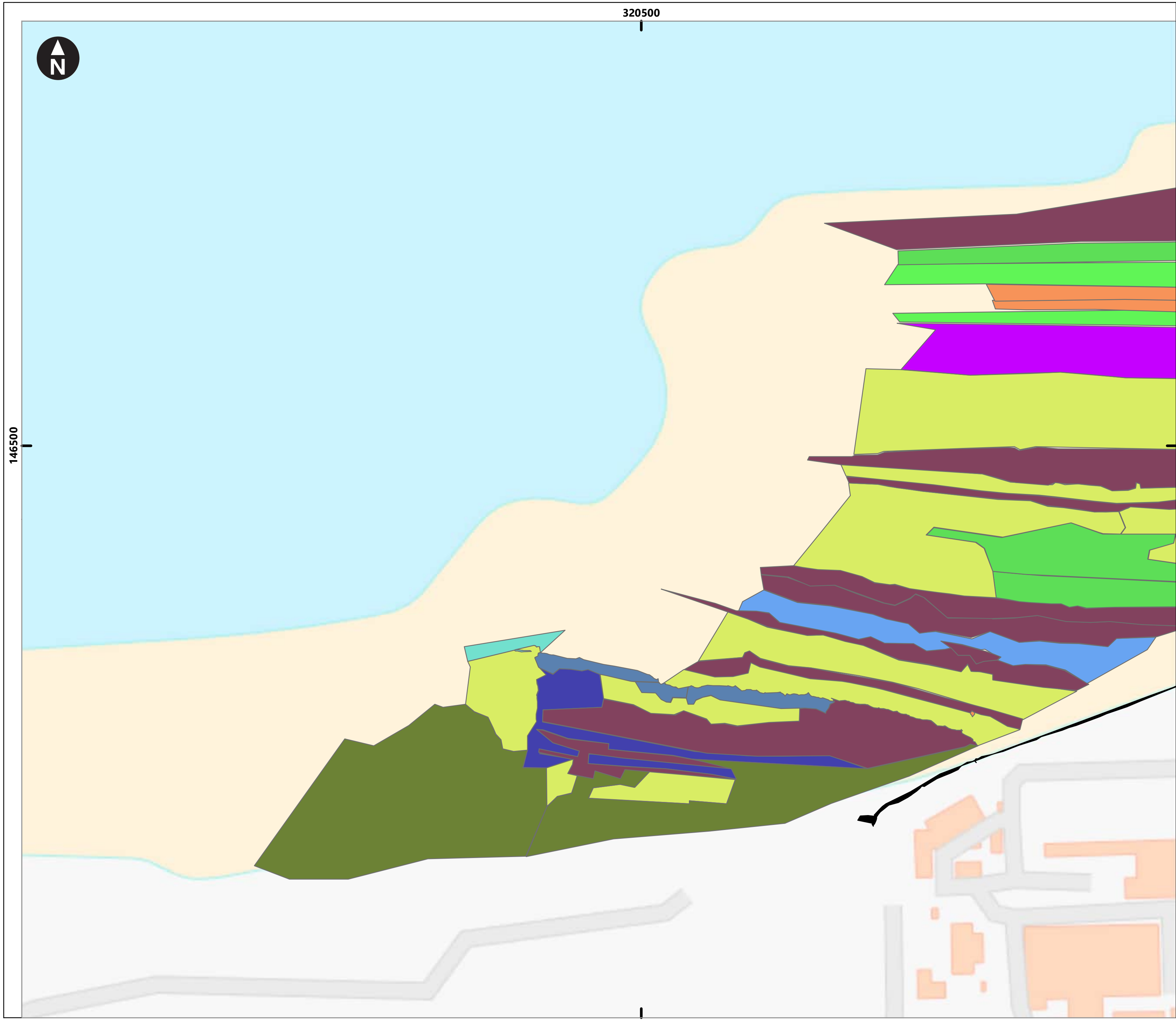
Intertidal Validation Survey October 2022 for Hinkley Point B Nuclear Power Station

Figure 3.3

Overall biotope map

System Identifier:				Version:
852351-WSPE-XX-XX-FG-OE-00018_S0_P01.2				1.0
Company: WSP	Drawn By: SUTET	Chk/Aprvd: MCCOC	Drawn Date: 13/01/2023	Status: FINAL

Appendix 3C
Figure 3.4 Biotope mapping from 2022 intertidal habitat validation survey (zoomed in version)



Key

Sea wall

Biotopes

- LR.FLR.Eph.EphX
- LR.FLR.Rkp.Cor.Cor
- LR.FLR.Rkp.SwSed
- LR.HLR.MusB.Sem.Sem
- LR.LLR.FVS.AscVS
- LR.LLR.FVS.FserVS
- LR.LLR.FVS.FvesVS
- LR.MLR.BF.Fser.Bo
- LR.MLR.BF.FvesB
- LS.LBR.Sab.Salv
- LS.LCS.Sh.BarSh
- LS.LMx.Mx
- LS.LSa.MuSa.MacAre

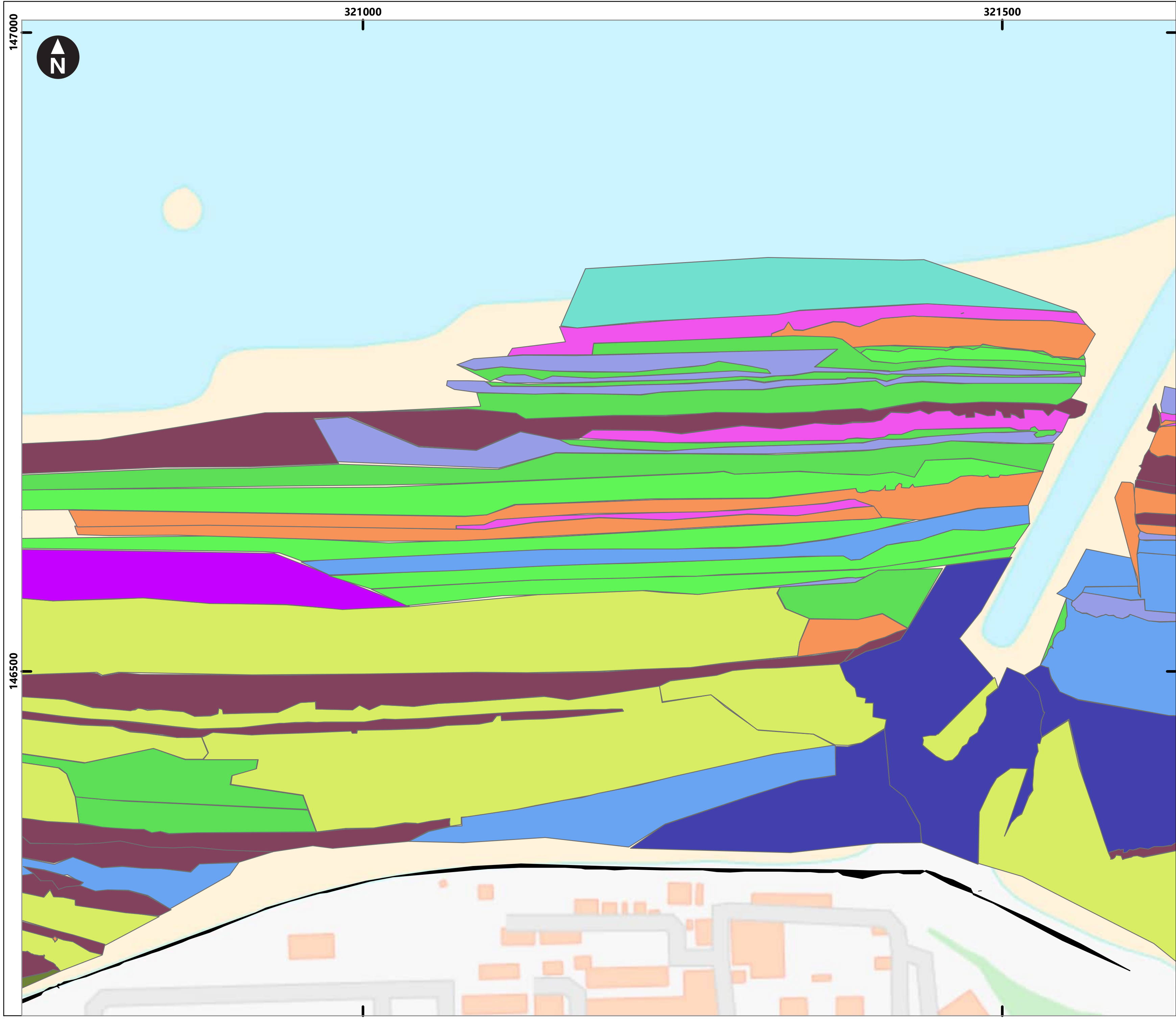
Meters
0 15 30 60 90 120
1:4,000

Intertidal Validation Survey October 2022 for Hinkley Point B Nuclear Power Station

Figure 3.4

Detailed biotope map (3 pages)

System Identifier:				Version:
852351-WSPE-XX-XX-FG-OE-00019_S0_P01.1				1.0
Company: WSP	Drawn By: SUTET	Chk/Aprvd: MCCOC	Drawn Date: 13/01/2023	Status: FINAL



Key

Sea wall

Biotopes

- LR.FLR.Eph.EphX
- LR.FLR.Rkp.Cor.Cor
- LR.FLR.Rkp.SwSed
- LR.HLR.MusB.Sem.Sem
- LR.LLR.FVS.AscVS
- LR.LLR.FVS.FserVS
- LR.LLR.FVS.FvesVS
- LR.MLR.BF.Fser.Bo
- LR.MLR.BF.FvesB
- LS.LBR.Sab.Salv
- LS.LCS.Sh.BarSh
- LS.LMx.Mx
- LS.LSa.MuSa.MacAre

Meters
0 15 30 60 90 120
1:4,000

Intertidal Validation Survey October 2022 for Hinkley Point B Nuclear Power Station

Figure 3.4

Detailed biotope map (3 pages)

System Identifier:				Version:
852351-WSPE-XX-XX-FG-OE-00019_S0_P01.1				1.0
Company: WSP	Drawn By: SUTET	Chk/Aprvd: MCCOC	Drawn Date: 13/01/2023	Status: FINAL

Key

Sea wall

Biotopes

- LR.FLR.Eph.EphX
- LR.FLR.Rkp.Cor.Cor
- LR.FLR.Rkp.SwSed
- LR.HLR.MusB.Sem.Sem
- LR.LLR.FVS.AscVS
- LR.LLR.FVS.FserVS
- LR.LLR.FVS.FvesVS
- LR.MLR.BF.Fser.Bo
- LR.MLR.BF.FvesB
- LS.LBR.Sab.Salv
- LS.LCS.Sh.BarSh
- LS.LMx.Mx
- LS.LSa.MuSa.MacAre

Meters
0 20 40 80 120 160
1:5,000

Intertidal Validation Survey October 2022 for Hinkley Point B Nuclear Power Station

Figure 3.4

Detailed biotope map (3 pages)

System Identifier:				Version:
852351-WSPE-XX-XX-FG-OE-00019_S0_P01.1				1.0
Company: WSP	Drawn By: SUTET	Chk/Aprvd: MCCOC	Drawn Date: 13/01/2023	Status: FINAL

wsp.com

9B

Hinkley Point B Subtidal Survey Report

PUBLIC

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Wood Group UK

Hinkley Point B Marine Habitat Mapping Survey

Summary Report

27th May 2021

Seastar Survey Ltd. Project Number –J/20/541

For further information please contact Steven Dewey
Seastar Survey Ltd., Ocean Quay, Belvidere Road, Southampton, SO14 5QY
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Tel: 023 8063 5000

Please cite this report as:

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Executive Summary

Hinkley Point B Marine Habitat Mapping Survey

Background

The Hinkley Point B (HPB) nuclear power station will be moved into the defueling phase no later than 15th July 2022. In order to help assess the potential impacts of decommissioning on the marine environment, survey work was undertaken in order to map the extent and distribution of habitats present within the intertidal and subtidal zones of two overlapping survey areas at HPB. In order to map the extent and distribution of benthic habitats within the subtidal and the lower intertidal zones, a vessel-based survey was conducted.

Survey work was carried out between 4th and 10th November 2020 in two phases. Phase I consisted of collection of singlebeam bathymetry and sidescan sonar data. Phase II comprised collection of sediment samples for particle size analysis (PSA) and macrobenthic invertebrate assessment. The results of the grab sample analyses were used to ground-truth the sidescan sonar data and provide information regarding the biological communities present in the survey area.

Main findings

- The seabed in the subtidal region of the survey area was found to predominantly consist of soft sediments. The sediment types most frequently identified were muds and sandy muds and these were distributed throughout the survey area. In addition, areas of sands and muddy sands were identified close inshore.
- In the northwest of the survey area, an area of *Sabellaria alveolata* Annex I biogenic reef was identified, covering an area of approximately 50,233 m^2.
- Annex I *Sabellaria alveolata* reef structures were also identified in the shallow subtidal and lower intertidal zones along approximately 1,500 m of coastline adjacent to HPB. In the intertidal zone this area of reef covered an area of approximately 220,105 m^2, while the subtidal sections of this reef covered an area of 206,220 m^2.
- Macrobenthic invertebrate analysis of grab samples identified a total of 3,488 individuals and 61 taxa, dominated by annelid worms (69.9 %) and molluscs (19.9 %).
- The most common taxa identified included the biogenic reef-forming polychaete *S. alveolata*, which was identified in 5 of the 18 samples, the oligochaete *Tubificoides amplivasatus* and the bivalve *Limecola balthica*.
- The macrobenthic invertebrate results suggested the presence of a total of six biotopes. The majority of samples from the subtidal were found to represent one of two superficially similar biotopes; **SS.SMu.ISaMu.NhomLim** ('*Nephtys hombergii* and *Limecola balthica* in infralittoral sandy mud') and **SS.SMu.SMuVS.NhomTubi** ('*Nephtys hombergii* and *Tubificoides* spp. in variable salinity infralittoral soft mud').
- Subtidal areas of *Sabellaria* reef were assigned the biotope **SS.SBR.PoR.SalvMx** ('*Sabellaria alveolata* on variable salinity sublittoral mixed sediment'). In the intertidal, areas of Sabellaria reef were assigned the biotope **LS.LBR.Sab.Salv** ('*Sabellaria alveolata* reefs on sand-abraded eulittoral rock').

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1 INTRODUCTION

The Hinkley Point B (HPB) nuclear power station is approaching its end of generation, and will be moved into the defueling phase no later than 15th July 2022. Before the power station and associated structures can be decommissioned, potential environmental impacts of the works must be assessed through an Environmental Impact Assessment (EIA). The main activities likely to affect the marine environment include:

- the removal (to below the seabed) of the cooling water intake and outfall structures;
- the removal of the cooling water pumphouse; and
- the installation (and subsequent removal) of two temporary discharge pipelines across the intertidal area.

To help assess the potential impacts of decommissioning on the marine environment, survey work was undertaken within two overlapping survey areas. Each area measured 2 km in diameter, with one area centred on the HPB cooling water intake structure and the other centred on the HPB cooling water discharge pipe. The extent of the survey areas is shown in Figure 1.1 and the centre point of each area is provided in Table 1.1. The aim of the survey was to map the extent and distribution of habitats present within the intertidal and subtidal zones of the survey areas.

Table 1.1: Central positions of the two areas to be surveyed as part of the 2020 marine habitat mapping survey at HPB nuclear power station.

Study Area Centre Point	WGS84 Latitude & Longitude	UTM North Zone 30 (0-6^{o} W)
HPB CW Intake Structure	51^{o} 12.9266’ N, 03^{o} 08.0739’ W	490601.4 E, 5673792.0 N
HPB CW Discharge Pipe	51^{o} 12.7187’ N, 03^{o} 07.4440’ W	491334.0 E, 5673405.4 N

Wood Group UK (hereafter referred to as ‘Wood’) contracted Seastar Survey Ltd. (hereafter referred to as ‘Seastar’) to undertake vessel-based survey work in the subtidal and lower intertidal zones within the two survey areas. The remaining intertidal area was surveyed on foot by staff from Wood[1], with the aim of creating an overlap in the coverage of the two surveys where possible.

In order to map the extent and distribution of benthic habitats within the survey areas from the subtidal and the lower intertidal zones, an acoustic survey (singlebeam bathymetry and sidescan sonar) was carried out followed by a ground-truthing survey, consisting of the collection of sediment samples for particle size analysis (PSA) and macrobenthic invertebrate assessment. The data were used to create habitat maps of the survey areas to inform the EIA. The following sections provide details of the methods used (section 2) and the results obtained (section 3) from the vessel-based survey work completed by Seastar.

[1] See report Hinkley Point B Nuclear Power Station Intertidal Survey Results (2021). Document reference 42667-WOOD-XX-XX-RP-OM-0007_A_C1- HPB Intertidal Report.

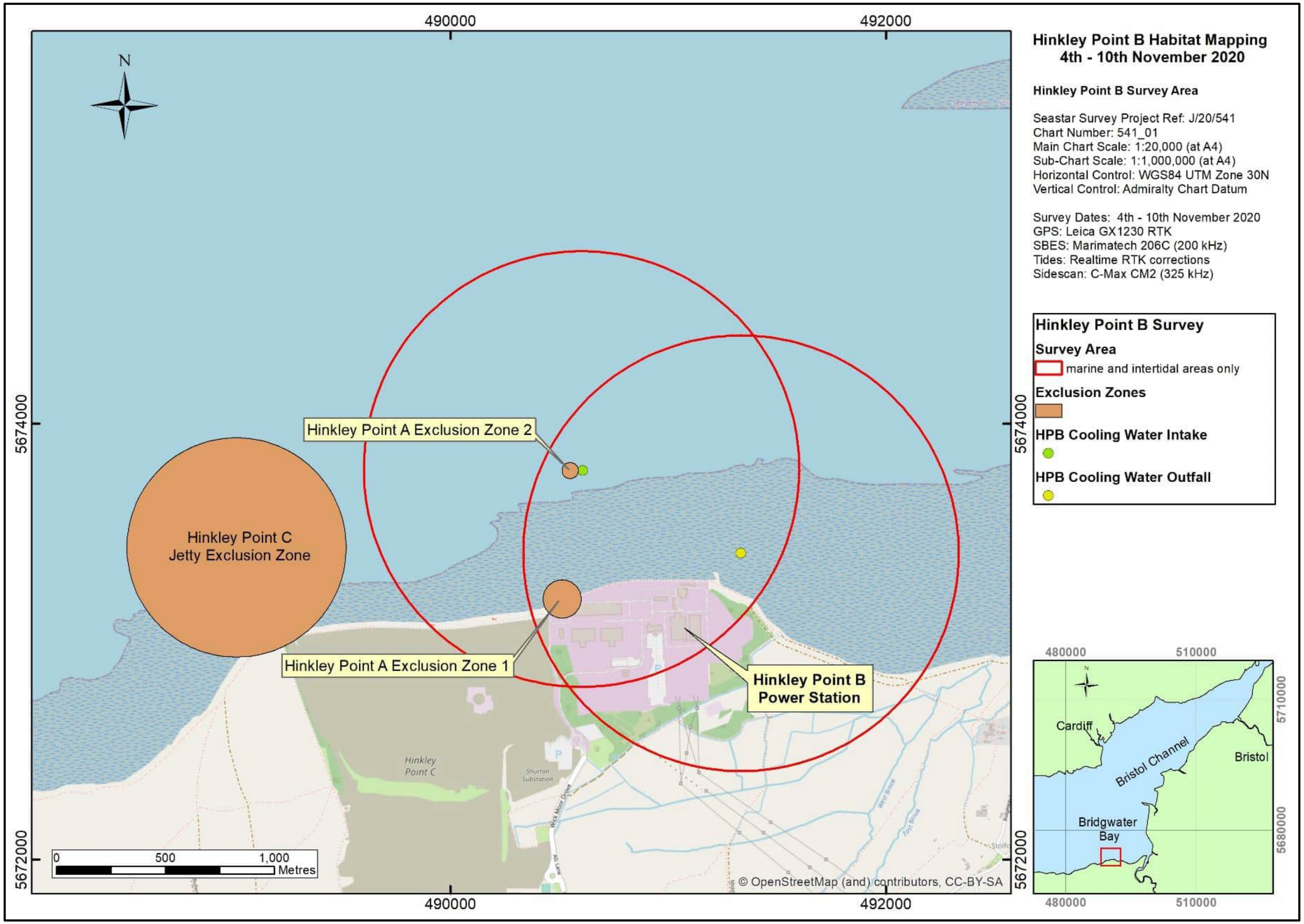

Figure 1.1: Location of the HPB survey areas.

2 METHODOLOGY

2.1 Survey Overview

Survey work was carried out between the 4th and 10th November 2020. In order to ensure overlap with the intertidal survey completed by Wood[1], the shallowest intertidal areas were surveyed at or around high water.

The work was split into two phases. Phase I consisted of the collection of singlebeam bathymetry and sidescan sonar data. This data was processed at the end of each survey day and the results were used to guide the selection of Phase II sampling locations. Phase II comprised collection of sediment samples for PSA and macrobenthic invertebrate assessment. The results of the grab sample analyses were used to ground-truth the sidescan sonar data and provide information regarding the biological communities present in the survey area.

2.1.1 Exclusion zones

Prior to survey works being conducted, three survey exclusion zones were designated by EDF Energy in relation to the project. Two exclusion zones, associated with Hinkley Point A , were located within the survey area (HPA1 and HPA2), and a third exclusion zone was placed around the new Hinkley Point C Jetty (HPCJ) (see Figure 1.1).

HPA1 surrounded the disused outfall for a chemical disposal line, located in the upper intertidal. The entirety of this exclusion zone was inaccessible by vessel during the survey, including at high water springs. HPA2 surrounded an active effluent discharge line, situated approximately 50 m west of the HPB cooling water intake structure, and was to be avoided if discharging. The outfall was not observed to be discharging during the survey; regardless, the survey vessel did not enter the exclusion zone at any time.

A 500 m exclusion zone was centred on the end of HPCJ. The entirety of this exclusion zone was located outside of the survey areas and was not entered during the survey.

2.2 Acoustic Survey

Prior to the survey, a detailed line plan was created using Hypack survey management software, ensuring full coverage of the subtidal zone of both survey areas. Lines were also planned in the lower to middle intertidal zone, with the aim of obtaining overlap with the intertidal survey conducted by Wood. The acoustic survey line plan is shown in Figure 2.1.

The HPCJ and HPA2 exclusion zones were avoided in the line plan and enough space was left between the end of lines and the exclusion zones for vessel turns. In the line plan three lines overlapped HPA1, however it was made clear that this exclusion zone was to be avoided during the survey.

The acoustic line plan consisted of 23 main lines, running approximately parallel to the shore, for the acquisition of sidescan sonar and singlebeam bathymetry. Collecting sidescan sonar data parallel to the main depth contours provides consistency in data acquisition by allowing the altitude of the sidescan tow-fish to be more easily maintained. In order to enable quality checking of the bathymetry data, 18 shore-normal, bathymetry-only crosslines were also planned (Figure 2.1).

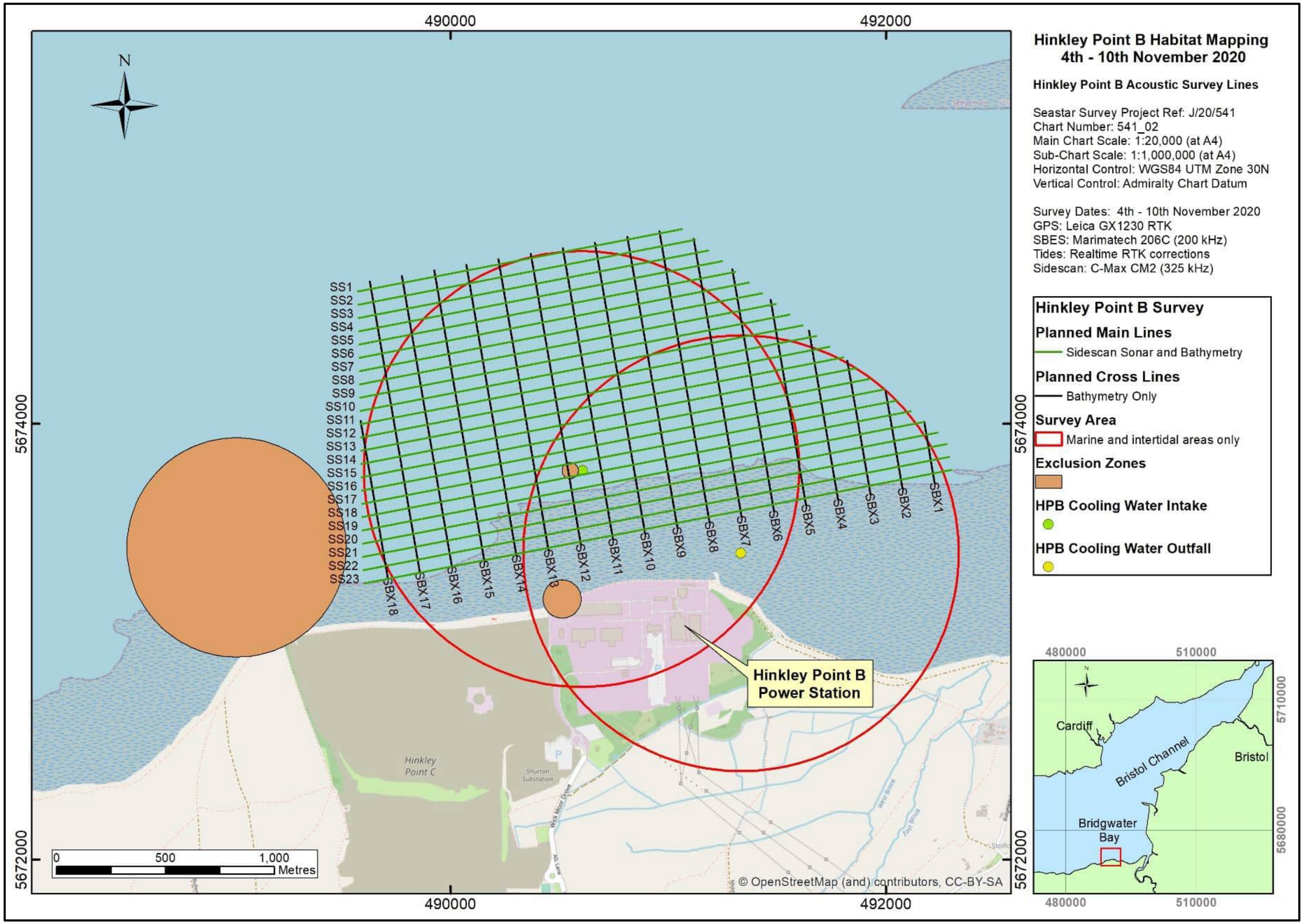

Figure 2.1: HPB acoustic survey line plan, showing location of habitat mapping survey areas and exclusion zones.

The acoustic survey was carried out on the 5th and 6th November 2020. The following equipment was used for the sidescan sonar and bathymetric survey:

- Leica GX1230 RTK GPS;
- Hypack survey management software;
- Marimatech E-Sea Sound 206C singlebeam echosounder;
- Valeport Mini-CTD;
- TSS CMS25 (Compact Motion Sensor); and
- C-MAX CM2 (325 kHz) sidescan sonar system.

Survey navigation was achieved through the use of a Leica GX1230 RTK (Real Time Kinematic) GPS. The GPS antenna was mounted inboard, adjacent to the echosounder transducer, and offsets between the antenna and transducer were measured and entered into Hypack prior to data acquisition. The GPS was used in full RTK mode; within the GPS, satellite derived positions (WGS84 latitude and longitude) were updated in real-time with pseudo-range corrections from Leica Smartnet via a GSM receiver. Used in full RTK mode, GPS positions were accurate to ± 0.03 m in three dimensions. During the survey positional data were recorded using Hypack survey management software and converted into WGS84 UTM North Zone 30 (6ºW - 0º) grid coordinates.

Navigation checks of the Leica GX1230 RTK GPS system were carried out against a known location in Penarth Marina at the start and end of the acoustic survey and at the end of the grab survey.

Vertical control for the survey was achieved using a Marimatech E-Sea Sound 206 dual frequency echosounder. The echosounder transducer was pole mounted to the port side of the vessel, approximately 0.6 m below the water line. Throughout the survey high frequency (200 kHz) data were recorded digitally in Hypack.

Tide corrections were achieved in real time via the vertical component of the RTK GPS positional data. The raw bathymetric soundings produced by the echosounder were reduced relative to Ordnance Datum Newlyn (ODN) using the Ordnance Survey OSGM02 model within Hypack. This allowed for the tidal component to be removed from the raw soundings in real-time. Bathymetric soundings were then converted to chart datum (Lowest Astronomical Tides) during post-processing using the geoid-ellipsoid separation for Hinkley.

A Valeport Mini-CTD was used to measure the speed of sound through the water column at four locations within the survey area. The speed-of-sound profiles were applied to the raw bathymetric data during post-processing in Hypack.

Potential errors associated with vessel movement (heave, pitch, and roll) were reduced using a TSS CMS25 motion reference unit (MRU). The MRU was mounted on the echosounder transducer pole to remove the need for offsets, and corrections were applied in real-time through the echosounder control box and recorded in Hypack.

A C-MAX CM2 sidescan sonar was used at a frequency of 325 kHz, appropriate for shallow water applications. The sidescan sonar tow-fish was deployed on a breast tow in order to maintain the tow-fish alongside the survey vessel at a depth of approximately 1.5 m below the water surface. This method of deployment enabled shallow areas to be surveyed without risk of grounding the tow-fish and made the vessel more manoeuvrable during line turns (especially in shallow intertidal areas) and whilst surveying around obstructions (e.g. the HPB cooling water intake structure). The tow-fish was deployed from the starboard side of the vessel and offsets to the echosounder transducer and GPS antenna were measured and recorded in Hypack.

2.2.1 Achieved survey

Of the main survey lines (bathymetry and sidescan sonar), 22 of the 23 planned lines were successfully completed; line SS23 (see Figure 2.1) was in the intertidal and was too shallow to survey. On four lines (SS7, SS12, SS18, and SS20; see Figure 2.1) proximity to other vessels within the survey areas required data acquisition to be stopped early. These lines were successfully re-run, with no limitations to data quality. All 18 bathymetry-only cross lines were successfully surveyed and provided additional bathymetric coverage and quality control.

Figure 2.2 shows the vessel track plots whilst acquiring data during the acoustic survey. All exclusion zones were avoided, as well as areas too shallow to safely survey. Full acoustic survey logs are provided in Appendix I.

2.2.2 Acoustic data processing

Following completion of each acoustic survey day, the sidescan sonar data and bathymetric data were processed. Grab sampling locations (see section 2.3) were then selected based on assessment and review of the acoustic results, to ensure all different acoustic return signals were ground-truthed at a range of depths.

Raw bathymetry data were processed using the Single Beam Editor tool in Hypack, including the removal of data spikes caused by returns bouncing off water column targets, multiple returns, and all other erroneous data (e.g., seabed algal cover); speed of sound corrections were applied; and checks were made to the applied RTK tidal corrections.

The edited soundings were then reduced to Admiralty Chart Datum (ACD) using the CD-ODN separation for Hinkley, which is -5.90 m (NTSLF, 2020). Soundings were reduced to ACD to allow differentiation between local intertidal and subtidal areas, to aid habitat mapping.

For charting purposes, a 50 m horizontal sort of the edited bathymetry data was applied within Hypack (when applying a sort of the soundings the software selects the shallowest sounding within the sort-radius). In addition, a TIN (triangulated irregular network) model was produced of the bathymetry soundings based on a 1 m sort of the processed data in order to map bathymetry contours.

The raw sidescan sonar data were processed in Hypack using the sidescan mosaicking tool and a mosaic of the entire survey area was created. Processed sidescan sonar data were analysed line-by-line to estimate the full range of sediment types and features present within the subtidal and intertidal zones surveyed. Assessment of potential sediment types was based on the nature of the acoustic return, with dark returns suggesting harder substrate and lighter returns suggesting softer sediments.

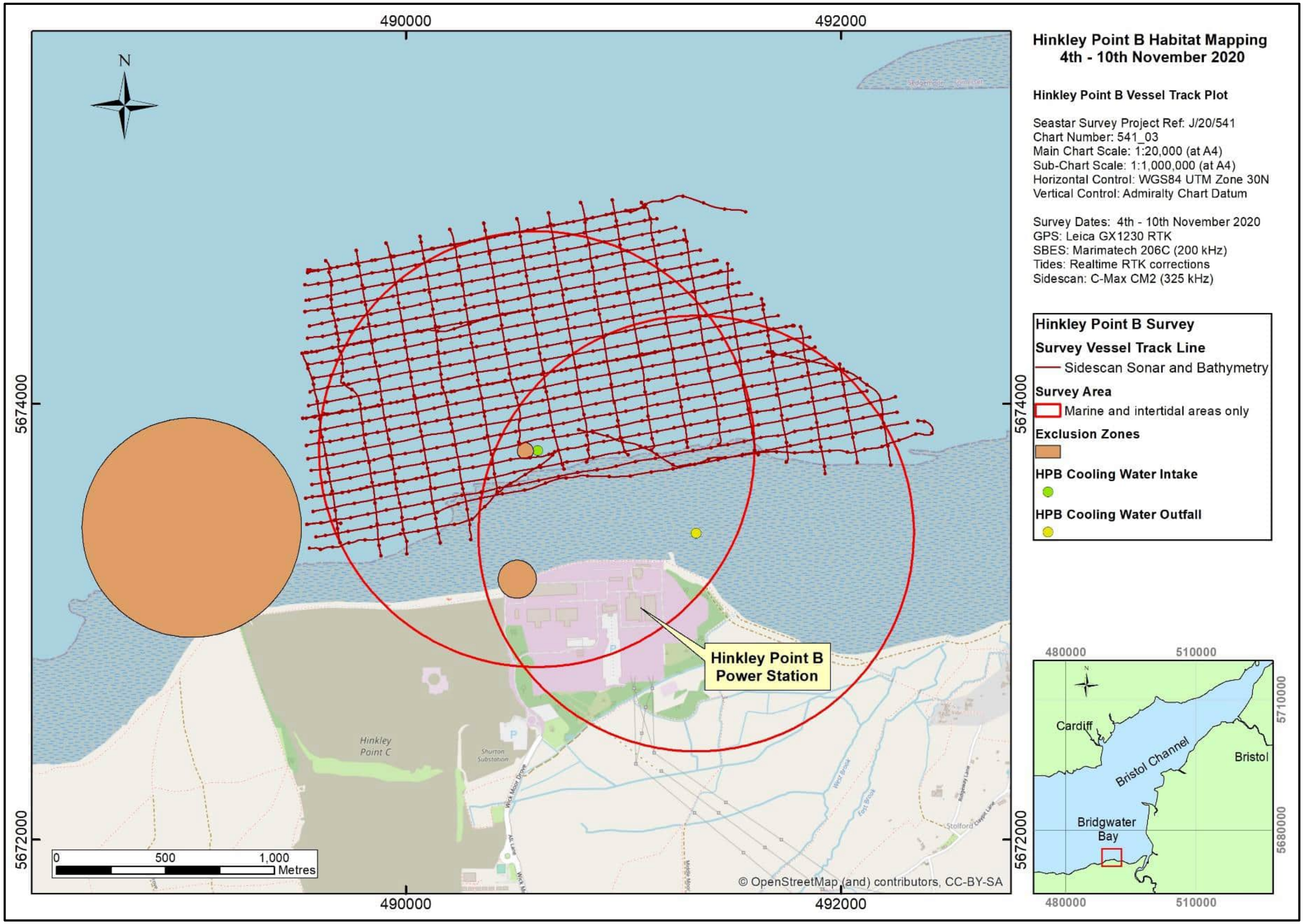

Figure 2.2: Vessel track plots from the 2020 HPB habitat mapping acoustic survey.

2.3 Grab Survey

A total of 18 grab sampling locations were selected, based on an assessment of the acoustic data. A stratified random approach was utilised, with the aim of sampling all acoustic return types at a range of depths, in both survey areas, in order to sample the full range of potential habitat types present.

At each sampling station the vessel set up on the proposed position and a 0.1 m^2 van Veen grab sampler was deployed. A 'fix' of GPS position and time was recorded in Hypack and manually logged in the logbook when the grab was on the seabed. The grab was then recovered to deck and the sample inspected for quality. Samples were rejected on the grounds of poor quality for the following reasons:

- Uneven surface indicative of striking the seabed at an angle;
- Washed out sample;
- Disturbed surface sediment;
- Contamination of the sediment (e.g., hagfish, paint chips, oil etc.);
- Sample touching the top of the grab; and
- Sample <40 % of the grab's capacity.

If the sample was not acceptable, the vessel was repositioned on station and the grab was redeployed on station.

If the sample was deemed to be acceptable the sample was processed. A brief description of the sediment was recorded, including appearance, texture, colour, and odour, as well as any other notable observations, and a labelled photograph was taken. Example images of successful grab samples are shown in Figure 2.3.

Sampling for PSA followed the NMBAQC's Best Practice Guidance for the collection of PSA samples to support biological analysis (Mason, 2016). A sub-sample for PSA was taken using a metal scoop to remove a 5 cm deep core from the grab sample, ensuring at least 100 ml of sediment was collected. Any conspicuous flora and fauna were noted in the logbook and removed from the sub-sample before storing the sediment in labelled plastic bags.

Following sub-sampling for PSA, the remaining sediment was processed for macrobenthic invertebrate analysis. The sediment in the grab was carefully washed into a sample tray ensuring no sample was left behind. The sediment in the tray was then gently washed through a 0.5 mm stainless steel sieve. The sediment sample retained in the sieve was then transferred into a labelled plastic bucket and fixed using a 4 % buffered formaldehyde-seawater solution.

Figure 2.3: Examples of good quality grab samples collected as part of the HPB survey; sample 541_02#1 from station HPBG_01 (left) and sample 541_12#1 from station HPBG_08 (right).

2.3.1 Achieved survey

The distribution of the grab sampling locations is shown Figure 2.4, and a summary of the samples collected at each location is given in Table 2.1. Full survey grab logs are included in Appendix II.

Macrobenthic invertebrate and PSA samples were successfully collected at 15 of the 18 planned sampling locations. At three stations (HPBG_04, HPBG_05, and HPBG_11), the presence of *Sabellaria* reef prevented the collection of good quality sub-samples for PSA. The grab samples at these sites were retained and processed for macrobenthic invertebrate analysis. The confirmed presence of *Sabellaria* reef also aided interpretation of the sidescan sonar data and subsequent habitat mapping.

Due to the fact that PSA samples could not be collected from stations HPBG_04, HPBG_05 and HPBG_11, three additional PSA-only sites (PSA_01, PSA_02, PSA_03) were selected in the field to provide further ground-truthing information to aid interpretation of the sidescan sonar data. These sample locations were situated with the aim of improving ground-truthing coverage or in areas where slight changes in sidescan sonar return had been identified.

Two grab samples were collected at station HPBG_06; the initial sample (541_05#01) was deemed acceptable as a good quality sample but was fairly small (approximately 50 % grab volume). The grab sample was retained and a second grab deployment undertaken. The second sample (541_05#2) mainly comprised *Sabellaria* reef. Both samples were retained as they each provided information about the composition of the substrata. The PSA sub-sample was taken from sample 541_05#1, and the second sample (541_05#2) was processed for macrobenthic invertebrate analysis. Obtaining sub-samples from two separate grabs at the same location is an accepted method under the NMBAQC's Best Practice Guidance (Mason, 2016).

Table 2.1: Summary of grab samples successfully collected as part of the 2020 HPB habitat mapping survey.

Station Name	Sample Number	Sampling Success
HPBG_01	541_02#1	Successful sample; macrobenthic invertebrate & PSA subsample taken
HPBG_02	541_01#1	Successful sample; macrobenthic invertebrate & PSA subsample taken
HPBG_03	541_03#1	Successful sample; macrobenthic invertebrate & PSA subsample taken
HPBG_04	541_06#1	*Sabellaria* reef observed - macrobenthic invertebrate sample only
HPBG_05	541_04#1	*Sabellaria* reef observed - macrobenthic invertebrate sample only
HPBG_06	541_05#1	PSA subsample only
HPBG_06	541_05#2	*Sabellaria* reef observed - macrobenthic invertebrate sample only
HPBG_07	541_07#1	Successful sample; macrobenthic invertebrate & PSA subsample taken
HPBG_08	541_12#1	Successful sample; macrobenthic invertebrate & PSA subsample taken
HPBG_09	541_19#1	Successful sample; macrobenthic invertebrate & PSA subsample taken
HPBG_10	541_10#1	Successful sample; macrobenthic invertebrate & PSA subsample taken
HPBG_11	541_08#3	*Sabellaria* reef observed - macrobenthic invertebrate sample only
HPBG_12	541_11#2	Successful sample; macrobenthic invertebrate & PSA subsample taken
HPBG_13	541_21#1	Successful sample; macrobenthic invertebrate & PSA subsample taken
HPBG_14	541_13#2	Successful sample; macrobenthic invertebrate & PSA subsample taken
HPBG_15	541_15#1	Successful sample; macrobenthic invertebrate & PSA subsample taken
HPBG_16	541_14#1	Successful sample; macrobenthic invertebrate & PSA subsample taken
HPBG_17	541_20#3	Successful sample; macrobenthic invertebrate & PSA subsample taken
HPBG_18	541_16#4	Successful sample; macrobenthic invertebrate & PSA subsample taken
PSA_01	541_09#1	Additional PSA-only sample
PSA_02	541_18#1	Additional PSA-only sample
PSA_03	541_17#2	Additional PSA-only sample

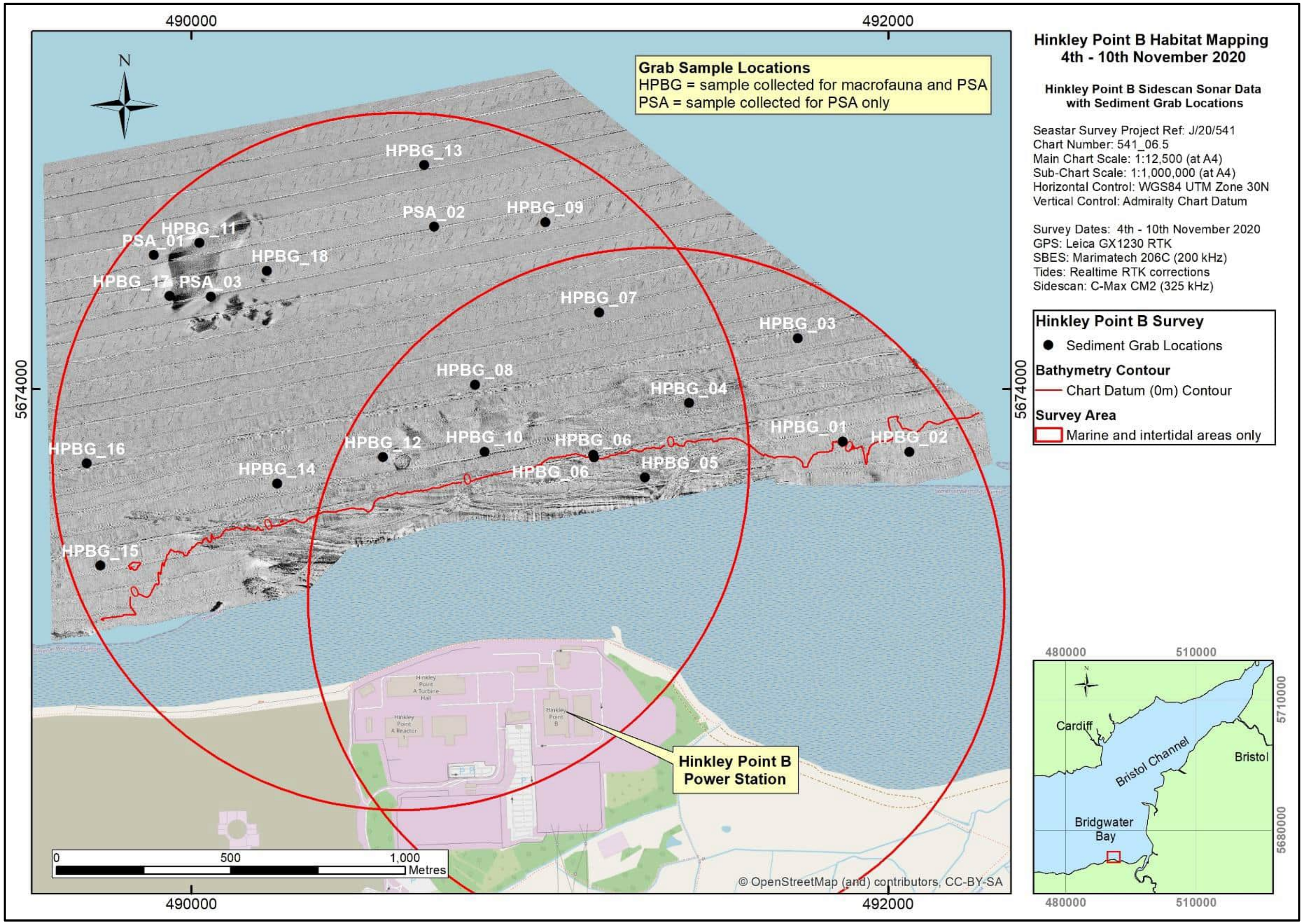

Figure 2.4: Location of grab samples successfully collected as part of the 2020 HPB habitat mapping survey, overlain on sidescan sonar data.

2.4 Laboratory Methods

2.4.1 Particle size analysis

Particle size analysis was carried out following guidelines given in Mason (2016). Samples were visually assessed and all marine fauna (>1 mm) that were alive at the time of sampling were removed. A brief sediment description was noted in the PSA log, together with details of any fauna removed and any other pertinent sediment characteristics (e.g. presence of *Sabellaria*, worm tubes, shell fragments).

Samples were transferred to labelled oven proof containers and dried in an oven at 100 °C. The dried and cooled samples were weighed using a calibrated balance and subsequently screened at 2 mm by wet sieving through a 2 mm sieve, with both >2 mm and <2 mm fractions retained.

The >2 mm fraction of each sample was then re-dried in an oven at 100 °C. The samples were then cooled and sieved at phi intervals. The sediment retained on each sieve was weighed using a calibrated balance with values recorded to three decimal places.

The <2 mm fractions were retained in covered beakers and left for 24 hours, allowing fine particles to settle out of suspension. The overlying water was carefully pipetted off and the saturated sediment was sent for laser diffraction granulometry at half phi intervals. Laser diffraction analysis was performed on three replicates of each sample for quality assurance purposes.

The results of analysis of the two fractions were combined and then analysed using Gradistat v8.0 (Blott, 2010) to determine sediment sorting, textural group, and sediment name (as per Folk, 1954).

2.4.2 Macrobenthic invertebrate analysis

In the laboratory, the macrobenthic invertebrate samples were washed through a 0.5 mm sieve in order to remove the fixative and further clean the sample before analysis. Residues from the sieves were transferred to petri dishes, which were sorted by experienced personnel using low magnification microscopes. The picked taxa were split by phyla and stored in glass vials in 80 % industrial methylated spirit (IMS) ready for identification.

Taxa were identified to the lowest practical taxonomic level with reference to WoRMS (WoRMS Editorial Board, 2021) for species nomenclature, and assigned an MCS alphanumeric biocode according to Howson and Picton (1997) where applicable. Epifauna were identified and recorded when clearly attached to substrate. Identified taxa were separated by major taxonomic group, preserved in 80 % IMS and stored in glass sample vials with polyethylene closures.

Identified taxa were analysed for biomass by major taxonomic group. Taxa were removed from their sample vials and blotted dry, to remove excess IMS, before being weighed using a calibrated balance accurate to 5 decimal places.

2.5 Biotope Assignment

The PSA results and the dominant/characteristic species identified from each sample were examined in detail and used to determine the most appropriate MNCR biotope according to Connor *et al*. (2004) using expert judgement and following guidance outlined in Turner *et al*. (2016) and Parry (2019). Wherever possible biotopes were assigned at the biotope (level 5) or sub-biotope (level 6) level. However, where biological information was lacking (e.g. PSA-only sampling stations) biotopes were instead recorded at the biotope complex level (level 4).

2.6 Habitat Mapping

The principal of habitat mapping is based on the acquisition of data which enable areas of consistent reflectivity, areas of consistent depths or bathymetric features to be ground-truthed. The ground-truthing of the acoustic data enables a substrate type or biotope to be assigned to areas of consistent sidescan sonar reflectivity or bathymetry. Data relating to sediment type, derived from the PSA data, and the biotopes assigned to each sediment sample were incorporated into GIS. These data were then superimposed over the sidescan sonar and bathymetry data. Polygons were then created within GIS around areas of consistent sidescan sonar reflectivity or bathymetric features and assigned labels based on the point sample data within those areas in order to create a habitat map.

3 RESULTS

3.1 Bathymetry Results

Processed bathymetry soundings relative to ACD derived from the survey data are shown in Figure 3.1. A portion of the lower intertidal zone was successfully surveyed by vessel and is denoted in Figure 3.1 by underlined soundings, which represent drying heights above ACD. The 0 m contour marks the border between the subtidal and intertidal zones within the survey areas.

Figure 3.2 shows a TIN model based on a 1 m sort of the processed data with bathymetry contours at 0.5 m intervals. The deepest areas, approximately 4 m below ACD, are shown in dark blue, with shallower subtidal areas going from light blue to light green, and the intertidal areas going from green, through yellow and into red. The shallowest areas surveyed (shown in red) were found to have a drying height of up to 6.5 m above ACD.

In the subtidal zone depths were found to generally increase toward the north (i.e., away from the shore) and toward the west of the survey area. Depths of approximately 1 m below ACD in the southeast corner increased to approximately 3.5 m below ACD in the northwest corner. Several areas of slightly deeper water, up to a maximum of 4.2 m below ACD, were also recorded (see Figure 3.2). A reef feature was identified in the northwest of the survey area, with depths shoaling from the surrounding seabed (~3-3.5 m below ACD) to approximately 2.4 m below ACD.

In the area just offshore of HPB, around the cooling water intake structure and discharge flow, depths were found to shoal very quickly from the shallow subtidal (around the 1.5 m contour) into the intertidal zone. To the east of the cooling water intake structure, a depth change of 7 m was recorded (from 0.5 m below ACD to a drying height of 6.5 m above ACD) over a distance of approximately 200 m. The shallow depths observed in this area appear to be due to the presence of biogenic reef structures present on the seabed. To either side of the reef (i.e., to the east and west of the survey area) the depths shoal much more gradually with drying heights in the region of 1.5 and 2.0 m above ACD.

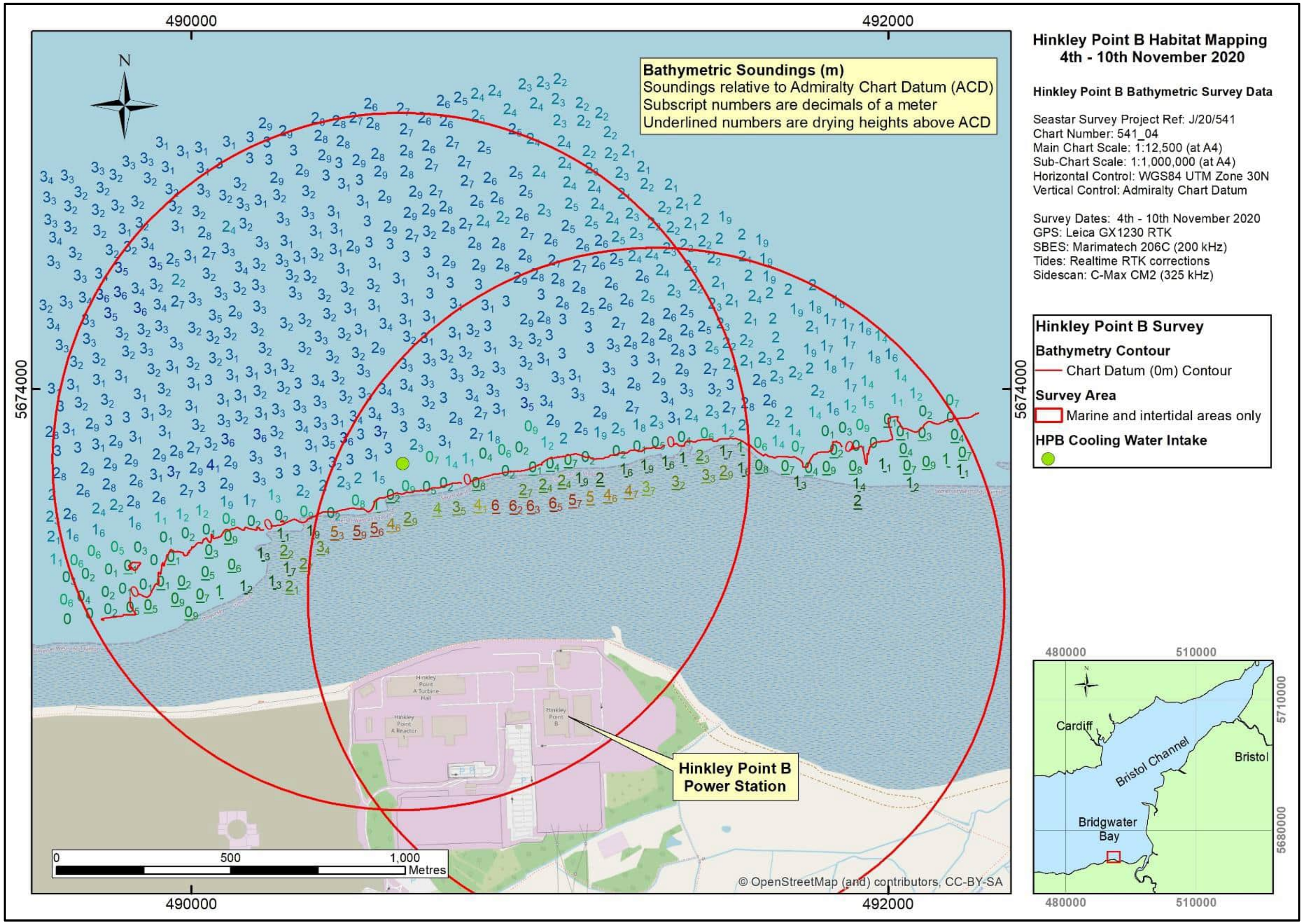

Figure 3.1: Bathymetric soundings (relative to Admiralty Chart Datum) for the HPB habitat mapping survey area surveyed in 2020.

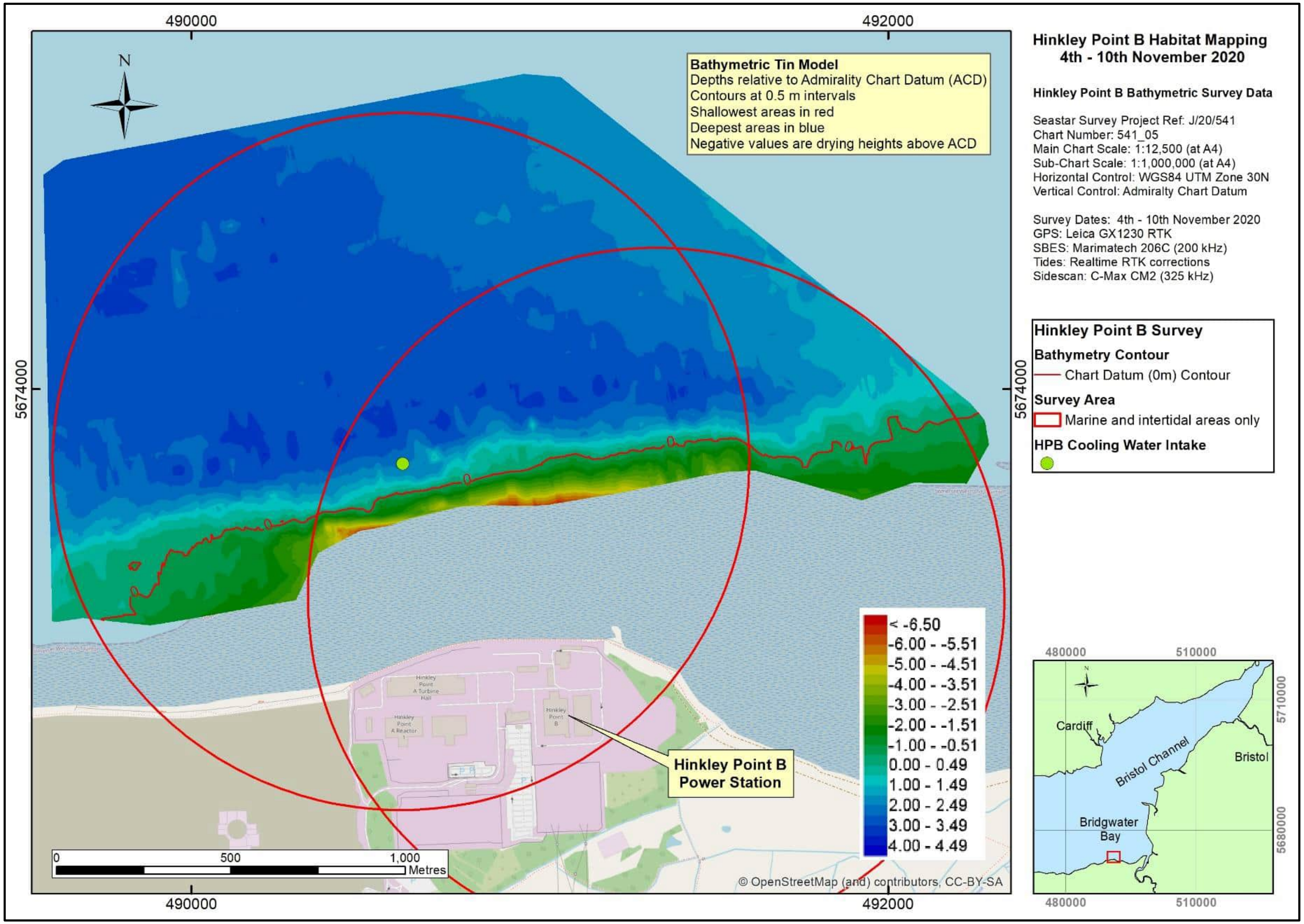

Figure 3.2: Bathymetric TIN model of the HPB habitat mapping survey area surveyed in 2020. Contours at 0.5 m intervals.

3.2 Sidescan Sonar Results

Following line-by-line analysis of the processed sidescan sonar data, several substrate types were identified. These comprised biogenic reef and areas of sands and muds. Figure 3.3 shows the sidescan sonar mosaic of the survey area that was created.

The seabed in the subtidal region of the survey area was found to predominantly consist of soft sediments. In the northwest of the survey area, a distinct region of dark acoustic return, which corresponded to the shallower depths identified in the bathymetry data, indicated the presence of a hard reef feature, likely composed of *Sabellaria* biogenic reef.

Biogenic reef structures were also identified in the shallow subtidal and lower intertidal zones along approximately 1,500 m of coastline adjacent to HPB. In the lower intertidal, banding of darker and lighter acoustic returns suggested 'rows' of biogenic reef structures interspersed with softer sediments. The shallow subtidal and lower intertidal zones either side of this biogenic reef consisted of softer sediments and corresponded with the more gradual shoaling depths observed in the bathymetry data.

Examples of the different returns observed in the sidescan sonar data are provided in Appendix III.

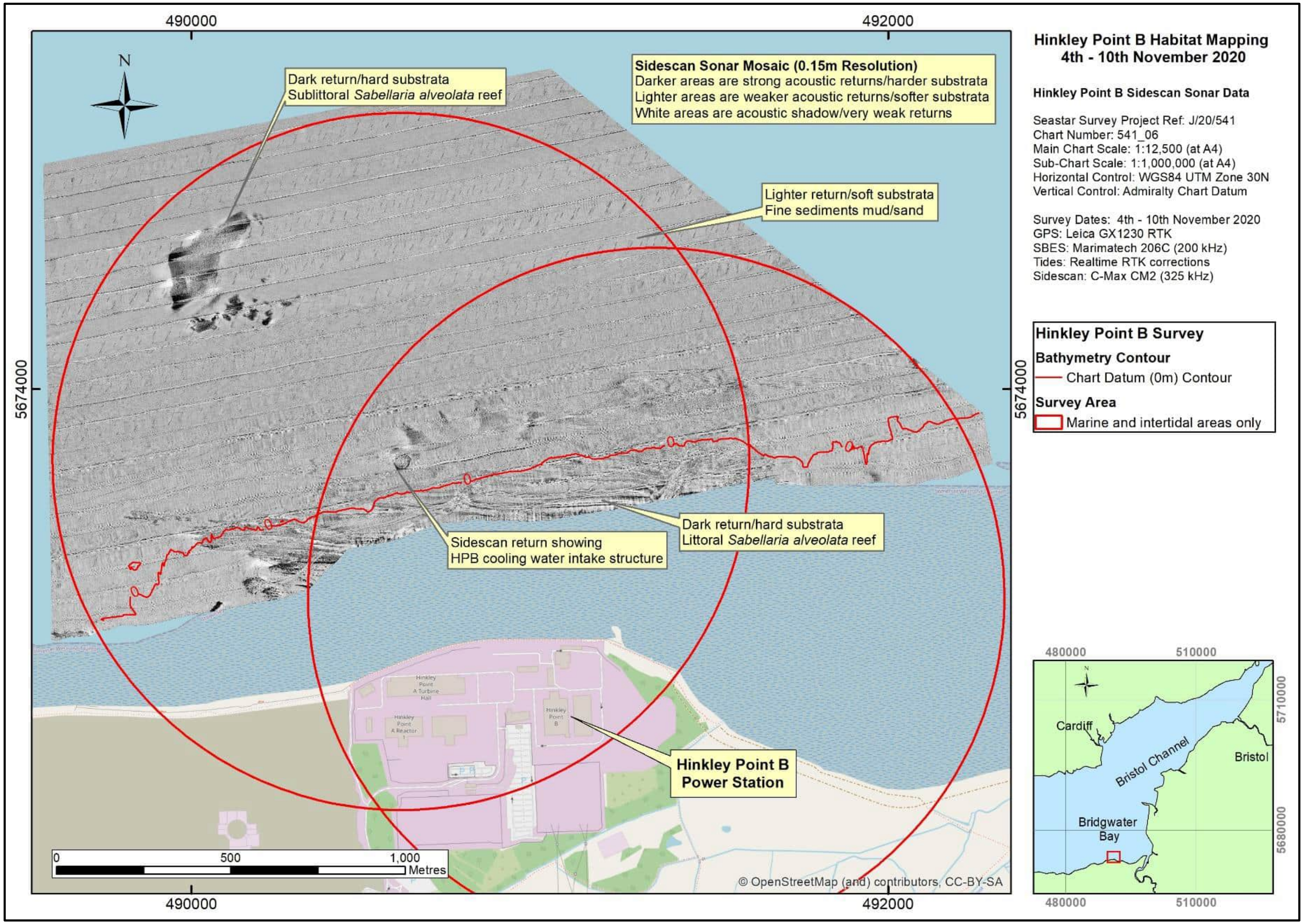

Figure 3.3: Sidescan sonar mosaic of the HPB habitat mapping survey area surveyed in 2020.

3.3 Particle Size Analysis Results

A summary of the results of the PSA is given in Table 3.1 and Figure 3.4, with the full results provided in Appendix IV. Five different sediment textural groups were identified; mud, slightly gravelly mud, sandy mud, muddy sand, and sand.

Table 3.1: Summary of the particle size analysis results of grab samples collected as part of the 2020 HPB habitat mapping survey (as per Folk & Ward, 1957).

Station no.	Sample Number	% Gravel	% Sand	% Mud	Sorting	Classification
			(Wentworth scale)		(Folk and Ward method)	
HPBG_01	541_02#1	0.07	42.75	57.18	Very Poorly Sorted	Sandy Mud
HPBG_02	541_01#1	0.34	12.75	86.94	Poorly Sorted	Sandy Mud
HPBG_03	541_03#1	0.00	5.53	94.47	Poorly Sorted	Mud
HPBG_04	541_06#1	Macrofaunal analysis sample only – evidence of *Sabellaria* reef observed				
HPBG_05	541_04#1	Macrofaunal analysis sample only – evidence of *Sabellaria* reef observed				
HPBG_06	541_05#1	0.25	88.88	10.87	Moderately Sorted	Muddy Sand
HPBG_06	541_05#2	Macrofaunal analysis sample only – evidence of *Sabellaria* reef observed				
HPBG_07	541_07#1	0.17	12.82	87.01	Poorly Sorted	Sandy Mud
HPBG_08	541_12#1	0.01	9.14	90.87	Poorly Sorted	Mud
HPBG_09	541_19#1	0.00	8.73	91.28	Poorly Sorted	Mud
HPBG_10	541_10#1	0.00	95.83	4.16	Moderately Well Sorted	Sand
HPBG_11	541_08#3	Macrofaunal analysis sample only – evidence of *Sabellaria* reef observed				
HPBG_12	541_11#2	0.44	68.46	31.08	Very Poorly Sorted	Muddy Sand
HPBG_13	541_21#1	0.00	4.29	95.70	Poorly Sorted	Mud
HPBG_14	541_13#2	0.39	54.88	44.71	Very Poorly Sorted	Muddy Sand
HPBG_15	541_15#1	0.02	6.45	93.54	Poorly Sorted	Mud
HPBG_16	541_14#1	1.17	9.18	89.65	Poorly Sorted	Slightly Gravelly Mud
HPBG_17	541_20#3	0.38	12.67	86.96	Poorly Sorted	Sandy Mud
HPBG_18	541_16#4	0.04	8.17	91.79	Poorly Sorted	Mud
PSA_01	541_09#1	0.00	8.50	91.50	Poorly Sorted	Mud
PSA_02	541_18#1	0.72	9.52	89.77	Poorly Sorted	Mud
PSA_03	541_17#2	0.32	7.38	92.29	Poorly Sorted	Mud

The sediment types most frequently identified were muds (10 samples) and sandy muds (4 samples). With the exception of samples 541_10#1 and 541_05#1, which were mostly composed of sand, mud fractions were high (between 31.1 and 95.7 %). Proportions of gravel were very low throughout the survey area, with a maximum of 1.2 % recorded at station HPBG_16.

Muddy sediments (i.e., mud, sandy mud, and slightly gravelly mud) were distributed throughout the survey area and corresponded with the areas of soft sediments identified in the sidescan sonar data. Sandier sediments were primarily located in the shallow subtidal areas surrounding the inshore area of biogenic reef. Samples taken in this area comprised muddy sands (HPBG_06, HPBG_12, HPBG_14) and fine sand (HPBG_10).

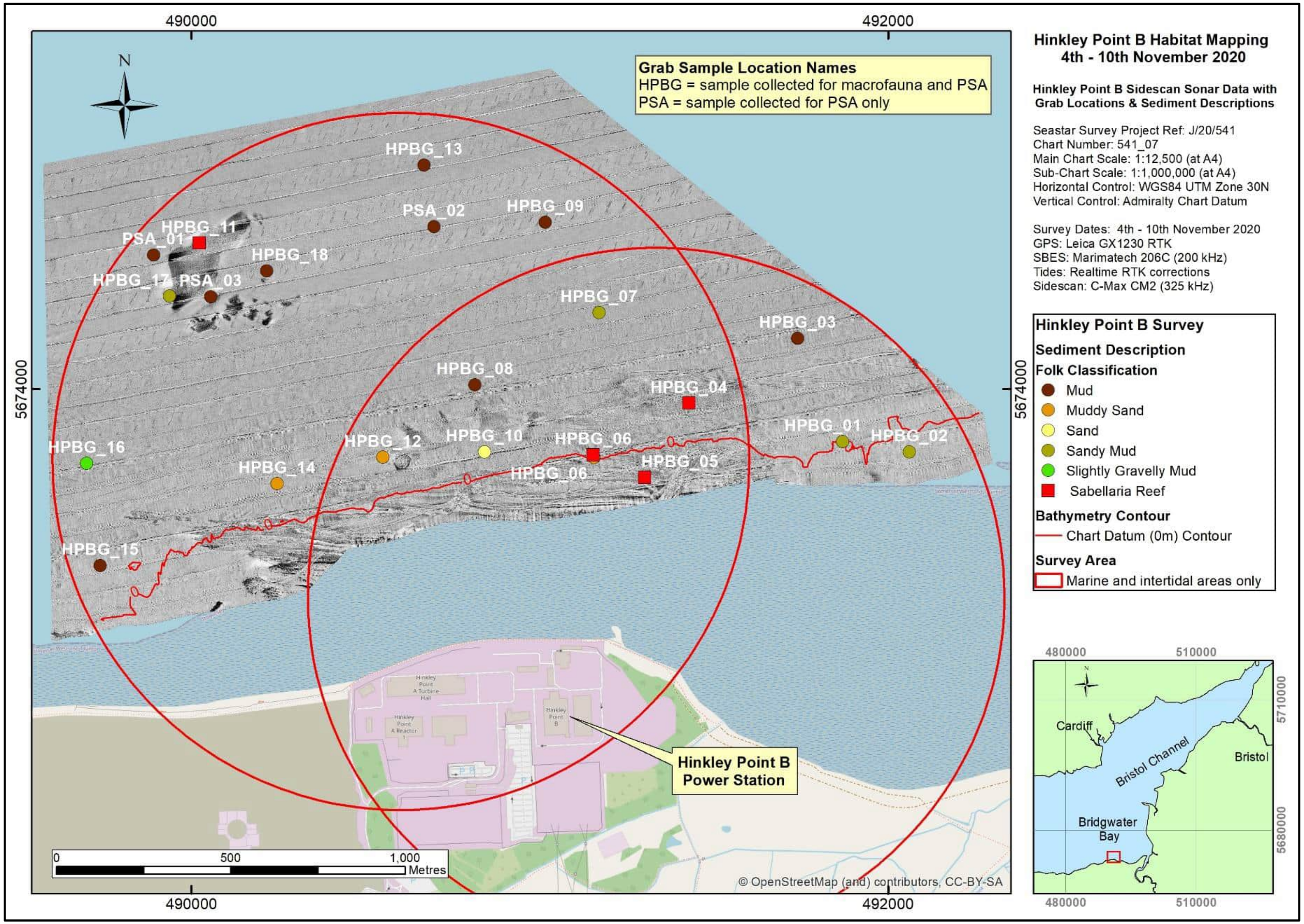

Figure 3.4: Particle size analysis results from samples collected as part of the 2020 HPB habitat mapping survey, overlain on sidescan sonar data. Samples not successfully collected due to the presence of *Sabellaria* reef are indicated as red squares.

3.4 Macrobenthic Invertebrate Analysis

The macrofaunal analysis identified a total of 3,488 individuals and 61 taxa (excluding unquantifiable meiofauna and epifauna). Overall, the macrofauna was dominated by Annelida (69.9 %) followed by Mollusca (19.9 %) and Crustacea (2.9 %). The remaining 7.25 % of individuals comprised Nematoda (1.4 %), Nemertea, Actiniaria, Phoronida, Sipuncula and Pycnogonida (all <1 %). In addition, at a single sampling location (HPBG_05; sample 541_04#1), high numbers of taxa generally associated with intertidal sediments were identified. These included Collembola (springtails), Chironomidae (non-biting midges) and Acari (mites and ticks).

Of note was the presence of the polychaete *Sabellaria alveolata*. This species constructs tubes in tightly packed masses with a distinctive honeycomb-like appearance. The tube masses can form structures classified as Annex I biogenic reef habitat.

3.4.1 Macrofaunal abundance

The abundances of the identified macrofauna (excluding unquantifiable meiofauna and epifauna) are given in Appendix V with a summary of the most abundant taxa in the samples given in Table 3.2.

Table 3.2: Total abundance of the macrofaunal taxa identified in grab samples collected as part of the 2020 HPB habitat mapping survey. Taxa shown comprise 95 % of total individuals identified.

Taxon	Qualifier	Abundance (total no. in all samples)
Sabellaria alveolata		984
Tubificoides amplivasatus		945
Limecola balthica		638
Nephtys sp.	juv.	132
Collembola	indet.	111
Nephtys hombergii		107
Nereididae	juv.	88
Pygospio elegans		87
NEMATODA	indet.	48
Chironomidae	larva	45
Peringia ulvae		41
Diastylis rathkei		39
Polydora sp.	juv.	31
ACARI	indet.	20

The most abundant taxon overall was the biogenic reef-forming polychaete *S. alveolata*, comprising 28.2 % of all individuals identified. However, this species was only present in five of the samples. At stations HPBG_04, HPBG_05, HPBG_06 and HPBG_11 numbers were high ($\bar{x}$ = 245 individuals per sample, range = 220-267). These samples were collected from the locations where biogenic reef had been identified in the field (and hence no PSA sub-samples could be collected) and where reef features were evident in the acoustic data (see section 3.2). Three *S. alveolata* were also identified at station HPBG_17, which was located adjacent to the area of reef in the northwest of the survey area.

The oligochaete *Tubificoides amplivasatus* was also highly abundant, comprising 27.1 % of all individuals identified, and was present in 14 of the 18 samples. The bivalve *Limecola balthica* was also relatively abundant, comprising 18.3 % of individuals identified and present in 13 samples, being absent only from those 5 samples where *S. alveolata* was present. Other relatively abundant taxa included the polychaete *Nephtys* spp., which was present in 14 samples, and the tube-dwelling worm *Pygospio elegans*, which was only present in 3 samples, associated with high numbers of *S. alveolata*.

3.4.2 Diversity

Calculated species diversity indices for the samples are given in Table 3.3. The total number of individuals (N) at each station ranged from 23 to 638 individuals per sample. The total number of taxa (S) was generally low throughout the survey area, ranging from 5 to 24 per sample; 13 of the 18 samples were found to contain fewer than 15 taxa.

Table 3.3: Total number of individuals (N), number of species (S), Margalef's species richness (d), Pielou's equitability index (J), Shannon-Wiener diversity index (H') and Simpson's Dominance Index calculated for the infaunal samples collected as part of the 2020 HPB habitat mapping survey.

Station	Sample no.	S	N	d	J'	H'(loge)	Simpson's
HPBG_01	541_02#1	7	211	1.121	0.542	1.055	0.517
HPBG_02	541_01#1	6	105	1.074	0.674	1.208	0.576
HPBG_03	541_03#1	6	43	1.329	0.575	1.029	0.497
HPBG_04	541_06#1	18	266	3.045	0.243	0.701	0.244
HPBG_05	541_04#1	24	638	3.561	0.637	2.026	0.810
HPBG_06	541_05#2	17	321	2.772	0.297	0.840	0.305
HPBG_07	541_07#1	5	43	1.063	0.721	1.161	0.609
HPBG_08	541_12#1	5	141	0.808	0.762	1.226	0.653
HPBG_09	541_19#1	5	183	0.768	0.424	0.682	0.311
HPBG_10	541_10#1	10	23	2.870	0.812	1.871	0.802
HPBG_11	541_08#3	15	305	2.447	0.255	0.692	0.254
HPBG_12	541_11#2	8	111	1.486	0.377	0.785	0.357
HPBG_13	541_21#1	5	193	0.760	0.324	0.521	0.237
HPBG_14	541_13#2	10	404	1.500	0.489	1.127	0.564
HPBG_15	541_15#1	5	42	1.070	0.565	0.909	0.485
HPBG_16	541_14#1	7	95	1.318	0.667	1.299	0.649
HPBG_17	541_20#3	15	77	3.223	0.649	1.758	0.701
HPBG_18	541_16#4	6	287	0.883	0.331	0.593	0.270

The lowest value of N was found at station HPBG_10, which was also the sample with the highest proportion of sand. Despite this, this sample had the second highest species diversity (Shannon-Wiener diversity index) and the highest equitability (J).

The highest values of N and S were both found at station HPBG_05, which was located in the intertidal at a drying height of 2 m above ACD and which was one of the sampling locations at which biogenic reef was identified. This sample was characterised by high abundances of the polychaetes *S. alveolata*, *P. elegans* and Nereididae (ragworms). This was the only sample in which the taxa collembola, chironomidae and acari were identified.

The species diversity was highly variable between samples, ranging from a low of 0.521 (HPBG_13) to a high of 2.026 (HPBG_05). The stations with the lowest diversity index were generally located in the north of the survey area (further away from shore).

The equitability results suggest an unequal distribution between species at some of the stations. The lowest equitability values (< 0.3) were found at stations HPBG_04, HPBG_06 and HPBG_11, i.e., those stations at which *Sabellaria* reef was observed. Indeed, inspection of the data shows that *S. alveolata* comprised 83-87 % of the individuals in these samples. HPBG_05, the other station at which *Sabellaria* reef was observed, was not found to exhibit the same pattern, however, with a relatively high equitability value (0.64) due to the high abundance of several other taxa. The differences are likely due to the fact that HPBG_05 was located relatively high in the intertidal, while HPBG_04, HPBG_06 and HPBG_11 were located in the subtidal.

3.4.3 Biomass

The results of the biomass by major taxonomic group are presented in Appendix VI. Biomass was variable across the survey area and total sample biomass ranged between 0.33964 g (station HPBG_10) and 9.11922 g (station HPBG_01). Samples containing the most biomass (>6 g per sample) were found at stations HPBG_01, HPBG_12 and HPBG_16, with >90 % of the biomass in these samples attributed to molluscan taxa.

In 13 of the 18 samples, the greatest proportion of biomass was attributed to molluscan taxa. In samples from stations HPBG_04, HPBG_05, HPBG_06, and HPBG_11 (i.e. those stations at which *Sabellaria* reef was observed) the greatest proportion of biomass was attributed to annelida.

The biomass of the sample collected at station HPBG_17 (541_20#3) was predominantly a result of ‘other’ taxa, which comprised 93.5 % of the biomass.

3.4.4 Biotope assessment

Initially, samples were assigned habitats at EUNIS level 3, based on depth information (i.e., subtidal or intertidal) and the sediment type as determined by the PSA or, in the case of biogenic reef, observations in the field together with evidence from the acoustic data. The distribution of EUNIS level 3 habitats assigned to the grab samples is shown in Figure 3.5.

Biotopes were then assigned to each macrofaunal grab sample based upon examination of the macrobenthic invertebrate results. A summary of the biotopes assigned to each sample is presented in Table 3.4, and the distribution of these biotopes is shown in Figure 3.6.

Table 3.4: Summary of the EUNIS level 3 habitats and MNCR biotopes (Connor *et al*., 2004) assigned to grab samples collected as part of the 2020 HPB habitat mapping survey.

Station	Sample	EUNIS Level 3 habitat	Dominant/Characterising Taxa	MNCR Biotope Classification Code
HPBG_01	541_02#1	Sublittoral mud and sandy mud	*Limecola balthica*, *Nephtys hombergii*	SS.SMu.ISaMu.NhomLim
HPBG_02	541_01#1	Littoral mud	*Limecola balthica*, *Nephtys hombergii*	LS.LMu.MEst.NhomLimStr
HPBG_03	541_03#1	Sublittoral mud and sandy mud	*Limecola balthica*, *Nephtys hombergii*	SS.SMu.ISaMu.NhomLim
HPBG_04	541_06#1	Sublittoral biogenic reefs	*Sabellaria alveolata*; reef observed	SS.SBR.PoR.SalvMx
HPBG_05	541_04#1	Littoral biogenic reefs	*Sabellaria alveolata*, Collembola, Nereididae, *Pygospio elegans*; reef observed	LS.LBR.Sab.Salv
HPBG_06	541_05#1	Sublittoral sands and muddy sands	[PSA only]	SS.SSa.SSaVS
HPBG_06	541_05#2	Sublittoral biogenic reefs	*Sabellaria alveolata*; reef observed	SS.SBR.PoR.SalvMx
HPBG_07	541_07#1	Sublittoral mud and sandy mud	*Limecola balthica*, *Tubificoides amplivasatus*, *Nephtys* spp.	SS.SMu.ISaMu.NhomLim
HPBG_08	541_12#1	Sublittoral mud and sandy mud	*Limecola balthica*, *Tubificoides amplivasatus*, *Nephtys* spp.	SS.SMu.ISaMu.NhomLim
HPBG_09	541_19#1	Sublittoral mud and sandy mud	*Tubificoides amplivasatus*, *Limecola balthica*, *Nephtys* spp.	SS.SMu.SMuVS.NhomTubi
HPBG_10	541_10#1	Sublittoral sands and muddy sands	*Limecola balthica*, *Nephtys cirrosa*	SS.SSa.SSaVS.NcirMLim
HPBG_11	541_08#3	Sublittoral biogenic reefs	*Sabellaria alveolata*; reef observed	SS.SBR.PoR.SalvMx
HPBG_12	541_11#2	Sublittoral sands and muddy sands	*Limecola balthica*, *Nephtys hombergii*	SS.SMu.ISaMu.NhomLim
HPBG_13	541_21#1	Sublittoral mud and sandy mud	*Tubificoides amplivasatus*, *Limecola balthica*, *Nephtys* spp.	SS.SMu.SMuVS.NhomTubi
HPBG_14	541_13#2	Sublittoral sands and muddy sands	*Tubificoides amplivasatus*, *Limecola balthica*, *Nephtys hombergii*	SS.SMu.ISaMu.NhomLim
HPBG_15	541_15#1	Sublittoral mud and sandy mud	*Limecola balthica*, *Nephtys* spp.	SS.SMu.ISaMu.NhomLim
HPBG_16	541_14#1	Sublittoral mud and sandy mud	*Limecola balthica*, *Tubificoides amplivasatus*, *Nephtys hombergii*	SS.SMu.ISaMu.NhomLim
HPBG_17	541_20#3	Sublittoral mud and sandy mud	*Tubificoides amplivasatus*, *Nephtys hombergii*	SS.SMu.SMuVS.NhomTubi
HPBG_18	541_16#4	Sublittoral mud and sandy mud	*Tubificoides amplivasatus*, *Nephtys* spp.	SS.SMu.SMuVS.NhomTubi
PSA_01	541_09#1	Sublittoral mud and sandy mud	[PSA only]	SS.SMu.SMuVS
PSA_02	541_18#1	Sublittoral mud and sandy mud	[PSA only]	SS.SMu.SMuVS
PSA_03	541_17#2	Sublittoral mud and sandy mud	[PSA only]	SS.SMu.SMuVS

At sampling locations where biogenic reef was observed in the field, high numbers of *S. alveolata* were recorded. These samples were therefore assigned biogenic reef biotopes. In the subtidal, the biotope **SS.SBR.PoR.SalvMx** ('*Sabellaria alveolata* on variable salinity sublittoral mixed sediment') was assigned to stations HPBG_04, HPBG_06 and HPBG_11. In the intertidal, the biotope **LS.LBR.Sab.Salv** ('*Sabellaria alveolata* reefs on sand-abraded eulittoral rock') was assigned to sample HPBG_05.

Aside from HPBG_05, the only other sample taken from the intertidal zone was 541_01#1 at station HPBG_02. This sample was characterised by high numbers of the bivalve *L. balthica* and the polychaete *N. hombergii*, and the biotope **LS.LMu.MEst.NhomLimStr** ('*Nephtys hombergii*, *Limecola balthica* and *Streblospio shrubsolii* in littoral sandy mud') was assigned.

The sample taken at station HPBG_10 was assigned the biotope **SS.SSa.SSaVS.NcirMLim** ('*Nephtys cirrosa* and *Limecola balthica* in variable salinity infralittoral mobile sand') due to both the sediment type present (sand with a very small proportion of mud, in contrast to all the other samples collected) and to the presence of low numbers of *N. cirrosa* and *L. balthica*.

The majority of the macrobenthic invertebrate samples from the subtidal were found to represent one of two biotopes. The biotope **SS.SMu.ISaMu.NhomLim** ('*Nephtys hombergii* and *Limecola balthica* in infralittoral sandy mud') was assigned to eight samples, and the biotope **SS.SMu.SMuVS.NhomTubi** ('*Nephtys hombergii* and *Tubificoides* spp. in variable salinity infralittoral soft mud') was assigned to four samples. The two biotopes are superficially similar in terms of species composition, with the relative abundance of characterising species determining which biotope was selected. For example, at station HPBG_14 very high numbers of the oligochaete *T. amplivasatus* were present (248 individuals), suggesting the biotope SMuVS.NhomTubi was appropriate for this sample. However, the high number of *L. balthica* (89 individuals) present was more indicative of the more marine ISaMu.NhomLim. These two biotopes are often closely allied (Connor *et al*., 2004).

The distribution of the ISaMu.NhomLim and SMuVS.NhomTubi biotopes exhibited a clear geographical pattern, with SMuVS.NhomTubi found toward the north of the survey area, away from shore, and ISaMu.NhomLim present closer to shore. This is consistent with previous findings; the community associated with the biotope SS.SMu.ISaMu.NhomLim is known to occur in small patches or swathes in shallow waters parallel to the shore, or in shallow nearshore depressions or trenches where finer material collects (Connor *et al*., 2004).

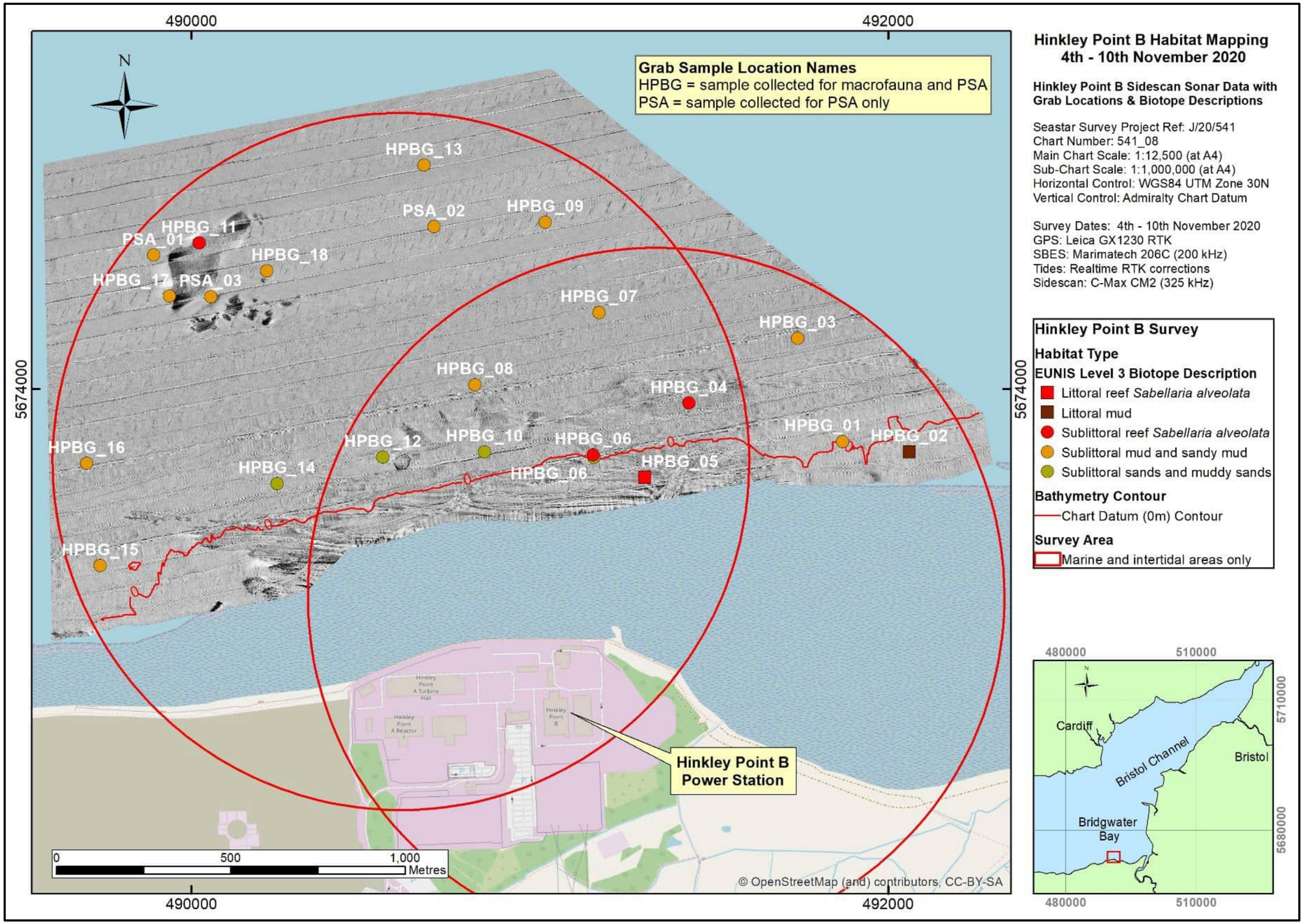

Figure 3.5: EUNIS Level 3 habitats assigned to grab samples collected as part of the 2020 HPB habitat mapping survey. Overlain on processed sidescan sonar data.

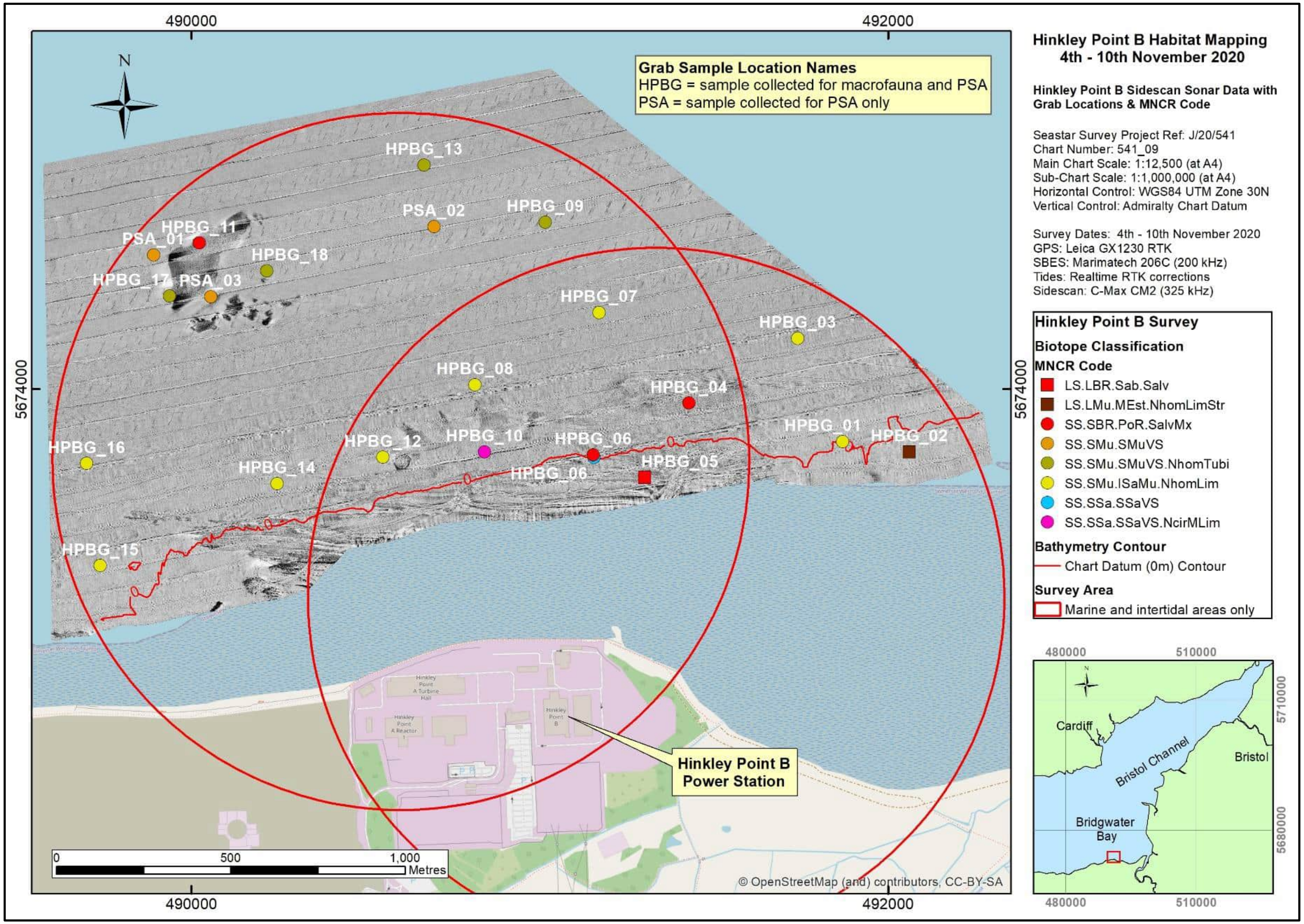

Figure 3.6: Distribution of MNCR biotopes (Connor *et al*., 2004) assigned to grab samples collected as part of the 2020 HPB habitat mapping survey. Overlain on processed sidescan sonar data.

3.5 Habitat Mapping

A EUNIS level 3 habitat map was created based on the results of the acoustic data analysis, PSA and macrobenthic invertebrate analysis. The resultant habitat map is shown in Figures 3.7 and 3.8.

Two main areas of *Sabellaria alveolata* Annex I biogenic reef were identified. One of these was located in the northwest of the survey area and covered an area of approximately 50,233 m^2. The other was a significantly larger area of reef running along the shore in the central region of the survey area, extending from the intertidal into the subtidal. In the intertidal zone this area of reef covered an area of approximately 220,105 m^2, while the subtidal sections of this reef covered an area of 206,220 m^2.

To either side of the intertidal *Sabellaria* reef areas of littoral mud (EUNIS code A2.3) were identified. The area immediately offshore of the inshore subtidal *Saballeria* reef was classified as sublittoral sands and muddy sands (A5.2). This polygon was primarily based on the results of the PSA; no changes in sidescan sonar reflectivity were detected between this area and the much larger area of sublittoral mud and sandy mud (A5.3) which covered the vast majority of the survey area to the north.

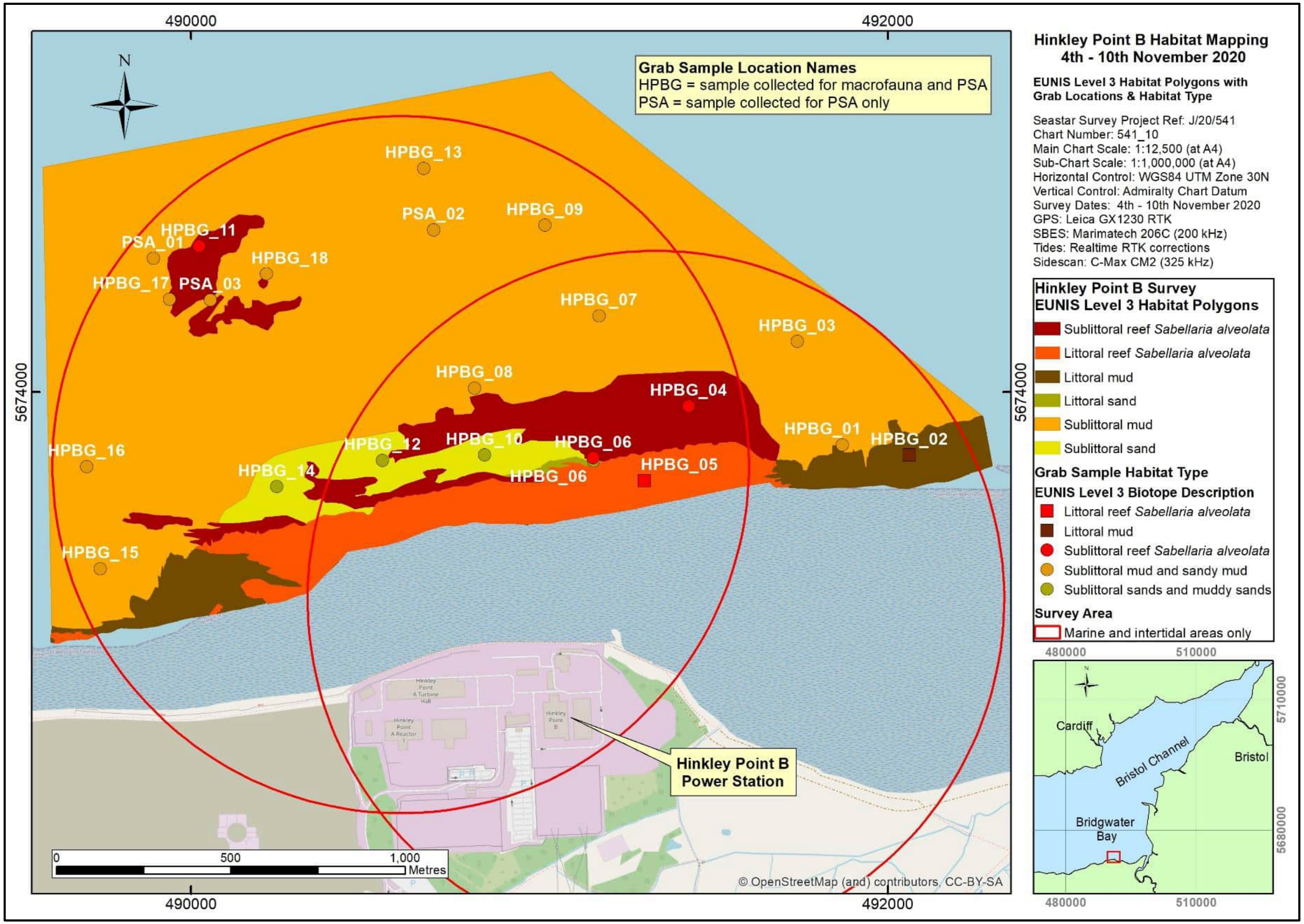

Figure 3.7: EUNIS Level 3 habitat map of the HPB survey area surveyed in 2020, showing EUNIS level 3 habitats assigned to grab samples.

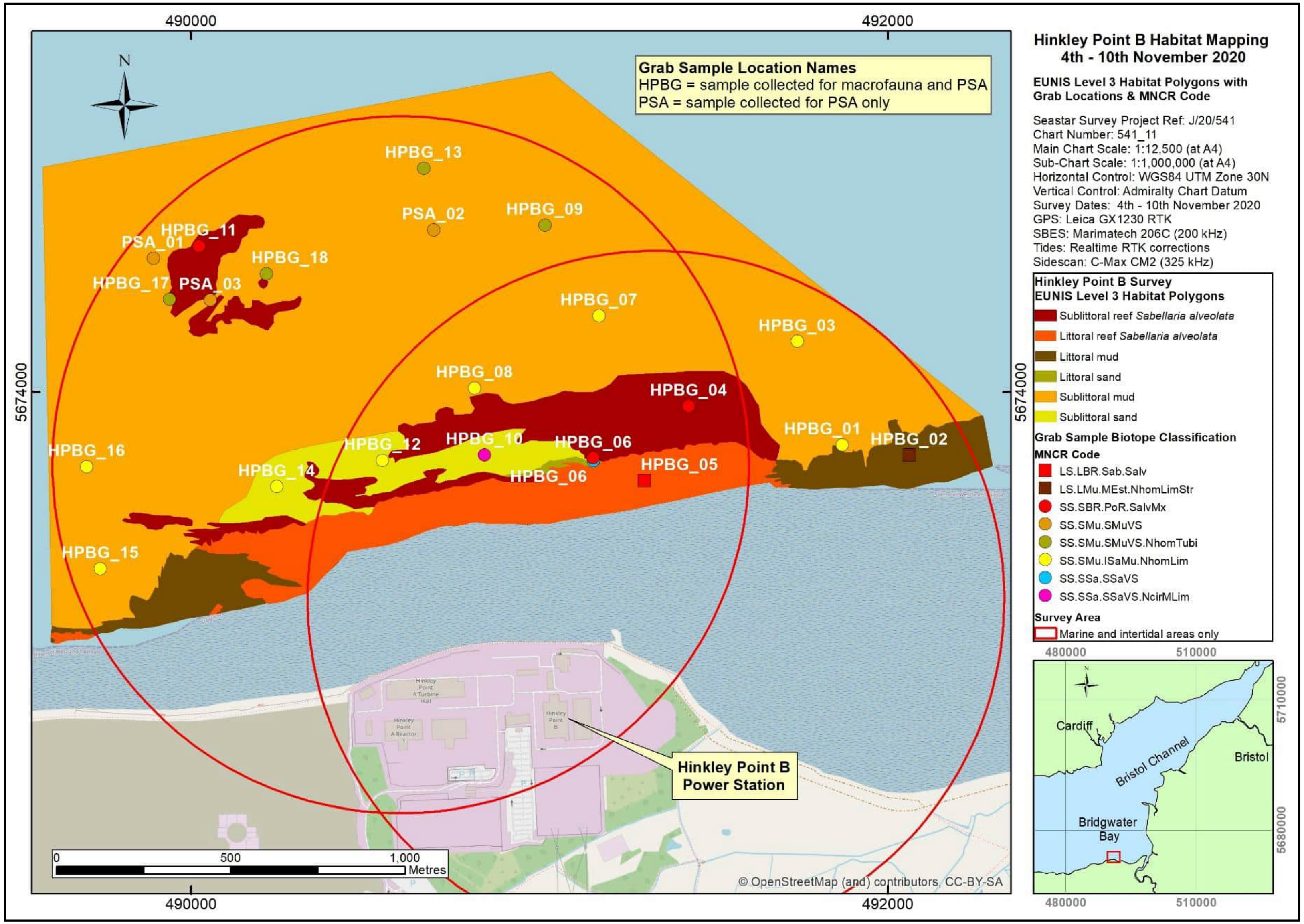

Figure 3.8: EUNIS Level 3 habitat map of the HPB survey area surveyed in 2020, showing MNCR biotope classifications assigned to grab samples.

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5 APPENDICES

Appendix I: Acoustic Survey Field Logs

Logs for completed acoustic survey lines where good quality data were acquired. Times in GMT.

Line Name	Date	Line Direction	Range (m)	Layback (m)	Start of Line			End of Line		
					Time	Event	Fish Altitude (m)	Time	Event	Fish Altitude (m)
SBX17	05/11/2020	South	*Bathymetry only*		10:15:18	245	-	10:25:05	265	-
SBX16	05/11/2020	North	*Bathymetry only*		10:26:41	266	-	10:35:35	284	-
SBX15	05/11/2020	South	*Bathymetry only*		10:38:09	285	-	10:46:57	303	-
SBX14	05/11/2020	North	*Bathymetry only*		10:48:15	304	-	10:57:25	323	-
SBX13	05/11/2020	South	*Bathymetry only*		10:59:36	324	-	11:06:33	338	-
SBX12	05/11/2020	North	*Bathymetry only*		11:08:32	339	-	11:13:11	349	-
SBX11	05/11/2020	South	*Bathymetry only*		11:14:54	350	-	11:21:35	364	-
SBX10	05/11/2020	North	*Bathymetry only*		11:22:38	365	-	11:28:23	377	-
SBX9	05/11/2020	South	*Bathymetry only*		11:29:55	378	-	11:36:09	391	-
SBX8	05/11/2020	North	*Bathymetry only*		11:37:08	392	-	11:42:35	403	-
SBX7	05/11/2020	South	*Bathymetry only*		11:43:58	404	-	11:49:39	416	-
SBX6	05/11/2020	North	*Bathymetry only*		11:50:46	417	-	11:55:01	426	-
SBX5	05/11/2020	South	*Bathymetry only*		11:57:09	427	-	12:01:28	436	-
SBX4	05/11/2020	North	*Bathymetry only*		12:02:25	437	-	12:05:47	444	-
SBX3	05/11/2020	South	*Bathymetry only*		12:07:22	445	-	12:10:38	452	-
SBX2	05/11/2020	North	*Bathymetry only*		12:12:14	453	-	12:14:08	457	-
SBX1	05/11/2020	South	*Bathymetry only*		12:25:30	458	-	12:30:54	469	-
SS1*	05/11/2020	West	*Bathymetry only*		12:38:36	470	-	12:49:37	493	-
SBX18	05/11/2020	South	*Bathymetry only*		13:00:02	494	-	13:05:32	505	-
SS2	05/11/2020	East	50	0	13:40:32	506	4.6	13:52:27	530	3.2
SS1B*	05/11/2020	West	50	0	13:54:45	533	2.9	14:03:40	551	4.1
SS4	05/11/2020	East	50	0	14:06:09	552	4.0	14:18:30	577	2.6

Line Name	Date	Line Direction	Range (m)	Layback (m)	Start of Line			End of Line		
					Time	Event	Fish Altitude (m)	Time	Event	Fish Altitude (m)
SS3	05/11/2020	West	50	0	14:20:04	578	2.5	14:30:09	599	3.7
SS6	05/11/2020	East	50	0	14:32:52	600	3.9	14:46:33	628	2.1
SS5	05/11/2020	West	50	0	14:47:51	629	2.4	14:59:15	652	3.9
SS8	05/11/2020	East	50	0	15:06:33	653	3.8	15:18:13	677	2.4
SS7**	05/11/2020	West	50	0	15:20:38	678	2.4	15:34:25	706	3.9
SS10	05/11/2020	East	50	0	15:39:47	707	4.2	15:51:21	730	2.6
SS9	05/11/2020	West	50	0	15:53:37	731	3.0	16:07:11	759	4.7
SS21A	06/11/2020	West	50	0	10:40:34	798	7.5	10:53:44	825	7.6
SS22	06/11/2020	East	50	0	10:55:06	826	7.1	11:03:13	843	7.8
SS20A**	06/11/2020	East	50	0	11:09:28	844	7.3	11:10:52	847	6.9
SS20B	06/11/2020	East	50	0	11:13:26	848	7.3	11:29:53	881	6.2
SS19	06/11/2020	West	50	0	11:34:55	882	6.9	11:45:42	904	7.4
SS18**	06/11/2020	East	50	0	11:47:40	905	7.8	11:51:17	913	7
SS18A	06/11/2020	East	50	0	11:56:37	914	7.4	12:12:16	946	5.8
SS15	06/11/2020	West	50	0	12:13:58	947	6.5	12:22:58	965	7.1
SS16	06/11/2020	East	50	0	12:24:18	966	7.1	12:41:05	1000	5.1
SS17	06/11/2020	West	50	0	12:42:53	1001	5.1	12:53:46	1023	6.4
SS12**	06/11/2020	East	50	0	12:56:02	1024	6.7	13:09:05	1051	4.6
SS11	06/11/2020	West	50	0	13:10:31	1052	4.8	13:19:58	1071	5.9
SS14	06/11/2020	East	50	0	13:23:05	1072	5.3	13:44:19	1115	3.5
SS13	06/11/2020	West	50	0	13:45:36	1116	3.5	13:56:56	1139	4.8
SS12A	06/11/2020	East	50	0	13:58:11	1140	4.7	14:17:30	1179	2.9
SS7A	06/11/2020	West	50	0	14:20:39	1180	3.2	14:30:15	1200	4.4

*SS1 was run as a bathymetry-only line as well as a bathymetry and sidescan sonar line.

**Data quality was good but the survey vessel had to go offline to avoid other vessels in the survey areas. These lines were re-run (highlighted in bold) and were successfully completed with no limitation to data quality.

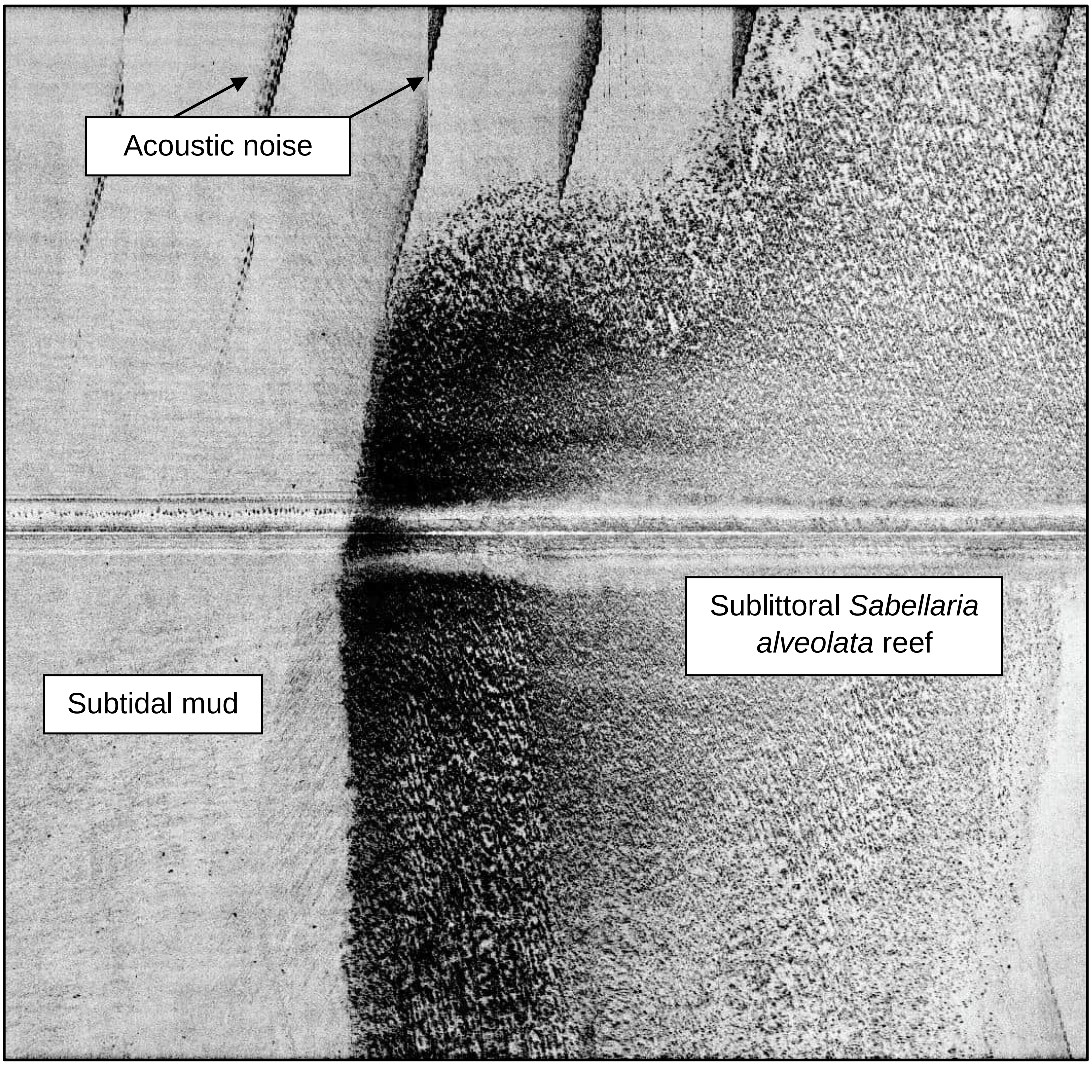
Appendix II: Grab Survey Field Logs

Positions are in WGS84 UTM North Zone 30 (6°W – 0°) Easting and Northing and WGS84 Latitude and Longitude (decimal degrees).
'Y' = sample successfully collected; 'N' = no sample collected. DNF = Grab did not fire.

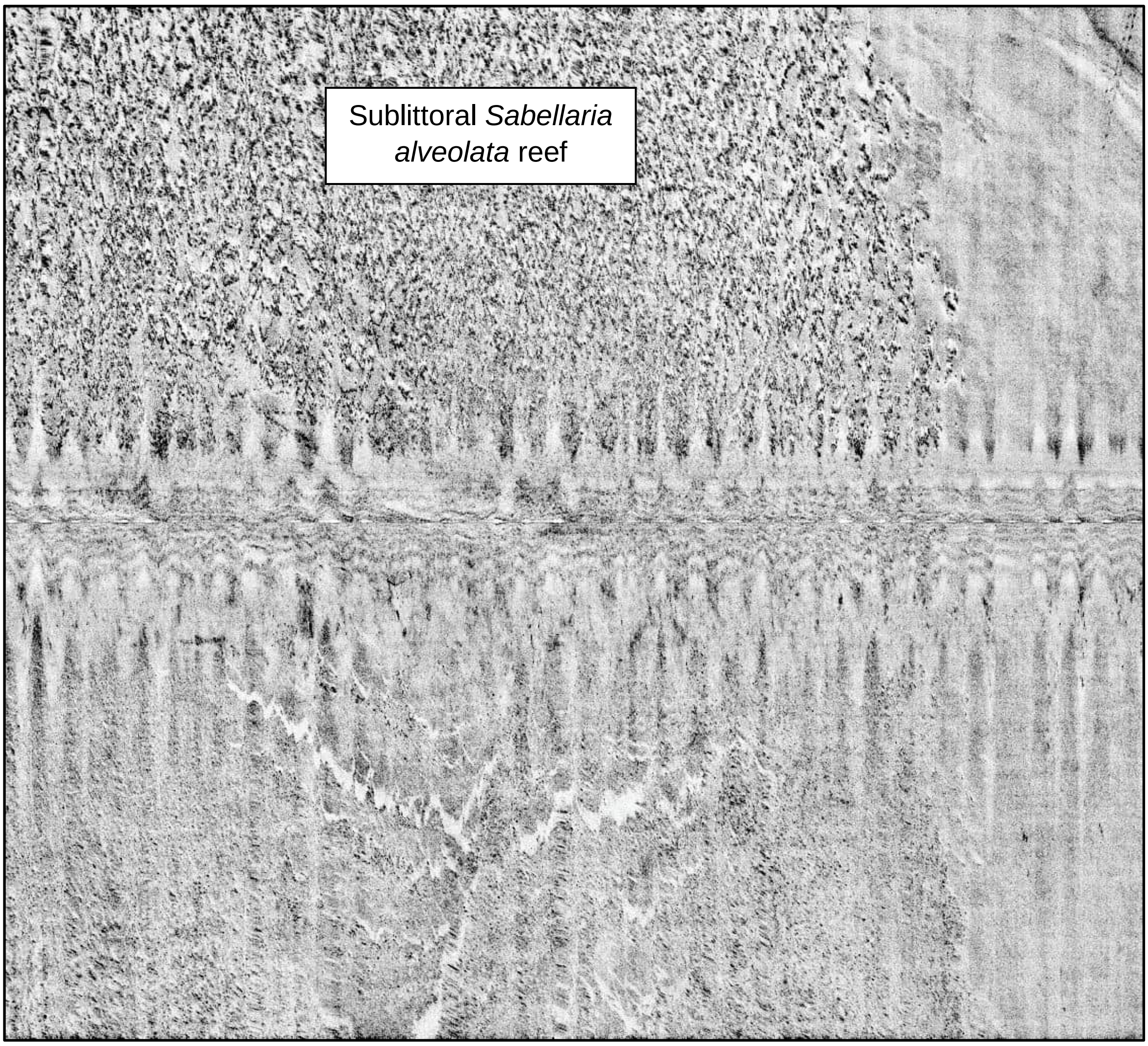
Station Name	Sample No.	Date	Time (GMT)	Easting (m)	Northing (m)	Latitude (°N)	Longitude (°W)	Macrofaunal sample	PSA sample	Sample Description
HPBG_02	541_01#1	07/11/2020	11:50:39	492061.95	5673818.92	51.21571	3.11365	Y	Y	Semi-fluid brown sandy mud surface over consolidated grey clay. No smell.
HPBG_01	541_02#1	07/11/2020	12:17:54	491870.05	5673848.51	51.21597	3.11640	Y	Y	Semi-fluid brown slightly sandy mud surface over more consolidated grey clay.
HPBG_03	541_03#1	07/11/2020	12:48:26	491740.76	5674144.94	51.21863	3.11826	Y	Y	Brown mud.
HPBG_05	541_04#1	07/11/2020	13:11:57	491302.07	5673745.40	51.21503	3.12453	Y	N	Live *Sabellaria* reef.
HPBG_06	541_05#1	07/11/2020	13:29:31	491156.07	5673802.79	51.21555	3.12662	N	Y	Live *Sabellaria* reef.
HPBG_06	541_05#2	07/11/2020	13:43:49	491154.17	5673810.87	51.21562	3.12665	Y	N	Brown sandy mud.
HPBG_04	541_06#1	07/11/2020	14:15:40	491428.59	5673959.39	51.21696	3.12273	Y	N	Live *Sabellaria* reef.
HPBG_07	541_07#1	07/11/2020	14:37:33	491171.17	5674218.73	51.21929	3.12642	Y	Y	Soft brown mud, semi-fluid surface.
HPBG_11	541_08#1	07/11/2020	15:03:25	490090.62	5674436.60	51.22123	3.14190	N	N	Brown mud.
HPBG_11	541_08#2	07/11/2020	15:03:55	490071.85	5674430.65	51.22118	3.14216	N	N	Deep fluid brown mud layer over more consolidated grey clay.
HPBG_11	541_08#3	07/11/2020	15:06:59	490023.11	5674418.34	51.22107	3.14286	Y	N	Moderately well sorted brown sand.
PSA_01	541_09#1	07/11/2020	15:20:40	489891.74	5674383.34	51.22075	3.14474	N	Y	No sample – DNF.
HPBG_10	541_10#1	08/11/2020	11:28:58	490842.49	5673819.10	51.21569	3.13111	Y	Y	No sample - live *Sabellaria* reef in jaws, washed out sample.
HPBG_12	541_11#1	08/11/2020	11:48:58	490548.77	5673796.86	51.21549	3.13532	N	N	Live *Sabellaria* reef.
HPBG_12	541_11#2	08/11/2020	11:49:50	490549.49	5673803.92	51.21555	3.13531	Y	Y	No sample – DNF.
HPBG_08	541_12#1	08/11/2020	12:45:33	490814.16	5674011.35	51.21742	3.13152	Y	Y	Slightly sandy brown mud, semi-fluid surface.
HPBG_14	541_13#1	08/11/2020	13:42:52	490248.55	5673727.92	51.21486	3.13962	N	N	Brown mud.
HPBG_14	541_13#2	08/11/2020	13:43:20	490246.00	5673727.99	51.21486	3.13965	Y	Y	No sample – DNF.

Station Name	Sample No.	Date	Time (GMT)	Easting (m)	Northing (m)	Latitude (°N)	Longitude (°W)	Macrofaunal sample	PSA sample	Sample Description
HPBG_16	541_14#1	08/11/2020	14:20:55	489699.68	5673785.88	51.21537	3.14748	Y	Y	Slightly sandy brown mud.
HPBG_15	541_15#1	08/11/2020	14:58:38	489738.92	5673492.80	51.21274	3.14691	Y	Y	Deep very fluid mud layer over more consolidated grey clay.
HPBG_18	541_16#1	08/11/2020	15:34:13	490215.92	5674338.23	51.22035	3.14010	N	N	Very fluid brown mud layer over very consolidated grey clay. Anoxic smell.
HPBG_18	541_16#2	08/11/2020	15:34:48	490216.04	5674338.72	51.22035	3.14010	N	N	Live *Sabellaria* reef and mud; *Sabellaria* in jaws, washed out sample.
HPBG_18	541_16#3	08/11/2020	15:36:33	490216.40	5674339.03	51.22036	3.14009	N	N	No sample – DNF.
HPBG_18	541_16#4	08/11/2020	15:37:19	490216.74	5674338.44	51.22035	3.14009	Y	Y	Live *Sabellaria* reef and soft brown mud, small stones, shell fragments.
PSA_03	541_17#1	08/11/2020	16:27:07	490062.17	5674262.40	51.21966	3.14230	N	N	No sample - DNF
PSA_03	541_17#2	08/11/2020	16:27:28	490055.76	5674264.24	51.21968	3.14239	N	Y	No sample - grab fired but no sediment
PSA_02	541_18#1	08/11/2020	16:37:55	490696.65	5674464.81	51.22149	3.13322	N	Y	No sample – DNF.
HPBG_09	541_19#1	09/11/2020	10:12:19	491016.22	5674478.03	51.22162	3.12864	Y	Y	Soft brown mud.
HPBG_17	541_20#1	09/11/2020	10:43:34	489946.05	5674262.27	51.21966	3.14396	N	N	Very fluid thin brown mud layer over consolidated grey clay. Slight anoxic / hydrocarbon smell.
HPBG_17	541_20#2	09/11/2020	10:47:04	489910.48	5674283.02	51.21985	3.14447	N	N	Very fluid brown mud layer over very consolidated grey clay.
HPBG_17	541_20#3	09/11/2020	10:49:48	489937.98	5674265.99	51.21969	3.14408	Y	Y	No sample - grab fired but no sediment.
HPBG_13	541_21#1	09/11/2020	11:04:50	490668.07	5674641.42	51.22308	3.13363	Y	Y	Very fluid brown mud layer over very consolidated grey clay

Appendix III: Sidescan Sonar Sediment Type Examples

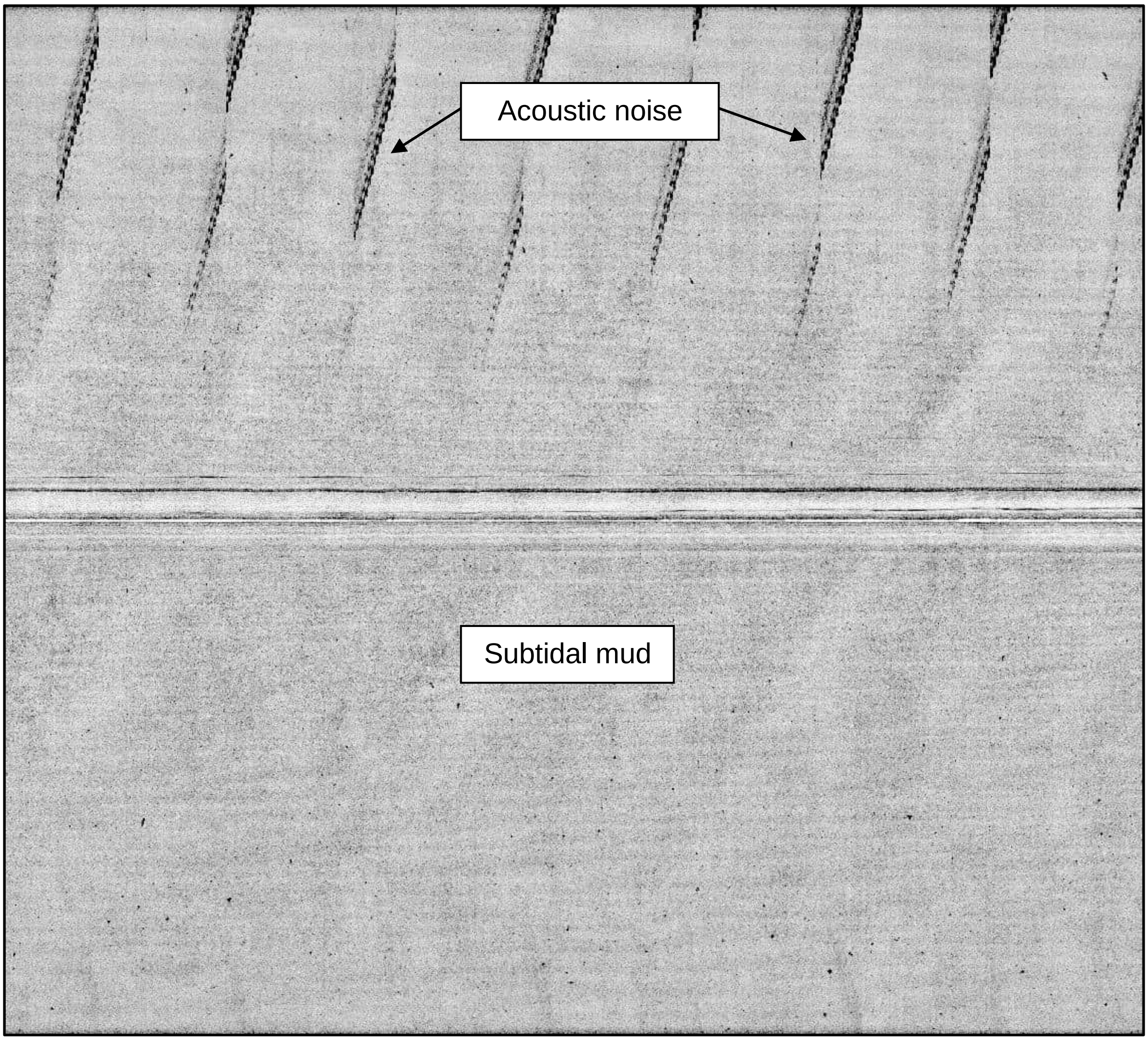


Section of sidescan sonar data at station PSA_01, showing an example of subtidal mud and sublittoral *Sabellaria alveolata* biogenic reef. Acoustic noise was likely due to the close proximity of the vessel hull to the towfish and the shallow water on site.

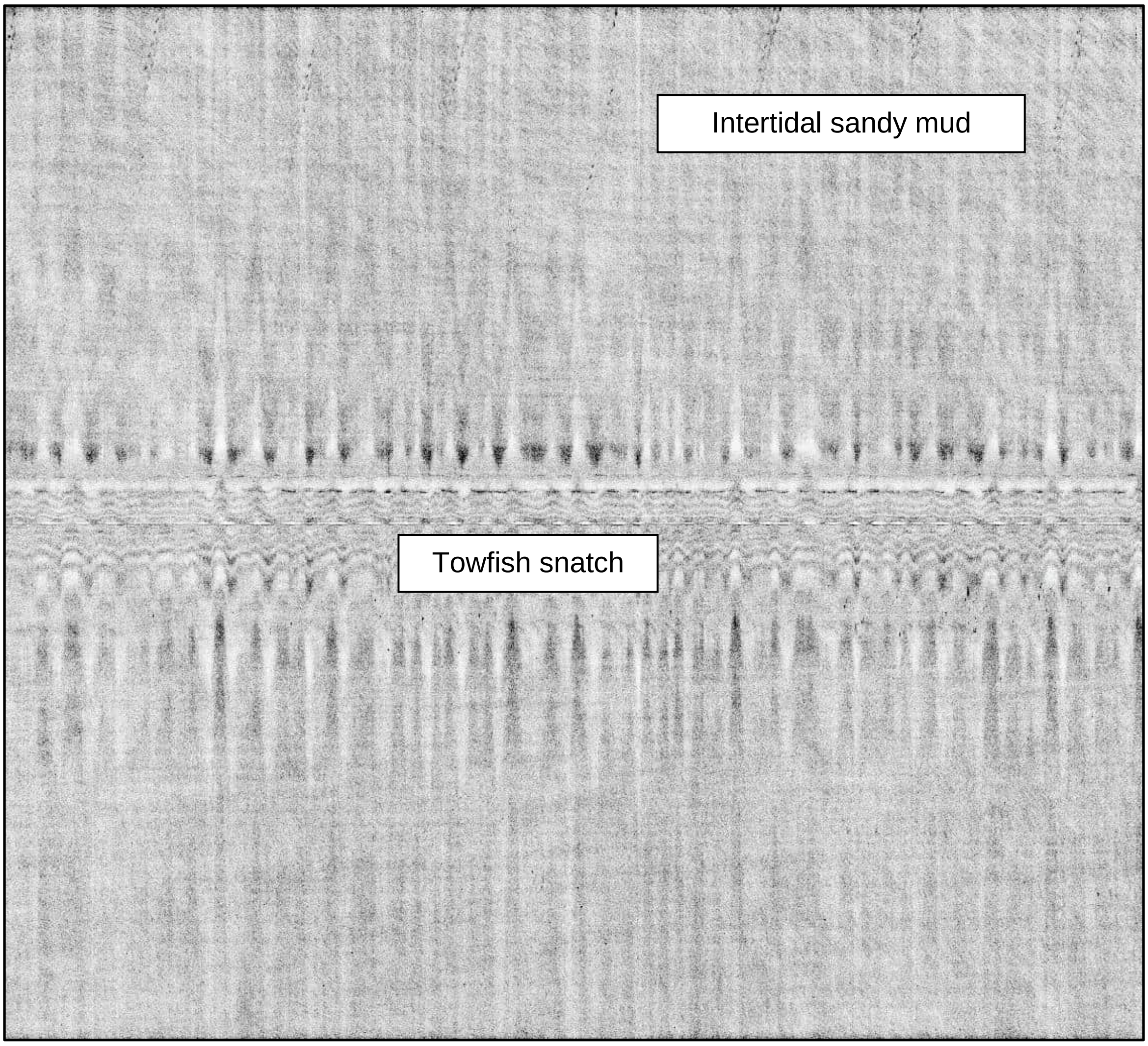


Section of sidescan sonar data at station HPBG_04, showing an example of sublittoral *Sabellaria alveolata* biogenic reef.

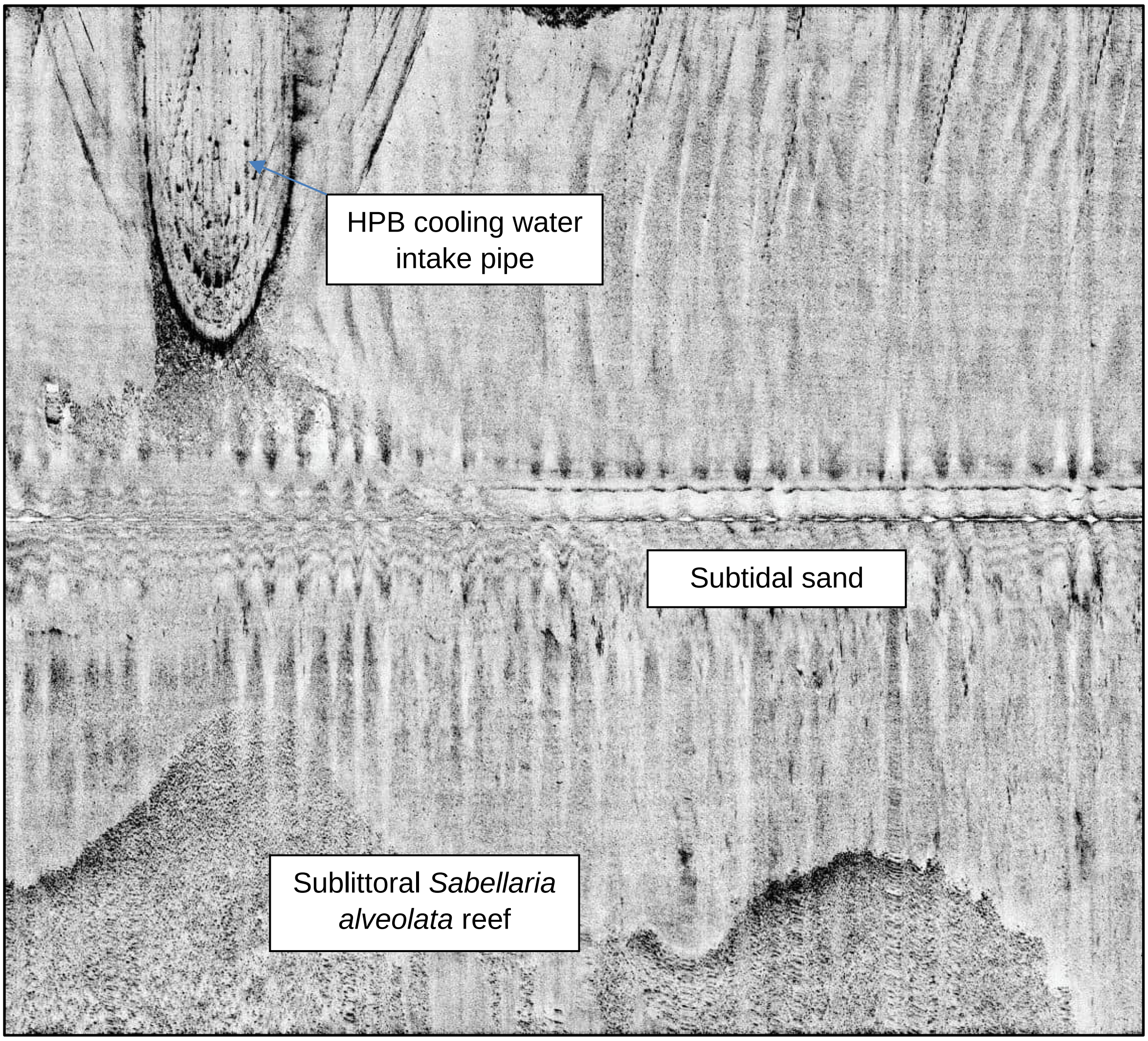
Section of sidescan sonar data at stations HPBG_05 and HPBG_06, showing an example of littoral *Sabellaria alveolata* biogenic reef.



Section of sidescan sonar data at station HPBG_09 showing an example of subtidal mud and acoustic noise (likely caused by close proximity of the vessel hull and the shallow water).



Section of sidescan sonar data at station HPBG_02 showing an example of intertidal mud and sidescan sonar towfish snatch, as a result of sea swell.



Section of sidescan sonar data at station HPBG_10 showing an example of subtidal sand and the HPB cooling water intake pipe.

Appendix IV: Particle Size Analysis Results

Results of the particle size analysis of grab samples collected as part of the 2020 Hinkley Point B habitat mapping survey.

Sediment Grain Size	HPBG_01 541_02#1	HPBG_02 541_01#1	HPBG_03 541_03#1	HPBG_06 541_05#1	HPBG_07 541_07#1	HPBG_08 541_12#1	HPBG_09 541_19#1	HPBG_10 541_10#1	HPBG_12 541_11#2
16 mm	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
8 mm	0.018	0.008	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4 mm	0.016	0.080	0.000	0.115	0.062	0.000	0.000	0.000	0.210
2 mm	0.035	0.248	0.000	0.130	0.110	0.006	0.000	0.001	0.235
1.4 mm	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1 mm	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.71 mm	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.50 mm	0.460	0.030	0.020	1.985	0.000	0.000	0.010	0.390	0.418
0.355 mm	4.477	0.299	0.190	15.133	0.369	0.140	0.710	10.160	6.989
0.250 mm	8.964	1.415	0.330	31.882	1.917	0.780	1.090	33.730	17.084
0.180 mm	11.082	2.601	0.420	28.460	2.586	1.410	1.080	36.500	21.733
0.125 mm	9.503	3.070	0.560	10.544	2.346	1.940	1.140	13.980	15.909
90 µm	5.616	2.801	1.110	0.878	2.266	2.250	1.640	1.070	5.814
63 µm	2.648	2.531	2.900	0.000	3.334	2.620	3.060	0.000	0.518
44 µm	2.868	4.066	6.780	0.030	6.539	4.520	6.540	0.000	0.378
31 µm	4.957	7.096	10.730	0.938	9.843	7.330	10.350	0.460	2.300
22 µm	7.095	10.355	13.190	1.237	11.770	10.029	12.780	0.960	3.793
16 µm	7.575	11.471	12.610	1.047	11.151	10.889	12.240	0.610	4.032
11 µm	8.734	13.554	13.290	1.297	11.850	13.189	12.860	0.360	4.729
8 µm	6.595	10.275	9.440	1.297	8.605	10.579	9.100	0.270	3.803
6 µm	5.176	7.983	7.260	1.277	6.768	8.699	6.980	0.340	3.186
4 µm	6.026	9.209	8.560	1.696	8.146	10.539	8.230	0.560	3.893
3 µm	3.298	5.073	4.850	0.948	4.692	5.960	4.670	0.350	2.150
2 µm	3.068	4.834	4.680	0.828	4.582	5.710	4.500	0.250	1.951
1.3 µm	1.339	2.232	2.160	0.279	2.156	2.620	2.080	0.000	0.777

Sediment Grain Size	HPBG_01 541_02#1	HPBG_02 541_01#1	HPBG_03 541_03#1	HPBG_06 541_05#1	HPBG_07 541_07#1	HPBG_08 541_12#1	HPBG_09 541_19#1	HPBG_10 541_10#1	HPBG_12 541_11#2
1 µm	0.290	0.508	0.520	0.000	0.509	0.560	0.520	0.000	0.090
0.7 µm	0.160	0.279	0.370	0.000	0.369	0.250	0.400	0.000	0.000
0.5 µm	0.000	0.000	0.030	0.000	0.030	0.000	0.030	0.000	0.000
0.35 µm	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.24 µm	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.17 µm	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.12 µm	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Sediment Grain Size	HPBG_13 541_21#1	HPBG_14 541_13#2	HPBG_15 541_15#1	HPBG_16 541_14#1	HPBG_17 541_20#3	HPBG_18 541_16#4	PSA_01 541_09#1	PSA_02 541_19#1	PSA_03 541_17#2
16 mm	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
8 mm	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.506	0.000
4 mm	0.000	0.042	0.000	0.204	0.000	0.037	0.000	0.013	0.000
2 mm	0.000	0.351	0.015	0.967	0.381	0.000	0.000	0.201	0.324
1.4 mm	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1 mm	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.71 mm	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.50 mm	0.000	0.060	0.010	0.049	0.020	0.050	0.260	0.030	0.050
0.355 mm	0.080	5.707	0.280	0.534	0.976	0.810	0.790	0.526	0.259
0.250 mm	0.210	12.780	0.580	0.810	2.471	0.970	1.210	0.913	0.688
0.180 mm	0.180	16.007	0.830	0.988	2.690	0.770	1.340	1.062	1.017
0.125 mm	0.340	12.790	1.270	1.384	2.072	0.950	1.360	1.340	1.296
90 µm	1.030	6.056	1.590	2.105	1.823	1.669	1.440	2.085	1.625
63 µm	2.450	1.484	1.890	3.311	2.620	2.949	2.100	3.564	2.442
44 µm	5.620	1.365	3.529	6.187	5.270	5.918	4.630	6.910	5.073
31 µm	9.680	3.526	6.279	9.349	8.318	9.277	8.150	10.305	8.512

Sediment Grain Size	HPBG_13 541_21#1	HPBG_14 541_13#2	HPBG_15 541_15#1	HPBG_16 541_14#1	HPBG_17 541_20#3	HPBG_18 541_16#4	PSA_01 541_09#1	PSA_02 541_19#1	PSA_03 541_17#2
22 µm	12.920	5.429	9.159	11.583	10.679	11.736	11.220	12.331	11.323
16 µm	13.140	5.817	10.458	11.385	10.958	11.686	11.850	11.675	11.712
11 µm	14.500	6.813	13.378	12.522	12.602	12.955	13.660	12.350	13.406
8 µm	10.560	5.359	11.338	9.349	9.663	9.696	10.380	8.915	10.247
6 µm	8.080	4.373	9.739	7.442	7.691	7.697	8.210	6.950	8.203
4 µm	9.260	5.249	12.198	8.964	9.065	9.257	9.690	8.260	9.798
3 µm	5.000	2.889	6.999	5.090	5.041	5.278	5.410	4.676	5.512
2 µm	4.530	2.640	6.689	4.862	4.772	5.118	5.150	4.478	5.263
1.3 µm	1.850	1.086	3.000	2.194	2.172	2.369	2.340	2.055	2.382
1 µm	0.370	0.169	0.580	0.474	0.478	0.530	0.530	0.486	0.528
0.7 µm	0.190	0.000	0.190	0.247	0.249	0.270	0.280	0.347	0.319
0.5 µm	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.030	0.010
0.35 µm	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.24 µm	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.17 µm	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.12 µm	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Appendix V: Macrobenthic invertebrate analysis results

Species abundance matrix for samples collected as part of the 2020 Hinkley Point B habitat mapping survey.

MCS codes as per Howson & Picton (1997).
Species nomenclature as per WoRMS (2021).

MCSA	MCSN	Taxon	Authority	Qualifier	HPBG_01 541_02#1	HPBG_02 541_01#1	HPBG_03 541_03#1	HPBG_04 541_06#1	HPBG_05 541_04#1	HPBG_06 541_05#2
AA	1	ANIMALIA		eggs		P			P	
D	433	Sertularia		juv.				P		P
D	662	ACTINIARIA		indet.					6	2
G	1	NEMERTEA		indet.				1	11	
HD	1	NEMATODA		indet.				1	17	2
N	11	Golfingiidae		juv.						
P	82	Lepidonotus squamatus	(Linnaeus, 1758)					1		2
P	127	Mysta picta	(Quatrefages, 1866)					1	1	
P	159	Eulalia tripunctata	McIntosh, 1874					2	1	12
P	167	Eumida sanguinea	(Oersted, 1843)	agg.						
P	360	Syllis armillaris	(O F Müller, 1771)	agg.					1	
P	360	Syllis gracilis	Grube, 1840						1	
P	414	Brania pusilla	(Dujardin, 1851)						3	
P	434	Myrianida		indet.						2
P	458	Nereididae		juv.					87	
P	470	Neanthes nubila	(Savigny, 1822)						3	1
P	475	Eunereis longissima	Johnston, 1840					1		2
P	494	Nephtys		juv.	5	6	1			
P	498	Nephtys cirrosa	Ehlers, 1868							
P	499	Nephtys hombergii	Savigny, 1818		36	13	6			
P	553	Eunicidae		juv.						
P	579	Lumbrineris cingulata	(Ehlers, 1897)	agg.				1		
P	655	Orbiniidae		indet.						
P	676	Aricidea		indet.				2		
P	704	Paraonis fulgens	(Levinsen, 1884)							
P	747	Polydora		juv.				12	3	14
P	776	Pygospio elegans	Claparède, 1863					3	81	3
P	840	Dodecaceria		juv.				1		
P	919	Mediomastus fragilis	Rasmussen, 1973						2	
P	1116	Sabellaria alveolata	(Linnaeus, 1767)					231	220	267
P	1206	Neoamphitrite figulus	(Dalyell, 1853)							
P	1425	Tubificinae		indet.					1	
P	1487	Tubificoides amplivasatus	(Erséus, 1975)			3	2	1		1
P	1501	Enchytraeidae		indet.					1	
Q	15	Achelia echinata	Hodge, 1864							
Q	53	ACARI		indet.					20	
R	38	SESSILIA		juv.						1
R	77	Balanus crenatus	Brugière, 1789						1	6
R	2432	Eusarsiella zostericola	(Cushman, 1906)		1					
S	89	Schistomysis spiritus	(Norman, 1860)					1		
S	116	Gammarellus homari	(J C Fabricius, 1779)					1		1
S	146	Parapleustes bicuspis	(Kröyer, 1838)							
S	257	Harpinia pectinata	G O Sars, 1891							
S	452	Bathyporeia elegans	Watkin, 1938							
S	498	Abludomelita obtusata	(Montagu, 1813)							
S	576	Parajassa pelagica	(Leach, 1814)						2	
S	606	Corophium volutator	(Pallas, 1766)							
S	640	Caprella		juv.						1
S	805	Cyathura carinata	(Kröyer, 1847)					1	14	
S	869	Lekanesphaera monodi	(Arcangeli, 1934)							
S	889	Jaera (Jaera) nordmanni	(Rathke, 1837)						5	
S	892	Janira maculosa	Leach, 1813							
S	1169	Tanaissus lilljeborgi	Stebbing, 1891							
S	1188	Cumopsis goodsir	(van Beneden, 1861)							
S	1253	Diastylis rathkei	(Kröyer, 1841)		9	5	3			
S	1566	Cancer pagurus	Linnaeus, 1758							1
T	1	Collembola		indet.					111	
T	31	Chironomidae		larva					45	
W	385	Peringia ulvae	(Pennant, 1777)		18	12				
W	1570	Nucula nucleus	(Linnaeus, 1758)		1		1			
W	1694	Mytilus		juv.				1		
W	2029	Limecola balthica	(Linnaeus, 1758)		141	66	30			
W	2152	Sphenia binghami	Turton, 1822						1	3
Y	14	Crisia aculeata	Hassall, 1841							
Y	73	Alcyonidium		indet.				P		
Y	122	Farrella repens	(Farre, 1837)						P	
Y	178	Electra pilosa	(Linnaeus, 1767)					P	P	
Y	222	Amphiblestrum auritum	(Hincks, 1877)							P
ZA	3	Phoronis		indet.				4		

MCSA	MCSN	Taxon	Authority	Qualifier	HPBG_07 541_07#1	HPBG_08 541_12#1	HPBG_09 541_19#1	HPBG_10 541_10#1	HPBG_11 541_08#3	HPBG_12 541_11#2
AA	1	ANIMALIA		eggs						
D	433	Sertularia		juv.	frags					P
D	662	ACTINIARIA		indet.						
G	1	NEMERTEA		indet.						
HD	1	NEMATODA		indet.					14	
N	11	Golfingiidae		juv.					1	
P	82	Lepidonotus squamatus	(Linnaeus, 1758)						1	
P	127	Mysta picta	(Quatrefages, 1866)							
P	159	Eulalia tripunctata	McIntosh, 1874						2	
P	167	Eumida sanguinea	(Oersted, 1843)	agg.					1	
P	360	Syllis armillaris	(O F Müller, 1771)	agg.					6	
P	360	Syllis gracilis	Grube, 1840							
P	414	Brania pusilla	(Dujardin, 1851)							
P	434	Myrianida		indet.						
P	458	Nereididae		juv.					1	
P	470	Neanthes nubila	(Savigny, 1822)							
P	475	Eunereis longissima	Johnston, 1840							
P	494	Nephtys		juv.	4	14	12	2		1
P	498	Nephtys cirrosa	Ehlers, 1868					3		
P	499	Nephtys hombergii	Savigny, 1818		2	9	5			14
P	553	Eunicidae		juv.						
P	579	Lumbrineris cingulata	(Ehlers, 1897)	agg.						
P	655	Orbiniidae		indet.						
P	676	Aricidea		indet.				1		
P	704	Paraonis fulgens	(Levinsen, 1884)					1		
P	747	Polydora		juv.					1	
P	776	Pygospio elegans	Claparède, 1863							
P	840	Dodecaceria		juv.						
P	919	Mediomastus fragilis	Rasmussen, 1973							
P	1116	Sabellaria alveolata	(Linnaeus, 1767)						263	
P	1206	Neoamphitrite figulus	(Dalyell, 1853)							
P	1425	Tubificinae		indet.						
P	1487	Tubificoides amplivasatus	(Erséus, 1975)		10	47	151			2
P	1501	Enchytraeidae		indet.						
Q	15	Achelia echinata	Hodge, 1864						1	
Q	53	ACARI		indet.						
R	38	SESSILIA		juv.						
R	77	Balanus crenatus	Brugière, 1789							
R	2432	Eusarsiella zostericola	(Cushman, 1906)							1
S	89	Schistomysis spiritus	(Norman, 1860)							
S	116	Gammarellus homari	(J C Fabricius, 1779)						1	
S	146	Parapleustes bicuspis	(Kröyer, 1838)						1	
S	257	Harpinia pectinata	G O Sars, 1891							1
S	452	Bathyporeia elegans	Watkin, 1938					1		
S	498	Abludomelita obtusata	(Montagu, 1813)							
S	576	Parajassa pelagica	(Leach, 1814)							
S	606	Corophium volutator	(Pallas, 1766)							
S	640	Caprella		juv.						
S	805	Cyathura carinata	(Kröyer, 1847)							
S	869	Lekanesphaera monodi	(Arcangeli, 1934)					1		
S	889	Jaera (Jaera) nordmanni	(Rathke, 1837)							
S	892	Janira maculosa	Leach, 1813						7	
S	1169	Tanaissus lilljeborgi	Stebbing, 1891					1		
S	1188	Cumopsis goodsir	(van Beneden, 1861)					2		
S	1253	Diastylis rathkei	(Kröyer, 1841)		2	4	3			
S	1566	Cancer pagurus	Linnaeus, 1758							
T	1	Collembola		indet.						
T	31	Chironomidae		larva						
W	385	Peringia ulvae	(Pennant, 1777)					1		1
W	1570	Nucula nucleus	(Linnaeus, 1758)						1	3
W	1694	Mytilus		juv.						
W	2029	Limecola balthica	(Linnaeus, 1758)		25	67	12	10		88
W	2152	Sphenia binghami	Turton, 1822						4	
Y	14	Crisia aculeata	Hassall, 1841							
Y	73	Alcyonidium		indet.						
Y	122	Farrella repens	(Farre, 1837)							
Y	178	Electra pilosa	(Linnaeus, 1767)					P	P	P
Y	222	Amphiblestrum auritum	(Hincks, 1877)						P	
ZA	3	Phoronis		indet.						

MCSA	MCSN	Taxon	Authority	Qualifier	HPBG_13 541_21#1	HPBG_14 541_13#2	HPBG_15 541_15#1	HPBG_16 541_14#1	HPBG_17 541_20#3	HPBG_18 541_16#4
AA	1	ANIMALIA		eggs						
D	433	Sertularia		juv.						frags.
D	662	ACTINIARIA		indet.					2	
G	1	NEMERTEA		indet.	1					
HD	1	NEMATODA		indet.					13	1
N	11	Golfingiidae		juv.						
P	82	Lepidonotus squamatus	(Linnaeus, 1758)							
P	127	Mysta picta	(Quatrefages, 1866)							
P	159	Eulalia tripunctata	McIntosh, 1874						2	
P	167	Eumida sanguinea	(Oersted, 1843)	agg.						
P	360	Syllis armillaris	(O F Müller, 1771)	agg.					3	
P	360	Syllis gracilis	Grube, 1840							
P	414	Brania pusilla	(Dujardin, 1851)							
P	434	Myrianida		indet.						
P	458	Nereididae		juv.						
P	470	Neanthes nubila	(Savigny, 1822)							
P	475	Eunereis longissima	Johnston, 1840							
P	494	Nephtys		juv.	10	42	9	5	4	17
P	498	Nephtys cirrosa	Ehlers, 1868							
P	499	Nephtys hombergii	Savigny, 1818			13		6	1	2
P	553	Eunicidae		juv.					1	
P	579	Lumbrineris cingulata	(Ehlers, 1897)	agg.						
P	655	Orbiniidae		indet.					frag.	
P	676	Aricidea		indet.						
P	704	Paraonis fulgens	(Levinsen, 1884)							
P	747	Polydora		juv.					1	
P	776	Pygospio elegans	Claparède, 1863							
P	840	Dodecaceria		juv.						
P	919	Mediomastus fragilis	Rasmussen, 1973							
P	1116	Sabellaria alveolata	(Linnaeus, 1767)						3	
P	1206	Neoamphitrite figulus	(Dalyell, 1853)						1	
P	1425	Tubificinae		indet.						
P	1487	Tubificoides amplivasatus	(Erséus, 1975)		168	248	1	27	40	244
P	1501	Enchytraeidae		indet.						
Q	15	Achelia echinata	Hodge, 1864							
Q	53	ACARI		indet.						
R	38	SESSILIA		juv.						
R	77	Balanus crenatus	Brugière, 1789							
R	2432	Eusarsiella zostericola	(Cushman, 1906)			2				
S	89	Schistomysis spiritus	(Norman, 1860)							
S	116	Gammarellus homari	(J C Fabricius, 1779)							
S	146	Parapleustes bicuspis	(Kröyer, 1838)							
S	257	Harpinia pectinata	G O Sars, 1891			1			1	
S	452	Bathyporeia elegans	Watkin, 1938							
S	498	Abludomelita obtusata	(Montagu, 1813)						3	
S	576	Parajassa pelagica	(Leach, 1814)							
S	606	Corophium volutator	(Pallas, 1766)			1	1			
S	640	Caprella		juv.						
S	805	Cyathura carinata	(Kröyer, 1847)							
S	869	Lekanesphaera monodi	(Arcangeli, 1934)							
S	889	Jaera (Jaera) nordmanni	(Rathke, 1837)							
S	892	Janira maculosa	Leach, 1813							
S	1169	Tanaissus lilljeborgi	Stebbing, 1891							
S	1188	Cumopsis goodsir	(van Beneden, 1861)			1		1		
S	1253	Diastylis rathkei	(Kröyer, 1841)			1	2	6	1	3
S	1566	Cancer pagurus	Linnaeus, 1758							
T	1	Collembola		indet.						
T	31	Chironomidae		larva						
W	385	Peringia ulvae	(Pennant, 1777)		2	6		1		
W	1570	Nucula nucleus	(Linnaeus, 1758)						1	
W	1694	Mytilus		juv.						
W	2029	Limecola balthica	(Linnaeus, 1758)		12	89	29	49		20
W	2152	Sphenia binghami	Turton, 1822							
Y	14	Crisia aculeata	Hassall, 1841		frag.				frag.	
Y	73	Alcyonidium		indet.						
Y	122	Farrella repens	(Farre, 1837)							
Y	178	Electra pilosa	(Linnaeus, 1767)						P	P
Y	222	Amphiblestrum auritum	(Hincks, 1877)		frag.					
ZA	3	Phoronis		indet.						

Appendix VI: Biomass by major taxonomic group results

Results of the biomass of macrobenthic invertebrate samples collected as part of the 2020 Hinkley Point B habitat mapping survey. Results are in grams to 5 decimal places.

Station Name	Sample Number	Annelida	Crustacea	Mollusca	Other taxa	Additional Notes
HPBG_01	541_02#1	0.77872	0.09897	8.24153	-	Miscellaneous fragments and anthropogenic material present in sample (not biomassed).
HPBG_02	541_01#1	0.22142	0.06049	5.67871	-	Miscellaneous fragments and anthropogenic material present in sample (not biomassed).
HPBG_03	541_03#1	0.15644	0.03378	1.22927	-	Anthropogenic material present in sample (not biomassed)
HPBG_04	541_06#1	0.31583	0.02319	0.00034	0.02643	Miscellaneous fragments, plant and anthropogenic material present in sample (not biomassed).
HPBG_05	541_04#1	2.59588	0.01428	0.00272	0.03075	
HPBG_06	541_05#2	0.64708	0.25107	0.01216	0.07376	
HPBG_07	541_07#1	0.07725	0.01902	2.68212	-	
HPBG_08	541_12#1	0.48582	0.04756	4.48082	-	
HPBG_09	541_19#1	0.14567	0.03760	1.94346	-	
HPBG_10	541_10#1	0.14306	0.01898	0.1776	-	
HPBG_11	541_08#3	2.55619	0.10084	0.01396	0.00133	
HPBG_12	541_11#2	0.27068	0.00081	7.58741	-	
HPBG_13	541_21#1	0.07348	-	2.88526	0.49552	
HPBG_14	541_13#2	0.38013	0.01314	4.96917	-	
HPBG_15	541_15#1	0.02280	0.03296	0.92532	-	
HPBG_16	541_14#1	0.12753	0.09047	5.87318	-	Anthropogenic material present in sample (not biomassed).
HPBG_17	541_20#3	0.06860	0.01797	0.00067	1.25643	
HPBG_18	541_16#4	0.11204	0.03863	3.14946	0.00009	

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Appendix 9C

Underwater Noise Assessment

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Underwater Noise Assessment – Technical Note

DATE:	10 January 2025	**CONFIDENTIALITY:**	Public
PROJECT:	HNB and HPB Decommissioning	**AUTHOR:**	Josh Wilson
CHECKED:	Shira Daltrop	**APPROVED:**	Giles Bishop

INTRODUCTION

EDF Energy (the Applicant) has commissioned an assessment to understand the likely effects of underwater noise arising from activities associated with the dismantling and removal of an intake structure in the Bristol Channel, associated with the Proposed Works to decommission Hinkley Point B Nuclear Power Station (the 'Proposed Works').

The Proposed Works include the removal of up to 2500m^3 of concrete (85%) and steel (15%) (as a 'worst case') via a long-reach-excavator with multiple attachments (bucket, shears, hydraulic breaker) mounted on a jack-up barge. A second barge will also be utilised with a crawler crane and a selection of other dismantling equipment. The debris and any auxiliary equipment will be transported to and from the marine Works Area via service barges towed by a tug or multi-cat vessel.

This technical note presents the methods and results of underwater noise modelling of noise emissions from the proposed dismantling and removal activities within the marine environment. Fish and marine mammal species are the only noise sensitive receptors considered within this technical note.

UNDERWATER NOISE TERMINOLOGY

Underwater sound is generated by the movement or vibration of any object immersed in water. The sound travels through the water as vibrations of the fluid particles in a series of pressure waves. The waves comprise a series of alternating compressions (positive pressure variations) and rarefactions (negative pressure fluctuations).

As sound consists of variations in pressure, the unit for measuring sound is usually referenced to a unit of pressure, the pascal (Pa). The unit usually used to describe sound is the decibel (dB) and, in the case of underwater sound, the reference unit is taken as 1 micro pascal (µPa) (equal to 10^{-6} Pa), whereas airborne sound is usually referenced to a pressure of 20 µPa. To convert from a sound pressure level referenced to 20 µPa to one referenced to 1 µPa, a factor of 20 log (20/1) (i.e. 26 dB) has to be added to the former quantity. Therefore, 60 dB re 20 µPa is the same as 86 dB re 1 µPa, although the difference in sound speed and densities mean that the difference in sound intensity is much greater in-air compared to water for sound waves with the same sound pressure.

All underwater sound pressure levels in this report are described in dB re 1 µPa.

In water, the 'strength' of a sound source is usually described by its sound pressure level in dB re 1 µPa, referenced back to a representative distance of 1 m from an assumed (infinitesimally small) point source. This allows for the calculation of sound levels in the far-field. For large, distributed sources, the actual sound pressure level in the near-field will be lower than predicted.

There are several different metrics that may be used as measures of underwater sound pressure (NPL, 2014). The key metrics that are used to characterise underwater sound pressure are as follows:

Peak sound pressure level, SPL_{pk}: The maximum sound pressure during a stated time interval. A peak sound pressure may arise from a positive or negative sound pressure. This quantity is typically useful as a metric for a pulsed waveform;

Root mean square (RMS) sound pressure level, SPL_{rms}: The square root of the mean square pressure, where the mean square pressure is the time integral of squared sound pressure over a specified time interval divided by the duration of the time interval.

Another useful measure of sound used in underwater acoustics is the Sound Exposure Level (SEL). This metric is used as a measure of the total sound energy of an event or a number of events (e.g., in a given time period) and is normalised to one second. This allows the total acoustic energy contained in events lasting a different amount of time to be compared on a like for like basis. It is defined as the integral of the square of the sound pressure over a stated time interval or event and is expressed in units of Pa^2s. In the context of this assessment, the SEL will be presented as a cumulative SEL (SEL_{cum}) which is representative of the total acoustic energy of a noise source taking place across the course of a 24-hour period.

The frequency, or pitch, of sound is the rate at which pressure oscillations occur and is measured in cycles per second, or Hertz (Hz). The hearing of different species is frequency-dependent. Rather than express received sound pressures in terms of their levels over a broad bandwidth, levels can be weighted by the frequency response of hearing for the relevant animal (Popper *et al.,* 2014). When sound is measured in a way which approximates to how a human would perceive it, an A-weighting filter on a sound level meter is applied; the resulting level is described in values of dBA.

Southall *et al.,* (2007, 2019) developed 'M' frequency weighting functions for marine mammals to account for frequency-dependent sensitivities of several discrete hearing groups of marine mammals. These hearing weighting functions have been used to inform the assessment. It is important to note that where criteria are M-weighted, the noise source inputs to the modelling methodology also require an M-weighting, analogous to how an A-weighting is used for assessing human perception.

A similar attempt at frequency weighting for individual fish species and other animals was undertaken by Nedwell *et al.,* (2007). However, Popper *et al.,* (2014) discusses that whilst the general concept of weightings as proposed by Nedwell *et al.,* (2007a) may have value in the context of behavioural responses by fish, its application and adoption requires further scientific validation. Consequently, weighting functions for fish in the context of this assessment have not been considered.

Underwater Noise Assessment – Technical Note

DATE:	10 January 2025	**CONFIDENTIALITY:**	Public
PROJECT:	HNB and HPB Decommissioning	**AUTHOR:**	Josh Wilson
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EFFECTS OF UNDERWATER NOISE EXPOSURE ON MARINE FAUNA

Potential Impacts

Potential impacts on marine fauna from underwater noise are dependent upon:

the noise source characteristics (frequency (Hz) and decibels (dB));
attenuation of the noise in the specific location; and
the distance of the sound source from the receptor species.
In addition, to which species and individual animals display variations in levels of sensitivity at different life stages and in different situations (e.g., presence of young).

Effects of underwater noise can be broadly classified as:

physical/physiological effects (e.g., mortality, non-recoverable injury, permanent threshold shift (PTS) in hearing, temporary threshold shift (TTS) in hearing, recoverable injury); or
behavioural responses (e.g., stress, changes in movements, migration, feeding, breeding, displacement, disturbance).

The biological significance of sound relates to how it interferes with an individual's capacity to undertake normal functional behaviours and activities, as well as their ability to grow, reproduce and survive. Sound can impact communication and / or predator / prey detection, for example, which can result in individual and population level consequences (e.g., alterations in individual fitness, abundance, and diversity) and may affect the overall viability of a species (Popper *et al.* 2014). The greater the magnitude of the sound source (i.e., the 'loudness' and the rate of distribution of sound events), and the longer the duration the receptor is exposed to the sound source, the greater the likelihood of biological impacts arising from a behavioural disturbance (Popper *et al.* 2014).

Sensitive Marine Fauna

Underwater noise-sensitive marine species are known to be present in the study area. The marine fauna hearing groups considered within this assessment, and in-line with the are listed in **Table 1** below.

Table 1– Marine fauna hearing groups considered within this assessment

Marine Fauna Hearing Group	Description
Marine Mammals (Southall et al., 2019)	
Very high-frequency cetaceans (VHF)	This hearing group is inclusive of harbour porpoises as well as several oceanic dolphins. The generalised hearing range considered in the literature is 275 Hz to 160 kHz.
High-frequency cetaceans (HF)	This hearing group is inclusive of most delphinid species (e.g., bottlenose dolphin, common dolphin, and pilot whale), beaked whales and sperm whales. The generalised hearing range considered in the literature is 150 Hz to 160 kHz.

Underwater Noise Assessment – Technical Note

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Marine Fauna Hearing Group	Description
Phocid carnivores in water (PCW)	This hearing group is inclusive of harbour and grey seals. The generalised (underwater) hearing range considered in the literature is 50 Hz to 86 kHz.
Fish, Fish Eggs & Larvae[1] (Popper et al., 2014)	
Fish: Species without a swim bladder or other gas chamber	Example species are dab and other flatfish. These species are less susceptible to barotrauma[1] and only detect particle motion, not sound pressure. However, some barotrauma may result from exposure to sound pressure.
Fish: Species with a swim bladder, but without any swim bladder related hearing functionality	Example species are Atlantic salmon. These species are susceptible to barotrauma although hearing only involves particle motion not sound pressure.
Fish: Species with a swim bladder that is involved in hearing functionality	Example species are Atlantic cod, herring and relatives and Otophysi[2]. These species are susceptible to barotrauma and detect sound pressure as well as particle motion.
Fish eggs and larvae	This hearing group considers eggs and larvae from all species.
[1] **It is recognised that Popper et al. (2022) has re-evaluated** the definitions of "hearing specialists", "hearing generalists" and "non-sensitive" fish species hearing groups. However, in the absence of associated quantifiable hearing thresholds, the Popper et al. (2014) hearing groups and subsequent hearing threshold criteria as presented in **Table 2** have been considered within this assessment.	

MARINE FAUNA HEARING THRESHOLD CRITERIA

Fish, Eggs and Larvae

Adult fish, that are not in the immediate vicinity of noise generating activity, are generally able to vacate the area and avoid physical injury. However, larvae and eggs are not highly mobile and are therefore more likely to incur injuries from the sound energy in the immediate vicinity of the sound source, including damage to their hearing, kidneys, hearts and swim bladders. Such effects are unlikely to happen outside of the immediate vicinity of even the highest energy sound sources.

For fish, the most relevant criteria for injury are those contained in Popper *et al.,* (2014). Popper *et al.* (2014) sets out criteria for impacts due to different sources of noise. Both impulsive and non-impulsive (i.e., continuous) type noise is considered relevant to the Proposed Works.

[1] Barotrauma is the term used to describe injuries or trauma to fish due to rapid changes in barometric pressure exposure.
[2] The otophysi are a large group of predominantly freshwater fish. In the UK they include carp, minnows, bream, roach and their allies, as well as loaches and wels.

For both types of noise source (i.e., impulsive and continuous), where insufficient data exists to determine a quantitative guideline value, the risk is categorised in relative terms as “high”, “moderate” or “low” at three distances from the source: “near” (i.e., in the tens of metres), “intermediate” (i.e., in the hundreds of metres) or “far” (i.e., in the thousands of metres).

It should be noted that the qualitative criteria mentioned above cannot differentiate between exposures to different noise levels and therefore all sources of noise, no matter how noisy, would theoretically elicit the same assessment result. In the context of this assessment (i.e., the types of noise sources), and as shown in **Table 2**, the qualitative risks are generally qualified as “low”, except for a moderate risk at “near” range (i.e., within tens of metres) for some types of animal and physiological impairment effects. In line with the guidance provided in Popper *et al*., (2014), these relative risk ratings need to be considered with the source and received levels of the noise sources being assessed. The modelling inputs and outputs presented in this technical note indicate that impact ranges for instantaneous mortality and potential mortal injury, as well as recoverable injury, are generally <5m where quantifiable criteria can be assessed against. As discussed above, unless receptors are within this range, it is unlikely these effects will take place. Consequently, the qualitative relative risk ratings are not considered to provide a significant issue with respect to determining potential effects of noise on fish.

Table 2 below provides a summary of the assessment criteria applied in this assessment.

Table 2 – Fish hearing threshold criteria applied in this assessment (Popper *et al.* 2014)

Fish Category	Impulsive Noise				Continuous Noise			
	Mortality and Potential Mortal Injury	**Recoverable Injury**	**Temporary Threshold Shift (TTS)**	**Behavioural Response**	**Mortality and Potential Mortal Injury**	**Recoverable Injury**	**TTS**	**Behavioural Response**
No swim bladder *(particle motion detection)*	>219 dB SEL_{cum} >213 dB SPL_{pk}	>216 dB SEL_{cum} >213 dB SPL_{pk}	>186 dB SEL_{cum}	**(N)** High **(I)** Moderate **(F)** Low	**(N)** Low **(I)** Low **(F)** Low	**(N)** Low **(I)** Low **(F)** Low	**(N)** Moderate **(I)** Low **(F)** Low	**(N)** Moderate **(I)** Moderate **(F)** Low
Swim bladder not involved in hearing *(particle motion detection)*	>210 dB SEL_{cum} >207 dB SPL_{pk}	>203 dB SEL_{cum} >207 dB SPL_{pk}	>186 dB SEL_{cum}	**(N)** High **(I)** Moderate **(F)** Low	**(N)** Low **(I)** Low **(F)** Low	**(N)** Low **(I)** Low **(F)** Low	**(N)** Moderate **(I)** Low **(F)** Low	**(N)** Moderate **(I)** Moderate **F)** Low
Swim bladder involved in hearing *(primarily pressure detection)*	>207 dB SEL_{cum} >207 dB SPL_{pk}	>203 dB SEL_{cum} >207 dB SPL_{pk}	>186 dB SEL_{cum}	**(N)** High **(I)** High **(F)** Moderate	**(N)** Low **(I)** Low **(F)** Low	170 dB_{rms} 1µPa for 48hrs	158 dB_{rms} 1µPa for 12hrs	**(N)** High **(I)** Moderate **(F)** Low
Eggs and larvae	>210 dB SEL_{cum} >207 dB SPL_{pk}	**(N)** Moderate **(I)** Low **(F)** Low	**(N)** Moderate **(I)** Low **(F)** Low	**(N)** Moderate **(I)** Low **(F)** Low	**(N)** Low **(I)** Low **(F)** Low	**(N)** Low **(I)** Low **(F)** Low	**(N)** Low **(I)** Low **(F)** Low	**(N)** Moderate **(I)** Moderate **(F)** Low

Where insufficient data exist to make a recommendation for guidelines a subjective approach is adopted in which the relative risk of an effect is placed in order of rank at three distances from the source – near **(N)**, intermediate **(I)**, and far **(F)** (top to bottom within each cell of the table, respectively). While it would not be appropriate to ascribe distances to effects because of the many variables in making such decisions, "near" might be considered to be in the tens of meters from the source, "intermediate" in the hundreds of meters, and "far" in the thousands of meters.

The rating for effects in these tables is highly subjective and represents general consensus of the Popper ***et al.*** (2014) working group. These ratings are not hard and fast, and they are presented as the basis for discussion.

It is important to note, that the quantifiable criteria as set out for recoverable injury and TTS are reflective of the fish receptors being stationary for the 48-hour period or 12-hour period respectively. This is not reflective of real fish habitats, as the research is based on captive fish. However, it does provide a useful quantifiable threshold level at which conservative impact ranges can be calculated.

Marine Mammals

The Joint Nature Conservation Committee (JNCC) guidance (JNCC, 2010) recommends using the injury criteria proposed by Southall *et al.* (2007). However, the guidance also suggests that criteria will need to be updated as and when more recent scientific studies become available. These criteria were updated in 2016 (NOAA, 2018) and most recently in 2019 (Southall *et al.* 2019). They reflect the most comprehensive and up-to-date scientific knowledge relating to the risk of auditory injury to marine mammals. Southall *et al.* (2019) divides marine mammals into Functional Hearing Groups (FHGs), with the same impact thresholds used for all species within a FHG.

JNCC requires the injury criteria and FHGs presented in NOAA (2018) and Southall *et al.* (2019) to be used for any marine mammal noise assessment. It is worth noting that while the FHGs and thresholds are the same in these two documents, the terminology used to identify the FHGs does differ. For this assessment the terminology used in Southall *et al.* (2019) will be used. The injury criteria are based on a combination of linear (i.e., un-weighted) peak pressure levels and marine mammal hearing weighted SELs. The hearing weighting function is designed to represent the bandwidth for each FHG within which acoustic exposures can have auditory effects (Southall *et al.,* 2019).

The current National Marine Fisheries Service (NMFS) disturbance (onset of behavioural response) thresholds for all marine mammal species are 160 dB re 1 µPa (SPL_{rms}) and 120 dB re 1 µPa (SPL_{rms}) for impulsive and non-impulsive noise respectively (NMFS, 2023). These disturbance thresholds do not consider the overall duration of the noise or its acoustic frequency distribution to account for species dependent hearing. This is considered very conservative and not necessarily a reflection of an adverse effect, but the onset at which behavioural responses may start to occur for certain sensitive species. Furthermore, it is important to note that ambient noise levels in the areas where work is proposed could exceed the continuous noise threshold value, and hence highlights the very precautionary nature of these criteria.

Table 3 below provides the relevant criteria for the onset of Permanent Threshold Shift (PTS) and Temporary Threshold Shift (TTS) as a result of exposure to both impulsive and non-impulsive sound sources for the relevant marine mammal FHGs considered within this assessment.

The criteria associated with impulsive noise is dual metric where both peak sound pressure levels and cumulative SELs are considered. However, due to the relatively low peak sound pressure levels associated with the impulsive source considered within this assessment, only the cumulative sound exposure criteria for impulsive noise have been presented as this will be driving the most onerous impact ranges.

Table 3 – Marine mammal auditory threshold criteria applied in this assessment (Southall *et al.* 2019)

Marine Mammal FHG	Impulsive Noise			Non-impulsive Noise		
	PTS Onset	**TTS Onset**	**Onset of Behavioural Response**	**PTS Onset**	**TTS Onset**	**Onset of Behavioural Response**
Very high frequency cetaceans (VHF)	155 dB SEL_{cum}	140 dB SEL_{cum}	160 dB SPL_{rms}	173 dB SEL_{cum}	153 dB SEL_{cum}	120 dB SPL_{rms}
High-frequency cetaceans (HF)	185 dB SEL_{cum}	170 dB SEL_{cum}		198 dB SEL_{cum}	178 dB SEL_{cum}	
Phocid carnivores in water (PCW)	185 dB SEL_{cum}	170 dB SEL_{cum}		201 dB SEL_{cum}	181 dB SEL_{cum}	
SPL_{rms} is referenced in dB re 1µPa, and SEL_{cum} is referenced in dB re 1µPa²s.						

UNDERWATER NOISE MODEL

Underwater sound is generated by the movement or vibration of any immersed object in water. The sound propagates through the water as vibrations of the fluid particles in a series of pressure waves. The many complexities of underwater environments influence how the sound propagates and subsequently effects how acoustic energy is lost during the process (transmission loss).

The modelling of underwater sound propagation is an established discipline, where several modelling approaches have been developed. Each approach has differing suitability according to the project-specific environmental conditions (i.e., water depth and spatial variability), the acoustic frequency range of source and receptor, and proportionate computational requirements dependent on the risk of adverse noise generating activities as well as the available source term data (Jensen *et al.,* 2011). To reduce uncertainty, field measurements of sound propagation can be used, where available, to inform theoretical and/or empirical models.

The *Underwater Noise Measurement Good Practice Guide* (NPL, 2014) provides a summary of the propagation models that are available for underwater noise predictions. Farcas *et al.,* (2016) builds on this and provides detail on the suitability of the different modelling approaches in the context of Environmental Impact Assessments (EIA), albeit no specific modelling approach is recommended above another.

The JNCC provides guidance on the assessment of the significance of noise disturbance in Special Areas of Conservation (SAC) specific to Harbour Porpoise, a cetacean species particularly sensitive to underwater noise (JNCC, 2020). The guidance recommends using Effective Deterrence Ranges[3] (EDRs) based on empirical evidence as opposed to impact ranges predicted from underwater noise modelling, as an alternative approach to relying on modelling methods. However, the guidance only recommends EDRs

[3] Defined as the radius of a circular area assumed to be disturbed.

for impulsive noise sources (e.g., impact piling, UXO clearance and geophysical surveys). The smallest presented EDR is 5 km for 'other geophysical surveys'. The proposed noise emitting activities associated with the Proposed Works are expected to generate less underwater noise compared to geophysical survey activities. Consequently, the smallest 5 km EDR will be precautionary to apply in the context of the Project.

The proposed noise generating activities include impulsive and non-impulsive (i.e., continuous) characteristics. However, all noise sources are considered 'low-risk' (i.e., the source noise levels do not significantly exceed the auditory threshold criteria of each hearing group, and the impacts are dependent on exposure time rather than instantaneous impacts). Furthermore, there are limited proxy source term data for each of the proposed activities considered within the assessment, and hence where possible the worst-case noise levels within the literature have been used.

On the above basis, a simple two-dimensional practical spreading loss model is considered to be an appropriate modelling approach. This is a simplistic approach to the calculation of transmission loss and does not account for several of the factors that influence underwater noise propagation. Consequently, this approach can often over-estimate impact ranges especially in the far-field (Farcas *et al.* 2016) and is considered to provide conservative approximations of likely impact ranges. However, it is reflective of the 'low-risk' nature of the proposed noise emitting activities and the relative lack of available source term data in the literature.

The NMFS recommends the use of practical spreading loss model solutions to developers and has subsequently incorporated this into two separate calculation tools (NMFS, 2022; NMFS, 2021) to calculate impact ranges for fish and marine mammals for impulsive and non-impulsive underwater noise. The NMFS's Multi-Species Calculator Version 1.2 (NMFS, 2022) was modified for use for this assessment.

The model is a logarithmic equation that incorporates geometric spreading and absorption loss factors that provides first order calculations of the received (unweighted) levels with distance from the source. The modified NMFS tool considered relevant marine mammal criteria weightings where required. The formula is represented as below (Ulrick, 1983; Xavier, 2002):

$$\mathbf{TL = L_2 - L_1 = N \times \log_{10}(R_1/R_2) + \alpha R}$$

Where:

N: is the wave mode coefficient

TL: is the transmission loss in dB.

L_1: sound pressure level at a given distance R_1.

L_2: measured sound pressure level at a given distance R_2.

R_1: is the impact range in meters from the noise source at which the relevant threshold is exceeded.

R_2: is the distance from the source of the initial measurement.

αR: linear absorption and scattering loss

Solving for L_1 provides the underwater sound pressure level at a given distance. To determine at what distance or range a known sound pressure level will occur, the equation must be solved for R_1:

$$\mathbf{R_1 = R_2 \times 10^{((L2 - L1) - \alpha R / N)}}$$

It is understood that the Environment Agency has compiled measured data to derive a more appropriate empirically informed wave mode coefficient (N) and absorption coefficient (α) for shallow water environments. These data were presented at the Institute of Fisheries Management (IFM) Conference on 23 May 2013, and were collected from the following construction projects undertaken in shallow water estuarine and coastal locations:

Russian River New Bridge in Geyserville, California (Illinworth and Rodkin, 2007);
San Rafael Sea Wall in San Francisco Bay, California (Illinworth and Rodkin, 2007);
Scroby Sands Offshore Wind Farm located off the coast of Great Yarmouth (Nedwell et al., 2007b);
North Hoyle Offshore Wind Farm in Liverpool Bay (Nedwell et al., 2007b);
Kentish Flats Offshore Wind Farm located off the coast of Kent (Nedwell et al., 2007b);
Burbo Bank Offshore Wind Farm in Liverpool Bay (Nedwell et al., 2007b);
Barrow Offshore Wind Farm located south west of Walney Island (Nedwell *et al.,* 2007b); and
Belvedere Energy-from-Waste Plant on Thames Estuary (measurements collected by Subacoustech Ltd on behalf of the Environment Agency and Costain).

These provide a mean N coefficient of 17.91 (Standard Deviation (SD) 3.05) and α coefficient of 0.00523 dB m^{-1} (SD 0.00377 dB m^{-1}) based on 11 and 9 observations respectively. It is understood that the Environment Agency has recommended the application of these model input values in underwater noise assessments undertaken in shallow water environments (e.g., URS Scott Wilson, 2011; ABPmer, 2015; Transport for London, 2016; ABPmer, 2022). These values are therefore considered appropriate to include as constants within the proposed modelling approach.

The calculation methodology provided in the NMFS calculation tool was used to estimate the distance from the source at which project-related noise would attenuate to threshold noise levels. The NMFS Multi-Species Calculator considers the dominant source frequency to apply a frequency weighting. The modelling approach typically assumes that all receptors are exposed to the noise for the entire source operating time (i.e., receptors are assumed to be stationary for the duration of the proposed operational activity). This is therefore a highly precautionary approach, as receptors will be in transit whilst the noise emissions are taking place.

PROJECT NOISE SOURCES

Input parameters were established for each noise source associated with the Proposed Works. Where specific noise levels were not available for project-specific sources, proxy source levels were obtained from publicly available information for similar noise sources. Note that actual source levels will depend on several factors including specific equipment types (dependent upon final contractors and kit availability).

Underwater Noise Assessment – Technical Note

DATE:	10 January 2025	**CONFIDENTIALITY:**	Confidential
PROJECT:	HPB Decommissioning	**AUTHOR:**	Josh Wilson
CHECKED:	Shira Daltrop	**APPROVED:**	

Table 4 outlines the modelling parameters associated with each source of noise, including the source level and the operating time within a 24-hour period. It is worth noting that the majority of proxy source noise levels in **Table 4** are presented as rms sound pressure levels. Where criteria are presented as SELs, a conversion calculation dependent on the operational duration has been undertaken and input into the model as the relevant source sound pressure level.

Table 4 – Noise source parameters

Noise Source	Operating Time (per 24-hr period), *hours*	Source Sound Levels at 1m		Literature Reference
		SPL_{rms} dB re 1 µPa	*SEL_{ss} dB re 1 µPa^{2}s*	
Rock Breaking - Xcentric Ripper Tool (Non-impulsive)[1]	6	163	-	Lawrence et al. 2022
Rock Breaking – Down-the-hole (DTH) Hammer (Impulsive)[1, 2, 3]	6	174 (at 10m)	164 (at 10m)	Denes et al. 2019; Reyff & Heyvaert 2019; Reyff 2020
Vessel - Tug	6	172	-	Richardson 1995
Jack-up Barge	6	163	-	Evans 1996

[1] Rock breaking is taken as a precautionary analogue for the Proposed Works to dismantle the CW Intake Structure. Two possible types of rock breaking activity in this context have been considered. The corresponding noise levels are representative of the worst-case measured noise levels in the literature for similar environments.
[2] SPL_{pk} source levels have not been considered in this assessment as the SEL_{cum} levels are driving the worst-case impact ranges. Any impairment effects on the assessed species due to SPL_{pk}, if any, would take place at very close range to the activity.
[3] The assumed worst-case strike rate of the DTH type activity assumed for the rock breaking was 380 strikes per minute, as this is typically in the upper range of strike rates associated with this type of activity.

UNDERWATER NOISE MODELLING RESULTS & POTENTIAL EFFECTS

Fish, Eggs & Larvae

The calculation methodology provided in the NMFS's Multi-Species Calculator Version 1.2 (NMFS, 2022) was utilised to predict underwater noise levels and the subsequent fish species impact ranges and relative risk due to the proposed noise emitting activities. A variation of the tool was developed to account for the most up-to-date impact thresholds which are considered in this assessment as provided by Popper *et al.* (2014).

Table 5 – Table 8 below provide the distances at which the onset of the various impairment effects are predicted to take place from the corresponding noise emitting activity. The Popper *et al.* (2014) relative risk of impacts as defined in **Table 2** are applicable to all noise sources and hence have not been presented in this section.

Table 5 – Rock Breaking: DTH Hammer (Impulsive)

Fish Hearing Group	Impairment Response	Hearing Threshold, *SEL_{cum}, dB re 1μPa^{2}s*	Impact Range, *m*
No swim bladder *(particle motion detection)*	*Mortality*	219	6
	Recoverable Injury	216	9
	TTS	186	433
Swim bladder not involved in hearing *(particle motion detection)*	*Mortality*	210	20
	Recoverable Injury	203	49
	TTS	186	433
Swim bladder involved in hearing *(primarily pressure detection)*	*Mortality*	207	29
	Recoverable Injury	203	49
	TTS	186	433
Eggs and larvae	*Mortality*	210	20
	Recoverable Injury	-	-
	TTS	-	-

Table 6 – Rock Breaking: Xcentric Ripper (Non-impulsive)

Recoverable Injury Impact Range, *m*	**TTS Impact Range,** *m*
Hearing Threshold: *170 dB_{rms} for 48 hrs*	**Hearing Threshold:** *158 dB_{rms} for 12 hrs*
Not Reached	2

Table 7– Tug (Non-impulsive)

Recoverable Injury Impact Range, *m*	**TTS Impact Range,** *m*
Hearing Threshold: *170 dB_{rms} for 48 hrs*	**Hearing Threshold:** *158 dB_{rms} for 12 hrs*
1	6

Table 8 – Jack-up Barge (Non-impulsive)

Recoverable Injury Impact Range, *m*	**TTS Impact Range,** *m*
Hearing Threshold: *170 dB_{rms} for 48 hrs*	**Hearing Threshold:** *158 dB_{rms} for 12 hrs*
Not Reached	2

The worst-case impact range for all impairment responses, across all fish hearing groups and all assessed noise emitting activities, is 433 m.

Overall, there is considered to be a low risk of any injury in fish as a result of the underwater noise generated by the above sources. The level of exposure will depend on the position of the fish with respect to the source, the propagation conditions, and the individual's behaviour over time. However, it is unlikely that a fish would remain in the vicinity of the proposed noise emitting activities for extended periods. Behavioural responses are anticipated to be spatially minor in scale and fish will be able to move away and avoid the source of the noise as required.

Marine Mammals

The NMFS's Multi-Species Calculator Version 1.2 (NMFS, 2022) was modified and utilised to predict the range at which the weighted SEL_{cum} impact thresholds (Southall *et al.,* 2019) for the onset of cumulative PTS and TTS are reached. The calculator has also been used to predict the onset on behavioural response on the basis of the NMFS (2023) precautionary behavioural response criterion.

Table 9 – Table 12 below provide the distances at which the onset of the various impairment effects is predicted to take place from the corresponding noise emitting activity.

Table 9 – Rock Breaking: DTH Hammer (Impulsive)

Marine Mammal FHG	Hearing Threshold	Impact Ranges, *m*
High-frequency cetaceans (HF)	**PTS Onset** *(Weighted SEL)* - 185 dB re 1µPa²s	39
	TTS Onset *(Weighted SEL)* - 170 dB re 1µPa²s	268
Very high frequency cetaceans (VHF)	**PTS Onset** *(Weighted SEL)* - 155 dB re 1µPa²s	736
	TTS Onset *(Weighted SEL)* - 140 dB re 1µPa²s	5065
Phocid carnivores in water (PCW)	**PTS Onset** *(Weighted SEL)* - 185 dB re 1µPa²s	377
	TTS Onset *(Weighted SEL)* - 170 dB re 1µPa²s	2592
All Species	**Onset of Behavioural Response** - 160 dB_{rms} re 1µPa	60

Table 10 – Rock Breaking: Xcentric Ripper Tool (Non-impulsive)

Marine Mammal FHG	Hearing Threshold	Impact Ranges, *m*
High-frequency cetaceans (HF)	**PTS Onset** *(Weighted SEL)* - 198 dB re 1µPa²s	Not Reached
	TTS Onset *(Weighted SEL)* - 178 dB re 1µPa²s	3
Very high frequency cetaceans (VHF)	**PTS Onset** *(Weighted SEL)* - 173 dB re 1µPa²s	2
	TTS Onset *(Weighted SEL)* - 153 dB re 1µPa²s	30
Phocid carnivores in water (PCW)	**PTS Onset** *(Weighted SEL)* - 201 dB re 1µPa²s	2
	TTS Onset *(Weighted SEL)* - 181 dB re 1µPa²s	20
All Species	**Onset of Behavioural Response** - 120 dB_{rms} re 1µPa	252

Table 11 – Tug (Non-impulsive)

Marine Mammal FHG	Hearing Threshold	Impact Ranges, *m*
High-frequency cetaceans (HF)	**PTS Onset** *(Weighted SEL)* - 198 dB re 1µPa²s	1
	TTS Onset *(Weighted SEL)* - 178 dB re 1µPa²s	10
Very high frequency cetaceans (VHF)	**PTS Onset** *(Weighted SEL)* - 173 dB re 1µPa²s	7
	TTS Onset *(Weighted SEL)* - 153 dB re 1µPa²s	96
Phocid carnivores in water (PCW)	**PTS Onset** *(Weighted SEL)* - 201 dB re 1µPa²s	5
	TTS Onset *(Weighted SEL)* - 181 dB re 1µPa²s	63
All Species	**Onset of Behavioural Response** - 120 dB_{rms} re 1µPa	800

Table 12 – Jack-up Barge (Non-impulsive)

Marine Mammal FHG	Hearing Threshold	Impact Ranges, *m*
High-frequency cetaceans (HF)	**PTS Onset** *(Weighted SEL)* - 198 dB re 1µPa²s	Not Reached
	TTS Onset *(Weighted SEL)* - 178 dB re 1µPa²s	3
Very high frequency cetaceans (VHF)	**PTS Onset** *(Weighted SEL)* - 173 dB re 1µPa²s	2
	TTS Onset *(Weighted SEL)* - 153 dB re 1µPa²s	30
Phocid carnivores in water (PCW)	**PTS Onset** *(Weighted SEL)* - 201 dB re 1µPa²s	5
	TTS Onset *(Weighted SEL)* - 181 dB re 1µPa²s	20
All Species	**Onset of Behavioural Response** - 120 dB_{rms} re 1µPa	252

The worst-case impact range for all impairment responses, across all marine mammal hearing groups and all assessed noise emitting activities, is 5065 m in the event that an impulsive hammer similar to a DTH Hammer is used for breaking activities.

It is important to reiterate that these impact ranges assume that the marine mammal receptors are stationary for duration of the noise exposure. In reality, the marine mammal receptors will be in transit and hence the impact ranges presented in this technical note are highly precautionary.

SUMMARY & CONCLUSIONS

This technical note presents the results of the underwater noise modelling and subsequent initial analysis of the potential impact on the relevant marine fauna in the vicinity of the Proposed Works.

In accordance with available guidance (NPL, 2014; Farcas *et al.,* 2016) and following reviews of assessments for similar projects, a practical spreading loss model has been selected to predict the propagation of underwater noise emissions from the proposed activities.

The predicted levels of underwater noise have been compared against peer-reviewed noise exposure criteria to determine the potential risk of impact on marine fauna (Popper *et al.,* 2014; Southall *et al.,* 2019).

For fish hearing groups, the worst-case impact range for all impairment responses and all assessed noise emitting activities is **433 m**.

For marine mammal hearing groups, the worst-case impact range for all impairment responses and all assessed noise emitting activities is **5065 m**.

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10

Coastal Management and Water Quality

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10A

Results from the Water Quality Surveys

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10A Results from the Water Quality Surveys

Quarter 1- May 2021

Table 10A-1 - Hinkley Point B in-situ water quality results (averaged)

Depth(m)	Temperature (°C)	Salinity (salinity units)	Electrical conductivity (mS/cm)	Dissolved Oxygen (mg/l)
1	11.23	28.08	32.20	8.7
6	11.22	28.18	32.30	8.9
11	11.25	28.24	32.38	8.9

Table 10A-2 - Hinkley Point B total suspended solids results

Depth (m)	Total Suspended Solids (mg/l)
1	53
6	71
11	74

Table 10A-3 - Hinkley Point B nutrient water quality results

Depth (m)	Total ammoniacal nitrogen (as N) (mg/l)	Nitrate (as N) (mg/l)
1	0.27	1.0
6	0.26	1.0
11	0.28	1.1

Table 10A-4 - Hinkley Point B dissolved trace metals water quality results

Depth (m)	Arsenic (mg/l)	Lead (mg/l)	Cadmium (mg/l)	Mercury (mg/l)	Chromium (mg/l)	Nickel (mg/l)	Copper (mg/l)	Zinc (mg/l)
1	2	<2	<0.8	<0.2	<1	<1	<1	<6
6	2	<2	<0.8	<0.2	<1	<1	2	<6
11	2	<2	<0.8	<0.2	<1	<1	<1	<6
Mean	**2**	**<2**	**<0.8**	**<0.2**	**<1**	**<1**	**<1.3**	**<6**

Quarter 2- August 2021

Table 10A-5 - Hinkley Point B in-situ water quality results (averaged)

Depth(m)	Temperature (°C)	Salinity (salinity units)	Electrical conductivity (mS/cm)	Dissolved Oxygen (mg/l)
1	18.62	27.92	37.98	7.4
6	18.55	27.92	37.93	7.6
11	18.53	27.94	37.94	7.5

Table 10A-6 - Hinkley Point B total suspended solids results

Depth (m)	Total Suspended Solids (mg/l)
1	163
6	196
11	118

Table 10A-7 - Hinkley Point B nutrient water quality results

Depth (m)	Ammoniacal Nitrogen (as N) (mg/l)	Nitrate (as N) (mg/l)
1	0.29	1.4
6	0.29	1.4
11	0.29	1.4

Table 10A-8 - Hinkley Point B total metals water quality results

Depth (m)	Arsenic (mg/l)	Lead (mg/l)	Cadmium (mg/l)	Mercury (mg/l)	Chromium (mg/l)	Nickel (mg/l)	Copper (mg/l)	Zinc (mg/l)
1	3.4	8	0.1	<0.3	2.7	1	3	<20
6	4.1	8	0.1	<0.3	3.6	2	5	30
11	3.5	8	0.1	<0.3	2.2	1	3	<20
Mean	**3.7**	**8**	**0.1**	**<0.3**	**2.8**	**1.3**	**3.7**	**<23**

Quarter 3- November 2021

Table 10A-9 - Hinkley Point B in-situ water quality results (averaged)

Depth(m)	Temperature (°C)	Salinity (salinity units)	Electrical conductivity (mS/cm)	Dissolved Oxygen (mg/l)
1	12.47	27.65	32.72	8.9
6	12.48	27.67	32.75	8.9
11	12.52	27.72	32.84	8.8

Table 10A-10 - Hinkley Point B total suspended solids results

Depth (m)	Total Suspended Solids (mg/l)
1	104
6	139
11	244

Table 10A-11 - Hinkley Point B nutrient water quality results

Depth (m)	Ammoniacal Nitrogen (as N) (mg/l)	Nitrate (as N) (mg/l)
1	0.32	0.9
6	0.31	0.9
11	0.2	0.9

Table 10A-12 - Hinkley Point B total metals water quality results

Depth (m)	Arsenic (mg/l)	Lead (mg/l)	Cadmium (mg/l)	Mercury (mg/l)	Chromium (mg/l)	Nickel (mg/l)	Copper (mg/l)	Zinc (mg/l)
1	2.2	<0.8	<0.4	0.2	0.2	0.8	6	<100
6	2.6	<0.8	<0.4	0.1	0.5	0.8	6	<100
11	2	<0.8	<0.4	<0.1	0.4	0.8	6	<100
Mean	**2.3**	**<0.8**	**<0.4**	**<0.13**	**0.37**	**0.8**	**6**	**<100**

Quarter 4- February 2022

Table 10A-13 - Hinkley Point B in-situ water quality results (averaged)

Depth(m)	Temperature (°C)	Salinity (salinity units)	Electrical conductivity (mS/cm)	Dissolved Oxygen (mg/l)
1	8.4	26.08	27.66	9.4
6	8.1	26.16	27.73	9.3
11.5	8.1	26.27	27.82	9.4

Table 10A-14 - Hinkley Point B total suspended solids results

Depth (m)	Total Suspended Solids (mg/l)
1	149
6	146
11.5	249

Table 10A-15 - Hinkley Point B nutrient water quality results

Depth (m)	Ammoniacal Nitrogen (as N) (mg/l)	Nitrate (as N) (mg/l)
1	0.25	1.6
6	0.23	1.7
11.5	0.25	1.6

Table 10A-16 - Hinkley Point B total metals water quality results

Depth (m)	Arsenic (mg/l)	Lead (mg/l)	Cadmium (mg/l)	Mercury (mg/l)	Chromium (mg/l)	Nickel (mg/l)	Copper (mg/l)	Zinc (mg/l)
1	2.4	<2	<0.07	<0.3	<3	<2	<6	100
6	2.3	<2	<0.07	<0.3	<3	<2	<6	100
11.5	2.2	<2	<0.07	<0.3	<3	<2	<6	300
Mean	**2.3**	**<2**	**<0.07**	**<0.3**	**<3**	**<2**	**<6**	**133**

10B

Water Framework Directive Appraisal

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10B Water Framework Directive Appraisal

10B.1 Introduction

Background

10B.1.1. Hinkley Point B Nuclear Power Station (HPB) ceased generation of electricity in August 2022. Defueling of HPB commenced shortly after in September 2022 and is anticipated to be complete in 2025. Decommissioning, namely the dismantling and decommissioning of plant and buildings within the HPB nuclear site license (NSL) boundary (the 'Site') and infrastructure associated with energy generation outside of the Site, is anticipated to start shortly after defueling is completed.

10B.1.2. The Environment Agency (EA) requires an assessment of the impact of any works/modifications to water bodies in England under the European Union's Water Framework Directive (WFD) (2000/60/EC)[1]. For groundwater, the European Union's Groundwater Directive (GWD), 2006/118/EC[2] (a 'daughter directive' to the WFD) requires an assessment of the impact of any works on groundwater bodies through the introduction of hazardous substances and/or non-hazardous pollutants. For surface and coastal water bodies, the objectives of the WFD are transposed into law in England and Wales under the Water Environment (WFD) (England and Wales) Regulations 2017 (the 2017 regulations) (SI 2017/407) and *The Water Framework Directive (Standards and Classification) Directions (England and Wales) 2015*. For groundwater, UK Government made The Groundwater (WFD) (England) Direction 2016 in order to direct the Environment Agency to implement the GWD.

10B.1.3. The purpose of this WFD assessment is to evaluate the potential impacts of the dismantling works and the decommissioning process (referred to as the Proposed Works) may have on current or potential future WFD compliance. This includes consideration of the engineering works and related activities involved in decommissioning and changes to water discharge activities at the Site. To assist the identification of where works will be undertaken, an Indicative Dismantling Works Area (hereafter referred to as the 'Works Area') has been identified (see **Figure 1.1** of the **Environmental Statement)**.

10B.2 Study Area

10B.2.1. HPB is located on the north coast of Somerset on the shores of the Severn Estuary. It is positioned approximately 12 km north-west of the largest local settlement which is the town of Bridgwater. The northern boundary fence of the Site extends for 750 m, set back approximately 5 m from the seaward face of a maintained sea wall providing coastal protection.

[1] The European Commission (2000). *Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy*. As amended by Directives 2008/105/EC and 2013/39/EU and 2014/101/EU. Available online: https://eur-lex.europa.eu/resource.html?uri=cellar:5c835afb-2ec6-4577-bdf8-756d3d694eeb.0004.02/DOC_1&format=PDF (Accessed 16 August 2024)

[2] European Commission (2006). *Directive 2006/118/EC of the European Parliament and of the Council of 12 December 2006 on the protection of groundwater against pollution and deterioration*. Available online: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32006L0118 (Accessed 16 August 2024).

10B.2.2. The Study Area for the WFD assessment includes those WFD water bodies which have potential connectivity to the Works Area, along with the WFD water bodies which the Proposed Works could potentially impact directly.

10B.2.3. There are no river water or groundwater bodies classified under the WFD that are within the Study Area, and there are currently no designated water dependent conservation sites located in the immediate vicinity of the HPB onshore site. However, there are coastal and transitional WFD water bodies within the Study Area.

10B.2.4. The Study Area for consideration of potential effects on inland surface waters, and potential subsequent changes to flood risk, is associated with the onshore surface water catchment of the HPB site, as well as the downstream extent of drainage ditches. As the Proposed Works with potential effects on WFD water bodies are wholly marine in nature, there is no overall potential pathway of effect between the Proposed Works and changes to inland surface waters and fluvial flood risk.

10B.2.5. The Proposed Works relating to the former cooling water outfall and installation of a new Active Effluent Discharge Line (AEDL) and Sewage Treatment Plant Line (STPL) are located within the Parrett WFD water body, and the Proposed Works relating to the dismantling of the former Cooling Water (CW) Intake Structure are located in the Bridgwater Bay WFD water body. These both have high connectivity with the Severn Estuary. WFD water bodies have been identified within a 10 km radius of the works as shown in **Graphic 10B-1** and **Table 10B-2** All three of these waterbodies have the potential to be affected by the Proposed Works.

Graphic 10B-1 - WFD water bodies

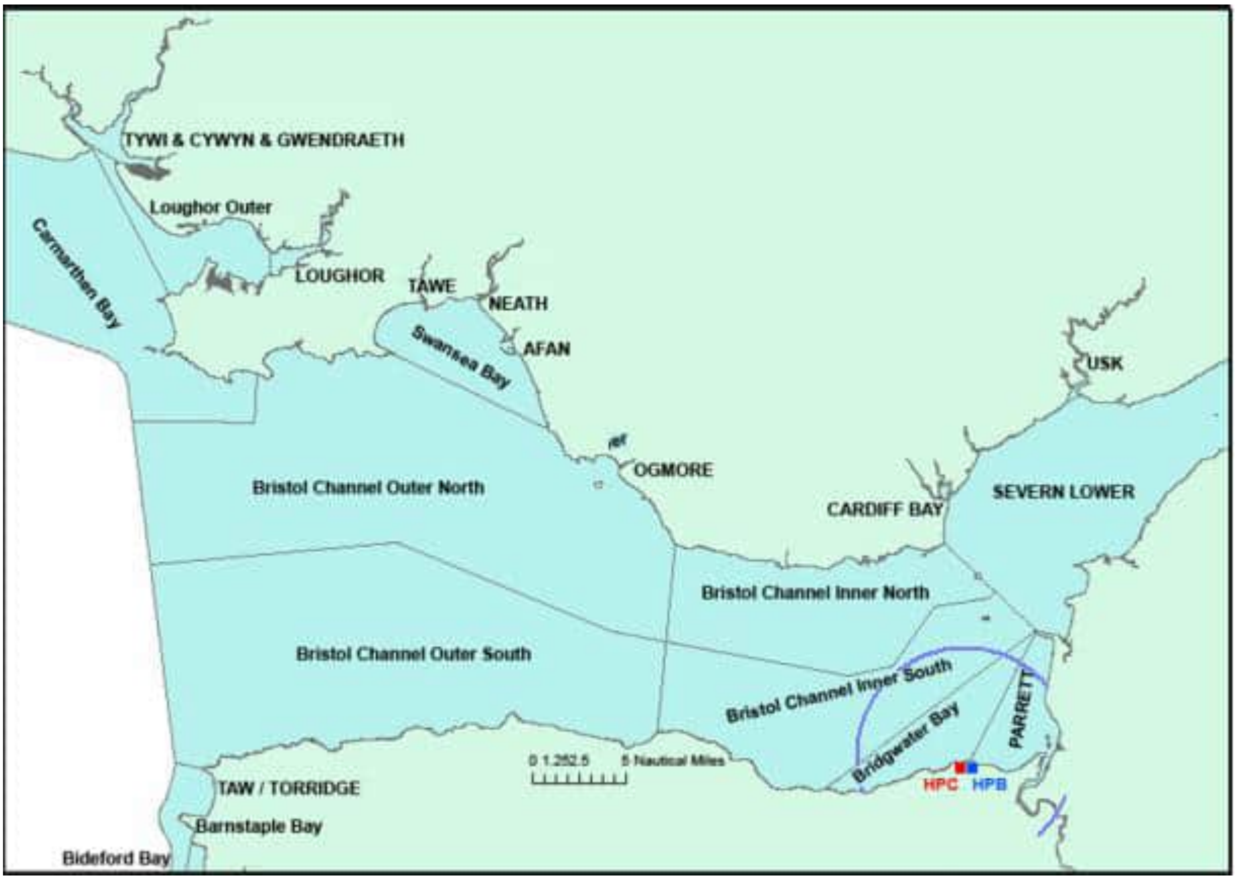

Table 10B-1 - Water bodies which the Proposed Works could potentially impact

Water body name and reference	Water body size (km²)	Water body type	Distance from proposed works	Artificial or heavily modified water body	Current status/potential
Bridgwater Bay GB670807410000	91.813	Coastal	0 km	No	Moderate Status (Moderate Ecological Status; Good Chemical Status)
Parrett GB540805210900	70.835	Transitional	0 km	Yes – flood protection	Moderate Status (Moderate Ecological Potential; Good Chemical Status)
Bristol Channel Inner South GB640807670000	337.974	Coastal	~3 km North	No	Moderate Status (Moderate Ecological Status; Good Chemical Status)

10B.2.6. Due to the macrotidal nature (large tidal range) of the Severn Estuary and the resultant high connectivity associated with the Estuary, it is considered there is potential for changes to one waterbody to have an impact on other connected waterbodies. Therefore, it is understood that if deterioration is identified in the WFD waterbodies considered within the local area (within 10 km from the Works Area) then additional assessment may be required for the connecting waterbodies. The connecting waterbodies are identified in **Table 10B-2.**

Table 10B-2 - Identification of connecting WFD waterbodies.

Water body name and reference	Water body type	Distance from proposed changes
Severn Lower (GB530905415401)	Transitional	Approx. 14 km north-east
Bristol Channel Inner North (GB641008660000)	Coastal	Approx 12 km north-west
Bristol Channel Outer South (GB610807680004)	Coastal	Approx. 32 km west-north-west
Bristol Channel Outer North (GB611008590001)	Coastal	Approx. 31 km west

The Proposed Works

Phases

10B.2.7. The Proposed Works comprise the decommissioning of HPB and will include the dismantling and deconstruction of buildings and structures in areas within and outside the NSL boundary that are associated with energy generation. The Proposed Works will be carried out in three phases:

- Preparation for Quiescence
- Quiescence; and
- Final Site Clearance.

10B.2.8. The Proposed Works comprise the following engineering activities, which may have potential impacts upon the WFD water bodies and quality elements[3]:

- removal of marine infrastructure associated with the HPB CW Intake Structure;
- installation of a new AEDL and STPL inside the existing tunnel, extending through to the seaward end of the existing open Outfall channel, cut into the rock;
- operation and decommissioning of a new AEDL and STPL;
- demolition of existing buildings and the undertaking of groundworks on site, including the construction of the Safestore and waste facilities during the Preparations for Quiescence phase, and subsequent removal during different stages of the Proposed Works, including:
  - construction of new buildings and retention of existing hardstanding areas;
  - excavation works and void infilling activities; and
  - final Site clearance works to make the Site available for future use.

10B.2.9. As cessation of operation of HPB and defueling do not form part of the Proposed Works, in accordance with the definition of decommissioning and requirements for assessment under the Nuclear Reactors (Environmental Impact Assessment for Decommissioning) Regulations 1999 (EIADR)[4] (as amended), cessation of discharges of cooling water and operational trade effluents do not form part of the Proposed Works. However, any changes to water discharges arising from the decommissioning process have been considered.

10B.2.10. A summary of these works is provided below, and further details of the decommissioning process are described in **Chapter 2: The Decommissioning Process** of the Environmental Statement (ES).

Preparations for Quiescence phase

10B.2.11. The purpose of this phase is to reduce the hazards presented by the radioactive and non-radioactive materials and wastes on site and to place the Site into a passively safe and secure state for the Quiescence phase, where the need for human intervention to maintain acceptable condition is minimised.

10B.2.12. This phase will include demolition of all existing buildings to ground level, except for the Reactor Building which will be repurposed to create a 'Safestore' to allow further radioactive decay to occur during the Quiescence phase. It also includes the processing, packaging and removal of operational Higher Activity Waste (HAW) and the processing, packaging of Lower Activity Waste (LAW) on site, generated as a result of deplanting and demolition activities.

10B.2.13. Marine structures associated with the operation of HPB will be decommissioned. To reduce the environmental impact associated with removing the cooling water tunnels, it is proposed that the CW Intake Structure will be removed to seabed level and the tunnel left *in-situ* below the seabed. The Outfall structure will be left *in-situ*.

[3] Ecological status is determined for rivers, lakes, and transitional and coastal waters based on biological quality elements (phytoplankton, macrophytes, phytobenthos, benthic invertebrate fauna and fish) and supporting physico-chemical (nutrients, oxygen condition, temperature, transparency, salinity and river basin specific pollutants (RBSPs) and hydromorphological quality elements.

[4] UK Government (1999). *The Nuclear Reactors (Environmental Impact Assessment for Decommissioning) Regulations, 1999, as amended*. (Online) Available at: https://www.legislation.gov.uk/uksi/1999/2892/contents/made (Accessed August 2023).

10B.2.14. A new AEDL will be installed to enable the Cooling Water Pumps to be turned off and to enable the decommissioning of the CW system. This will be implemented by installing a new pipe to carry the effluent from its current discharge point at the entry point to the CW Outfall Tunnel adjacent to the Sea Wall to the CW Outfall. This pipe will be threaded via the existing CW Outfall Tunnel and discharge at the CW Outfall Channel. As detailed optioneering studies are ongoing (see **Chapter 3: Alternatives**), for the purposes of assessment, the AEDL is assumed to extend approximately 220 m beyond the existing CW Outfall along the existing CW Outfall Channel (approximately 400 m from the Sea Wall). An additional back-up pipe will also be threaded, for use in the event of damage to the AEDL.

10B.2.15. In addition, effluent from the Sewage Treatment Plant (STP) will continue to be discharged at the CW Outfall, however a new pipeline will be installed, which will be separate to but running parallel with the AEDL pipeline, to carry these effluents to the Severn Estuary via the existing CW Outfall Channel. An additional back-up pipe will also be installed, for use in the event of damage to the STPL.

10B.2.16. A Jack up Barge (JuB), situated at the CW Outfall Channel is required to facilitate the threading of the four pipelines, from one fixed location.

10B.2.17. The dismantling of the CW Intake Structure is to be completed using a combination of plant, including long reach excavator, working from a JuB (Excavator Barge) using appropriate tooling, such as a hydraulic breaker, demolition jaws, as well as equipment deployed directly on the structure, such as coring, wire saws and supported by manual demolition techniques above and below the tide, to remove the low-level perimeter screen structure and dismantle the Intake Structure to sea bed level.

10B.2.18. Work undertaken from the JuB will be supported by a second working barge. To give a plausible mix of vessel types, including mooring point for service barge(s), this is assumed to be a Flat-Top Spud Barge, to support a crawler crane (Crane Barge).

10B.2.19. The Crane Barge will provide general lifting to support the demolition work, and the flat-top barge option would provide a potential floating laydown space and a mooring point for visiting service barges and work boats.

10B.2.20. Demolished materials arising from the dismantling will be loaded by the long reach excavator and/or crane on to a supporting service barge(s), which will navigate to a suitable port location, such as Avonmouth, for disposal.

10B.2.21. To enable deplanting and demolition of the CW system, it will be necessary to isolate the CW system from the marine environment.

10B.2.22. The CW Outfall Tunnel is exposed at low tide and therefore, for several hours per day it will be dry – hence there is no need to dewater. The CW Outfall Tunnel will be sealed where it intersects with the Sea Wall. The CW Outfall Tunnel will be exposed at the Sea Wall at the junction of the HPB and HPA tunnels. Shuttering will be installed on the HPB section of the tunnel and will be positioned to produce a concrete plug to prevent water ingress to the landward side of the CW Outfall tunnel. Concrete will be delivered to site and the void created by the shutters will be filled via gravity (through hoses) to form the plug.

Quiescence phase

10B.2.23. Following the Preparations for Quiescence phase, it is estimated that the Site will remain in a quiescent state for approximately 70 years. This is to allow for further decay of radioactive plant and materials housed in the Safestore prior to Final Site Clearance to reduce the quantity and radioactivity of radioactive waste when undertaking site clearance activities.

10B.2.24. There is minimal site activity that is anticipated to be required during this phase that would have any influence on WFD compliance.

Final Site Clearance

10B.2.25. This phase will involve removal of the Safestore from the Site, including all radioactive or other hazardous materials and wastes, for the purpose of de-licensing the Site.

Purpose of the WFD

10B.2.26. The primary aim of the WFD is to improve/maintain the Ecological Status/Potential of all surface water bodies and Good qualitative and quantitative status of groundwater bodies and to prevent deterioration in status of the water bodies and their associated WFD quality elements. Ecological Status/Potential for surface waters is determined by a suite of biological, physico-chemical and hydromorphological quality elements. Chemical status is also assessed. The objectives of this WFD assessment are to:

- establish the baseline conditions;
- evaluate potential impacts of the Proposed Works on relevant water bodies; and
- assess the likely effects on compliance with WFD objectives.

10B.2.27. The overarching objective of the WFD is for surface water bodies in Europe to attain overall 'Good Ecological Status' (GES) or 'Good Ecological Potential' (GEP) and Good chemical status, while for groundwater bodies the objective is to reach good quantitative and chemical status. GES refers to situations where the ecological characteristics show only a slight deviation from natural/near natural conditions. In such a situation, the biological, chemical, physico-chemical and hydromorphological conditions are associated with limited or no human pressure. Artificial and heavily modified water bodies that cannot reach GES by virtue of their use have a target to achieve GEP, which recognises their important uses, whilst ensuring the quality elements are protected as far as possible.

10B.2.28. The WFD sets a number of objectives including:

- to prevent deterioration in status for water bodies;
- to aim to achieve Good biological and Good surface water chemical status in water bodies. Those water bodies that did not achieve GES by 2021 need to achieve compliance by 2027;
- for water bodies that are designated as artificial or heavily modified (A/HMWB), the objective is to achieve GEP. Those A/HMWB that did not achieve GEP by 2021 need to achieve compliance by 2027;
- where it is considered either technically infeasible or disproportionately expensive to achieve GES or GEP by 2027, alternative objectives have been set for the water body, such as a target to achieve Moderate status;
- comply with additional objectives and standards for protected areas where relevant; and
- progressively to reduce pollution from priority substances and cease discharges, emissions and losses of priority hazardous substances.

10B.2.29. The introduction of a new modification, change in activity or change to structure in a water body needs to be considered in relation to whether it could cause deterioration in the Ecological Status or Potential of any water body.

10B.2.30. New modifications or changes to activities or structures may also result in any proposed mitigation measures or actions to achieve GES/GEP being ineffective. This could result in the water body failing to meet GES/GEP. Where a development is considered to cause deterioration or where it may contribute to the failure of the water body to meet GES/GEP, then an Article 4.7 assessment would be required which makes provision for deterioration of status provided that certain conditions are met.

10B.3 Methodology

Data collection

Desk study

10B.3.1. A desk-based study was carried out to collect baseline information and inform the WFD assessment. The following data sources were used for the desk study:

- contemporary OS maps;
- geology and soil maps[20];
- WFD status and objectives from Catchment Data Explorer[18];
- Environment Agency Ecology Explorer[5];
- Environment Agency Water Quality Archive[6];
- Environment Agency TraC Fish Counts for all Species for all Estuaries and all years[5] ;
- Hydrological data[7];
- Historic maps[8];
- Magic Map for designated areas, habitats and species, landscape, and marine data[9]; and
- various literature sources, including published articles and technical reports.

Field surveys

10B.3.2. A site walkover was carried out on 10 to 11 August 2021 to characterise the baseline surface water environment and appraise the degree of existing modification of the coastal hydromorphology within the Works Area and its vicinity.

10B.3.3. Site specific quarterly marine water quality surveys were undertaken during 2021 and 2022, with water samples collected approximately 800 m offshore of HPB at 51° 13.004' N 3° 08.317' W (see **Figure 10.2**). As there has been limited change in terms of activity in the area since the surveys were undertaken and there is limited potential to change water quality, no further surveys have been proposed.

Aquatic ecology surveys

10B.3.4. As part of the baseline study for the EIA targeted aquatic ecology surveys were undertaken including:

- A Phase 1 habitat survey of the intertidal area extending 1 km east and west of the HPB boundary at the Sea Wall, up to the HPC jetty, was carried out in September 2020. A validation survey over the same area was carried out in October 2022 and showed limited change.

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[5] Defra (2024). Ecology & Fish Data Explorer (online). Available at: https://environment.data.gov.uk/ecology/explorer/ (Accessed August 2024).

[6] Defra (2024). Water Quality Archive (online). Available at: https://environment.data.gov.uk/water-quality/view/landing (Accessed August 2024).

[7] UK Centre for Ecology & Hydrology (2024). UK Hydrological Outlooks Portal (online). Available at: https://ukho.ceh.ac.uk/ (Accessed August 2024).

[8] National Library of Scotland (2024). Ordnance Survey Maps (online). Available at: Map images - National Library of Scotland (nls.uk) 2 May 2024).

[9] Defra (2024). Multi-Agency Geographical information for the Countryside website (online). Available at: https://magic.defra.gov.uk/home.htm (Accessed August 2024).

- Benthic sampling offshore of HPB was undertaken in November 2020, with work completed in two phases; firstly bathymetry/side scan sonar work, followed by benthic grab sampling. Surveys covered two overlapping areas, each measuring 2 km in diameter, with one centred on the HPB CW Intake Structure, and the second on the end of the HPB cooling water outfall channel.

Environment Agency Records

10B.3.5. Phytoplankton data were retrieved from the Environment Agency's Ecology and Fish Data Explorer for the Bridgwater Bay water body.

10B.3.6. Status and objectives of the WFD water bodies assessed and the River Basin Management Plan for the South West river basin were retrieved from the Environment Agency's Catchment Data Explorer.

Consultation

10B.3.7. The Environment Agency provided comment on the Scoping Report via the Pre-Application Opinion in December 2022. Following engagement, it was identified that there was a need to consider the effects of water quality on aquatic receptors associated with accidental spillages of oils and fuels given the transformer oil spill at HPB in August 2021, which subsequently caused the temporary closure of the oyster farm at Porlock Bay.

10B.3.8. Technical engagement regarding coastal management and water quality has been undertaken with the following statutory bodies: Somerset Council, Somerset Internal Drainage Board (IDB), The Environment Agency and Natural England.

10B.3.9. Regarding inland surface water and flood risk, an initial technical engagement meeting was held with SCC on the 11 July 2021 to discuss the methodologies for the walkover survey, which was subsequently carried out by Wood (now WSP UK Ltd) on the 10 to 11 August 2021. Following the meeting, SCC noted that they were in agreement with the proposals for the walkover which covered the extents of the Study Area. It was also confirmed that the rhynes identified in the area are all classified as Ordinary Watercourses.

WFD assessment process

10B.3.10. The WFD assessment process for each water body is tailored, based on the type of water body assessed. Both coastal and transitional bodies are considered in this assessment. There are no WFD reportable groundwater bodies within the Study Area, so this aspect is not considered further.

10B.3.11. The assessment methodology used here is based on the guidance provided by the Environment Agency in Clearing the Wates for All[10] and Planning Inspectorate Advice Note 18: The Water Framework Directive[11]. This guidance outlines a three-stage process to WFD assessment: screening, scoping, and impact assessment. The outcome of each stage determines whether the assessment needs to progress to the next stage.

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[10] Environment Agency (2023). *Clearing the Waters for All*. Environment Agency guidance on Water Framework Directive assessment for activities in transitional and coastal waters. Available at: https://www.gov.uk/guidance/water-framework-directive-assessment-estuarine-and-coastal-waters (Accessed August 2024)

[11] HM Government (2017). The Planning Inspectorate Guidance Note 18: Water Framework Directive. Available online: https://infrastructure.planninginspectorate.gov.uk/legislation-and-advice/advice-notes/advice-note-18/ (Accessed August 2024)

Stage 1: Screening

10B.3.12. Screening is required to identify activities which have the potential to result in deterioration of a water body or failure to comply with the objectives of that water body. Screening serves to identify those proposed activities (e.g., proposed decommissioning methods) that are required to be taken through to scoping and those activities that are unlikely to result in the deterioration of the water body.

Stage 2: Scoping

10B.3.13. Scoping is required to identify risks to receptors from a project's activities, based on the relevant water bodies and their water quality elements (including information on status, objectives, and the parameters for each water body). Potential risks to hydromorphology, biology and water quality elements, as well as effects on WFD protected areas and invasive non-native species should be assessed. The scoping stage identifies which elements need to be carried forward to Stage 3.

Stage 3: Impact Assessment

10B.3.14. If the assessment progresses to Stage 3, a further assessment is undertaken to review environmental measures set to protect the water body and an assessment of the proposed activities against WFD status objectives.

10B.3.15. Low risk activities may be screened out and not progressed to the scoping stage. During scoping, a more detailed assessment is undertaken, examining the risks to each potential receptor, which are associated with the WFD quality elements. The key receptors for assessment of ecological status in transitional and coastal water bodies are:

- hydromorphology – morphological conditions, depth variation, structure and substrate of the coastal bed, structure of the intertidal zone, current direction, wave exposure;
- biological quality elements – phytoplankton, other aquatic flora, benthic invertebrate fauna and, for transitional water bodies, fish;
- chemical and physico-chemical quality elements - transparency, thermal conditions, oxygenation, salinity, nutrients, specific pollutants;
- invasive non-native species (INNS), which are not specifically mentioned in WFD but may constitute an anthropogenic pressure that prevents attainment of the required status for particular quality elements; and
- quantitative and qualitative elements for groundwater water bodies.

10B.3.16. Chemical status is also assessed based on concentrations of priority substances.

10B.3.17. Engineering works may have potential detrimental impacts on the WFD quality elements and may sometimes be of long duration. Such impacts are considered, along with embedded environmental measures designed to reduce or eliminate potential impacts on the water body and WFD quality elements.

Hydromorphology

10B.3.18. Hydromorphology is a set of physical characteristics which support biological elements. Where the hydromorphology of a surface water body is artificial or has been significantly altered for anthropogenic purposes (e.g. navigation or flood defence), such that it cannot meet GES, it can be designated as an Artificial or Heavily Modified Water Body ('A/HMWB'). An alternative environmental objective, good ecological potential ('GEP') applies in these cases.

Structure and substrate of the coastal seabed and intertidal zone

10B.3.19. An assessment should be undertaken where the footprint of the activity is:

- 0.5 km^2 or larger;
- 1% or more of the water body's area;
- within 500 m of any higher sensitivity habitat; or
- 1% or more of any lower sensitivity habitat.

Benthic biology

10B.3.20. As per Environment Agency (2023) guidance12, benthic habitats are divided into higher sensitivity and lower sensitivity habitats and are listed in **Table 10B.3**.

Table 10B.3 – Habitat sensitivity as defined by WFD guidance

Higher Sensitivity	Lower Sensitivity
Chalk reef	Cobbles, gravel and shingle
Clam, cockle and oyster beds	Intertidal soft sediments like sand and mud
Intertidal seagrass	Rocky shore
Maerl	Subtidal boulder fields
Mussel beds, including blue and horse mussel	Subtidal rocky reef
Polychaete reef	Subtidal soft sediments
Saltmarsh	
Subtidal kelp beds	
Subtidal seagrass	

Biology – Fish

10B.3.21. Fish species should be considered if activities:

- are in an estuary designated as a transitional water body;

[12] Environment Agency (2023) *Water Framework Directive assessment: estuarine and coastal waters*. Available online: https://www.gov.uk/guidance/water-framework-directive-assessment-estuarine-and-coastal-waters (Accessed August 2024)

- are in a coastal water body outside an estuary but could delay or prevent fish from entering an estuary; or
- could affect fish migration through an estuary to freshwater.

Water Quality

10B.3.22. Water quality encompasses the chemical status of the water body in relation to hazardous substances but also physico-chemical elements that support the biology, such as clarity, temperature, salinity, oxygen levels, nutrients and specific pollutants. Water quality should be considered as a receptor if activities:

- could affect water clarity, temperature, salinity, oxygen levels, nutrients or specific pollutants continuously for longer than a spring neap tidal cycle (about 14 days);
- are in a water body with a phytoplankton status of moderate, poor or bad; or
- are in a water body with a history of harmful algae.

WFD Protected Areas

10B.3.23. WFD protected areas encompass sites protected under the National Site Network (formerly Natura 2000) (i.e. Special Areas of Conservation ('SACs') and Special Protection Areas ('SPAs')), bathing waters, shellfish waters and nutrient sensitive areas ('NSAs'). Guidance stipulates that WFD protected areas located within 2 km of the proposed activity must be identified[12] It also acknowledges that the footprint of effects of an activity may be extended because of temperature or sediment plume, and for dredging activity (not notably is not applicable within this assessment), the footprint is taken as 1.5 times the dredge area. For coastal and transitional water bodies, terrestrial protected areas (with no functional link to the water body can be excluded.

Invasive Non-Native Species

10B.3.24. The introduction and spread of INNS can occur directly through the release of individuals of INNS species into the environment via activities, e.g. through release of ballast water[13] or on the hull of ships even if recently cleaned or anti-fouled[14],[15] or indirectly by creating opportunities for organisms to settle or spread (e.g. habitat creation or disturbance), thereby allowing for them to out-compete native species. Therefore, activities should be considered where:

- materials or equipment have come from, have been used in or travelled through other water bodies; or
- activities are involved that help spread existing INNS, either within the immediate water body or to other water bodies.

10B.3.25. INNS are not specifically mentioned in WFD but may constitute an anthropogenic pressure that prevents attainment of the required status for particular biological quality elements.

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[13] Ware, R., Yguel, B. and Majerus, M. (2009) *Effects of competition, cannibalism, and intra-guild predation on larval development of the European coccinellid* Adalia bipunctata *and the invasive species* Harmonia axyridis. *Ecological Entomology* **34**:12-19.

[14] International Maritime Organisation (2012). *Guidelines for the Control and Management of Ships' Biofouling to Minimize the Transfer of Invasive Aquatic Species*, 2012 Edition.

[15] Davidson, I. C., Zabin, C. J., Chang, A. L., Brown, C. W., Sytsma, M. D. and Ruiz, G. M. (2010). Recreational boats as potential vectors of marine organisms at an invasion hotspot. *Aquatic Biology* **11**:179-191.

Measures to Achieve Environmental Objectives

10B.3.26. The WFD Regulations require the preparation and publication of River Basin Management Plans (RBMPs), the setting of environmental objectives for groundwater and surface waters (including estuaries/transitional and coastal waters) and the devising and implementing of programmes of measures to meet those objectives. Under the WFD Regulations, a RBMP must be developed for each River Basin District (RBD) and reviewed and updated every six years. These plans were first published in December 2009, and last updated in February 2022[16].

10B.3.27. For the South West of England and Western Wales RBDs, a programme of measures has been drawn up to enable the achievement of objectives of the RBMPs.

10B.3.28. For the South West of England these include:

- measures required to address physical modifications;
- measures required to manage pollution from wastewater, from towns, cities and transport;
- measures required to manage pollution from metal mines;
- measures required for pollution from rural areas;
- measures required to manage changes to natural flow and levels of water;
- measures required for peatland restoration; and
- measures required to manage invasive non-native species.

10B.3.29. Detailed descriptions of each of the measures, and a consideration of their effects are described in the river basin management plan for the South West of England RBD.

10B.3.30. For the Western Wales RBD, the programme of measures includes[17]:

- The Welsh Governments Water Strategy for Wales;
- NRW's WFD Regulations 2017 driven programme;
- catchment scale improvement, river restoration and sustainable fisheries opportunities;
- protected areas including the SAC Rivers Project;
- flood and coastal risk management;
- water industry investment programme including the storm overflow roadmap;
- water resources sustainability measures;
- sustainable land management – agriculture;
- sustainable land management – woodland and forestry;
- Welsh Governments Capital Fund; and
- opportunity catchments.

10B.3.31. Measures are managed through the application of relevant legislation, policy and guidance by regulators and operators, as well as future planning, joint planning and coordination between regulators and operators. Additional measures include improved flood resilience, climate change adaptation, increased biodiversity and social cohesion.

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16 Environment Agency (2022). River Basin Management plan for the South West River Basin District. Available online: https://assets.publishing.service.gov.uk/media/635246fae90e07768c1a73a2/South_west_river_basin_management_plan_2022_HRA.pdf (Accessed August 2024).

17 Natural Resources Wales (2022). Western Wales River Basin Management Plan 2021-2027 Summary. Available online: https://naturalresourceswales.gov.uk/media/695227/western-wales-rbmp-2021_2027-summary.pdf (Accessed August 2024).

Limitations and assumptions

10B.3.32. There are no recent data on sediment quality available to assess potential contamination. However, there are data available at a range of sites within 4 km, collected in connection with dredging required as part of construction of the HPC cooling water intake and outfall heads. These data are described in Section 10.5 of **Chapter 10: Coastal Management and Water Quality** of the ES.

10B.4 Baseline

10B.4.1. The topography within the Site varies with an average of approximately 10 m above Ordnance Datum (m AOD), ranging from a maximum elevation of 20 m AOD within the south-western part of the Works Area in the vicinity of the HPB Substation to a minimum elevation of 9 m AOD at the northern boundary of the Site. Within the Study Area, levels gradually slope from west to the east and north - east from a high of approximately 20 m AOD near Pixies Mound to the west of Site towards the MHWS level at Hankley Brake and the Great Arch outfalls.

10B.4.2. The intertidal area immediately to the north of the Site is separated from the power station by a low cliff around 5-10 m in height, protected by a vertical concrete Sea Wall. The upper shore is characterised by shingle and cobbles, interspersed with sandy areas. Directly in front of the HPB power station is a rock platform with outcropping beds creating a series of low steps, which retain sea water at low tide and result in a high degree of habitat diversity. To the east are the extensive areas of mudflat of Bridgwater Bay.

Catchment geology and soils

10B.4.3. A detailed description of the geology and soils baseline is presented in **Chapter 12: Soils, Geology and Hydrogeology** of this ES.

Catchment hydrology

10B.4.4. A detailed description of inland surface waters baseline is presented in **Chapter 11: Surface Water and Flood Risk** and the groundwater baseline is considered in **Chapter 12: Soils, Geology and Hydrogeology** of this ES.

Coastal Management and Marine Water Quality

10B.4.5. A detailed description of coastal management and marine water quality is presented in **Chapter 10: Coastal Management and Water Quality** of the ES.

Baseline characteristics against WFD quality elements for relevant surface waters

10B.4.6. A summary of the WFD status of the Bridgwater Bay coastal water body (GB670807410000) is provided **in Table 10B.4**.

Table 10B.4 - WFD status of the Bridgwater Bay coastal water body (GB670807410000)[18]

Bridgwater Bay Coastal water body	ID: GB670807410000
Water body type	Coastal
River Basin District	South West
Water body area	92.245 km^2
Hydromorphological designation	Not designated artificial or heavily modified
Overall ecological status/potential	Moderate
Current overall status/potential	Moderate
Status objective (overall)	Good
Higher sensitivity habitats present	
Lower sensitivity habitats present	Not assessed
History of harmful algae	Not assessed
Protected Area Designation	Severn Estuary SPA (UK9015022), Ramsar Site (UK11081), SAC (UK0013030).
Biological Quality Elements	
Overall biological quality element status objective	Moderate
Angiosperms	N/A
Fish	N/A
Invertebrates	Moderate
Macro-algae	Moderate
Phytoplankton	Moderate
Physico-chemical Quality Elements	
Overall physico-chemical quality element status objective	Good
Dissolved inorganic nitrogen	Good

[18] Defra (2024). Catchment Data Explorer (online). Available at: https://environment.data.gov.uk/catchment-planning/ (Accessed 2 May 2024).

Bridgwater Bay Coastal water body	ID: GB670807410000
Dissolved oxygen	High
Specific pollutants	High
Arsenic	High
Copper	High
Zinc	High
Priority substances	Not assessed/Does not require assessment
Other pollutants	Not assessed/ Does not require assessment
Priority hazardous substances	Not assessed/ Does not require assessment
Overall chemical status	Does not require assessment
Overall chemical quality element status objective	Good
Hydromorphological Quality Elements	
Supporting elements (Morphology)	High
Mitigation measures assessment	Not assessed

10B.4.7. A summary of the WFD status of the Parrett transitional water body (GB540805210900) is provided in **Table 10B.5.**

Table 10B.5 - WFD status of the Parrett transitional water body (GB540805210900)[18]

Parrett Transitional Water Body	ID: GB540805210900
Water body type	Transitional
River Basin District	South West
Water body area	70.844 km^2
Hydromorphological designation	Heavily modified
Reason for not achieving good status	Disproportionately expensive: Disproportionate burdens.
For what use is the water body designated heavily modified?	Physical modifications for flood protection use.
Overall ecological status/potential	Moderate

Parrett Transitional Water Body	ID: **GB540805210900**
Current overall status/potential	Moderate
Status objective (overall)	Good
Justification for not achieving Good Status by 2014 (from EA Catchment Data Explorer)	Physical modifications for flood protection use. Polybrominated diphenyl ethers (PBDE), mercury and its compounds; measures delivered to address reason, awaiting recovery.
Higher sensitivity habitats present	
Lower sensitivity habitats present	Unknown
History of harmful algae	Not Assessed
Protected Area Designation	Severn Estuary SPA (UK9015022), Ramsar Site (UK11081), & SAC (UK0013030). Somerset Levels & Moors SPA (UK9010031) & Ramsar Site (UK11064). Brean Bathing Water (UK35600) Berrow North of Unity Farm Bathing Water (UK35500)
Biological Quality Elements	
Overall biological quality element status objective	Good
Angiosperms	Not Assessed
Fish	Not Assessed
Invertebrates	Good
Macro-algae	High
Phytoplankton	Not Assessed
Physico-chemical Quality Elements	
Overall physico-chemical quality element status objective	Not Assessed
Dissolved inorganic nitrogen	Not Assessed
Dissolved oxygen	Not Assessed
Specific pollutants	High

Parrett Transitional Water Body	ID: GB540805210900
Arsenic	Not Assessed
Copper	High
Zinc	High
Priority substances	Good
Other pollutants	Does not require assessment
Priority hazardous substances	Does not require assessment
Overall chemical status	Does not require assessment
Overall chemical quality element status objective	Good
Hydromorphological Quality Elements	
Supporting elements (Hydrological regime)	Supports Good
Supporting elements (Surface Water)	Moderate
Mitigation measures assessment	Moderate or less

10B.4.8. A summary of the WFD status of the Bristol Channel Inner South coastal water body (GB640807670000) is provided in **Table 10B.6.**

Table 10B.6 - WFD status of the Bristol Channel Inner South coastal water body (GB640807670000)[18]

Bristol Channel Inner South Coastal water body	ID: GB640807670000
Water body type	Coastal
River Basin District	South West
Water body area	338.403 km2
Hydromorphological designation	Not designated artificial or heavily modified
Overall ecological status/potential	Moderate
Current overall status/potential	Moderate
Status objective (overall)	Good
Higher sensitivity habitats present	

Bristol Channel Inner South Coastal water body	ID: GB640807670000
Lower sensitivity habitats present	Not assessed
History of harmful algae	Not assessed
Protected Area Designation	Severn Estuary SPA (UK9015022), Ramsar Site (UK11081), SAC (UK0013030). Exmoor Heaths SAC (UK0030040). Minehead Terminus Bathing Water (UK35000). Blue Anchor West Bathing Water (UK35200). Dunster Beach Bathing Water (UK35100).
Biological Quality Elements	
Overall biological quality element status objective	Good
Angiosperms	N/A
Fish	N/A
Invertebrates	Good
Macro-algae	Good
Phytoplankton	Good
Physico-chemical Quality Elements	
Overall physico-chemical quality element status objective	Good
Dissolved inorganic nitrogen	Good
Dissolved oxygen	High
Specific pollutants	High
Arsenic	High
Copper	High
Zinc	High
Priority substances	Not assessed/Does not require assessment
Other pollutants	Not assessed/ Does not require assessment
Priority hazardous substances	Not assessed/ Does not require assessment

Bristol Channel Inner South Coastal water body	ID: GB640807670000
Overall chemical status	Does not require assessment
Overall chemical quality element status objective	Good
Hydromorphological Quality Elements	
Supporting elements (Morphology)	Supports good
Mitigation measures assessment	Not assessed

Hydromorphology quality elements for coastal surface water bodies

10B.4.9. Hydromorphology quality elements for the Bridgwater Bay coastal water body are assessed as High whilst they are assessed as Good for the Parrett and Bristol Channel Inner South water bodies.

Tidal Regime

10B.4.10. The Severn Estuary is subject to the second largest tidal range in the world (10-12 m). The large tidal range creates very strong tidal currents throughout the main body of the estuary, whilst the funnel shaped estuary channel and shallow water friction effects causes tidal asymmetry with the flood tide velocity dominating over the ebb tide velocity[19].

Depth variation

10B.4.11. The intertidal area adjacent to HPB is highly diverse and extends seaward from the upper shore at approximately 7 m AOD for a distance of 600 m to 650 m, consisting of a series of limestone and mudstone beds dipping towards the subtidal area and creating a series of steps in the foreshore. To the east the foreshore is dominated by intertidal mudflats extending more than 1 km from the shore in Bridgwater Bay. Beyond low water mark, water depths (at Mean Low Water Springs (MLWS)) do not exceed 5 m within 2 km of the shore.

Quality, structure and substrate of the bed

10B.4.12. According to geological mapping and previous borehole records on the British Geological Society (BGS) GeoIndex[20], the Site is underlain by 50 to 70 m of Lower Lias mudstones with subordinate bands and lenses of limestone that dip gently to the north. The mudstones in the made ground and in the upper 5 to 10 m of Lower Lias strata have been weathered to silty clay. Beneath the Lower Lias are rocks of the Mercia Mudstone Group, which comprise interbedded mudstones and siltstones. The Lower Lias rocks outcrop on the foreshore to the north of HPB and the Mercia Mudstone Group beds outcrop about 500 m to the south of the Site. On the low land to the east of HPB there is a superficial covering of up to 5 m of estuarine organic clays overlying 2 to 5 m of fluvial-glacial sands. There is a prominent geological fault which runs northeast to southwest across the Site.

[19] Cannard (2016). The Sediment Regime of the Severn Estuary Literature Review.

[20] British Geological Survey (n.d.). GeoIndex (online). Available at: https://mapapps2.bgs.ac.uk/geoindex/home.html. (Accessed 4 May 2022).

Structure of the intertidal zone

10B.4.13. The shoreline adjacent to the Works Area is dominated by wave cut platforms and mud banks that form an extensive intertidal zone. The foreshore is in places defined by shallow cliffs rising above the outcrops of Jurassic Blue Lias that are of geological significance. The Severn Estuary, on which the headland of Hinkley Point lies is characterised by extensive mud flats, for which it is internationally renowned as being valuable for wildfowl and waders.

Freshwater zone

10B.4.14. The Severn Estuary to the north east of the Site provides inputs of freshwater into the Bristol Channel from its tributary rivers, notably the Severn, Wye, Usk and Avon. Across monitored parameters, marine water quality is within the normal range for a coastal site apart from salinity. Due to the influence of the River Severn and other freshwater inputs, salinity in the Severn Estuary tends to remain below 30 salinity units (salinity in the open sea being typically 34 salinity units around the UK), with electrical conductivity of seawater typically around 50 mS/cm).

Wave exposure

10B.4.15. While the Bristol Channel is affected by both tidal currents and Atlantic swell, the east-west orientation of its western section partially protects it from most incoming waves, causing it to be tidally dominated[14].

Biological Quality Elements for coastal surface water bodies

Composition abundance and biomass of phytoplankton

10B.4.16. The phytoplankton quality element for coastal waters is assessed using the Coastal Water Phytoplankton Tool[21]. This considers three separate indices covering:

- phytoplankton biomass (based on chlorophyll measurement);
- number of occasions in a season when phytoplankton numbers exceed a defined threshold (number of 'blooms'); and
- seasonal ratios of diatoms and dinoflagellates.

10B.4.17. The three indices are averaged to provide an overall phytoplankton assessment. The measured conditions (observed values) are compared against those described for reference conditions (minimally disturbed) to provide an Ecological Quality Ratio (EQR), whose values are used to indicate the status of the water body.

10B.4.18. The phytoplankton quality element status is affected by nutrient concentrations in the coastal water, thus any activity involving discharge or mobilisation of nutrients has the potential to affect the WFD status.

10B.4.19. Phytoplankton in the Bridgwater Bay water body is all currently assessed as Moderate. Bristol Channel Inner South water body is currently assessed as Good.

10B.4.20. No phytoplankton data were recorded during the surveys. However, Environment Agency TraC phytoplankton monitoring data for the Bridgwater Bay water body was available from surveys

[21] UKTAG (2014) *UKTAG Coastal Water Assessment Method: Phytoplankton. Coastal Water Phytoplankton Tool*. Published by Water Framework Directive – United Kingdom Technical Advisory Group (WFD-UKTAG). April 2014

conducted at a survey location 3.4 km northwest of the Site at National Grid Reference (NGR) ST 19230 49247. The assemblage was entirely made up of diatoms, with no invasive non-native species (INNS) or protected species present.

Composition and abundance of other aquatic flora

10B.4.21. A Phase 1 habitat survey of the intertidal area extending 1 km east and west of HPB boundary at the Sea Wall, up to the HPC temporary jetty, was carried out in September 2020. A further intertidal validation survey was undertaken in October 2022 extending between 1 km east and 1 km west of the HPB frontage, extending from the upper limit of the intertidal zone (Mean High Water Springs (MHWS)) to MLWS to validate that the scope of the 2020 survey remained adequate. In November 2021, site specific surveys were undertaken for the subtidal benthic environment. The full biotope map for the intertidal/subtidal environment is shown in Graphic 10B-1**.**

Angiosperms

10B.4.22. Whilst angiosperms are not used for WFD classification purposes in the Bridgwater Bay, Parrett and Bristol Channel Inner South water bodies, the Site lies adjacent to the Severn Estuary SAC and SPA under which Atlantic salt meadows (saltmarsh) are protected. The nearest saltmarsh is approximately 1.5 km east of HPB.

10B.4.23. The intertidal validation survey in 2022 did not record any seagrasses; however, two species are known in the Severn Estuary and Inner Bristol Channel, namely common eelgrass *Zostera marina* and dwarf eelgrass *Zostera noltii.* The salt tolerant tasselweed *Ruppia maritima* is also found, though generally not considered a marine species.

Macroalgae

10B.4.24. The macroalgae quality element for coastal waters is assessed using the Intertidal Rocky Shore Macroalgal Index[22]. This considers five separate metrics covering:

- species richness (normalised using a shore factor);
- proportion of Chlorophyta (green) algal species;
- proportion of Rhodophyta (red) algal species;
- proportion of opportunists (fast-growing nuisance algae); and
- ratio of ecological status groups.
- The five metrics are combined to form a multi-metric index to provide an overall macroalgae assessment. The measured conditions (observed values) are compared against those described for reference conditions (minimally disturbed) to provide an EQR, whose values are used to indicate the status of the water body.
- The macroalgae quality element status is affected by nutrient concentrations in the coastal water, thus any activity involving discharge or mobilisation of nutrients has the potential to affect the WFD status.
- Macroalgae are currently assessed as Moderate, High and Good, for the Bridgwater Bay, Parrett, and Bristol Channel Inner South water bodies respectively.

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[22] UKTAG (2014) *UKTAG Coastal Water Assessment Method: Macroalgae. Coastal Water Intertidal Rocky Shore Macroalgae Index*. Published by Water Framework Directive – United Kingdom Technical Advisory Group (WFD-UKTAG). April 2014

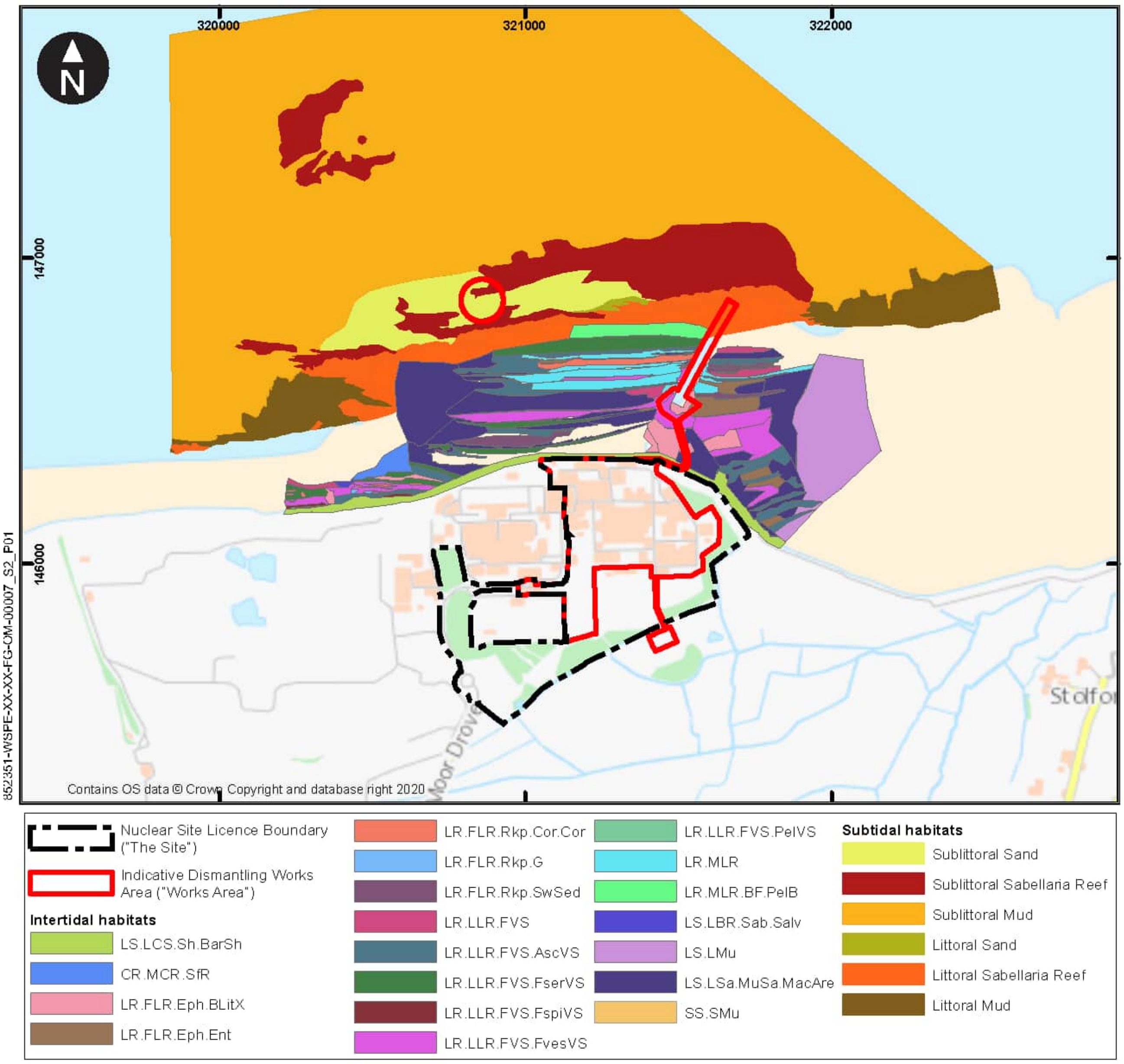
- During the Phase 1 habitat survey, a total of 19 habitat biotopes were recorded in the intertidal area, including areas of thick fucoid cover.
- During the intertidal validation survey in 2022, twelve biotopes were recorded including those with defining macroalgae species that include, *Ascophyllum nodosum*, *Fucus vesiculosus, Corallina officinalis, Fucus serratus,* and ephemeral green and red seaweed species. More detailed results of the intertidal validation survey can be found in **Appendix 9A: Hinkley Point B Intertidal Survey Report** provided in **Volume III** of the ES**.**

10B.4.25. A notable feature of the Inner Bristol Channel and Severn Estuary is the presence of areas of *Corallina* sward associated with the outer faces of the dipping mud/limestone beds that lie across the shore. *Corallina* spp. are of national importance although official conservation status is uncertain[23]. Previous studies carried out by Cefas[24] and Bamber and Irving also identified Hinkley Point to be important habitat for *Corallina* spp. Cefas highlighted that where scarps along the shore are naturally breached, water from the upper shore retaining areas can spill down to the lower shore, creating a permanently wet environment suitable for growth of algal species which would otherwise exist only when fully submerged in rock pools.

[23] BEEMS Technical Report TR068b. Distribution of Coralline turfs at Hinkley Point with respect to nuclear new build. EDF BEEMS (Cefas), 2010.

[24] Cefas (2011) Distribution of coralline turfs at Hinkley point in respect to nuclear new build (online). Available at: https://frastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010001/EN010001-005130-HPCNNBPEA-XX-000-RET-000110%201.pdf

Graphic 10B-2- Intertidal and Subtidal Habitats within the Study Area.



Composition and abundance of benthic invertebrate fauna

10B.4.26. The benthic invertebrate quality element for coastal waters is assessed using the infaunal quality index (IQI)[25]. This is a multimetric index for soft-bottom fauna composed of three individual components known as metrics, these are the:

- AZTI Marine Biotic Index (AMBI), a weighted average sensitivity score of all individuals within a sample;

[25] UKTAG (2014) *UKTAG Transitional and Coastal Water Assessment Method: Benthic invertebrate fauna. Infaunal Quality Index*. Published by Water Framework Directive – United Kingdom Technical Advisory Group (WFD-UKTAG). April 2014.

- Simpson's Evenness, a measure of the distribution of individuals across the different distinct taxonomic groups within a sample; and
- number of taxonomic groups recorded.

10B.4.27. The measured conditions (observed values) are compared against those described for reference conditions (minimally disturbed) to provide an EQR, whose values are used to indicate the status of the water body.

10B.4.28. Thus, any activity with potential to affect the numbers of individuals of different species or the species composition of a benthic community has the potential to affect the IQI score and thus affect WFD compliance.

10B.4.29. Benthic macroinvertebrates are currently assessed as being of Moderate, Good and Good, in the Bridgwater Bay, Parrett and Bristol Channel Inner South respectively.

10B.4.30. During the intertidal validation survey in 2022 and Phase 1 habitat survey in 2020, *Sabellaria alveolata* was recorded. Although this species is not protected under UK legislation, they can form extensive biogenic reefs that support ecosystems by stabilising the sedimentary environment; providing hard substrate for other sessile organisms to colonise and afford diverse habitat types for a range of organisms. The reef structures are classed as Annex I biogenic habitats under the 'Reefs' feature of the EC Habitats Directive and are listed within the UK Biodiversity Action Plan.

10B.4.31. Benthic sampling offshore of HPB was undertaken in November 2020, which included benthic grab sampling. The surveys covered two overlapping areas, each measuring 2km in diameter, with one centred on the HPB CW Intake Structure, and the second on the HPB CW Outfall Channel. In the northwest of the survey area, an area of *Sabellaria alveolata,* biogenic reef was identified, covering an area of approximately 50,200 m^2.

10B.4.32. Macrobenthic invertebrate analysis of grab samples identified a total of 3,488 individuals and 61 taxa, dominated by annelid worms (69.9%) and molluscs (19.9%). The most common taxa identified included the biogenic reef-forming polychaete *S. alveolata,* which was identified in five of the 18 samples, the oligochaete *Tubificoides amplivasatus* and the bivalve *Limecola balthica.*

10B.4.33. The findings of the site-specific benthic surveys supported the general understanding that benthic infaunal communities in the Inner Bristol Channel and Severn Estuary generally comprise impoverished assemblages, dominated by opportunistic species. This is predominantly due to the high instability of seabed habitats, due to the prevailing dynamic sedimentary regime.

Biological quality elements applicable to transitional surface water bodies

Fish

10B.4.34. The fish quality element for transitional water bodies is assessed using the Transitional Fish Classification Index (TFCI)[26]. This is a multimetric index composed of ten individual components known as metrics, these are the:

- species composition
- presence of indicator species

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[26] UKTAG (2014) *UKTAG Transitional Water Assessment Method: Fish fauna. Transitional Fish Classification Index*. Published by Water Framework Directive – United Kingdom Technical Advisory Group (WFD-UKTAG). April 2014.

- species relative abundance
- number of taxa that make up 90% of the abundance
- number of estuarine resident taxa
- number of estuarine-dependent marine taxa
- functional guild composition
- number of benthic invertebrate feeding taxa
- number of piscivorous taxa
- feeding guild composition.

10B.4.35. The measured conditions (observed values) are compared against those expected metric values under reference conditions (minimally disturbed) to provide EQT, whose values are used to indicate the status of the water body.

10B.4.36. Thus, any activity with potential to affect the numbers of individuals of different species or the species composition of a transitional fish community has the potential to affect the TFCI score and thus affect WFD compliance.

10B.4.37. The Parrett transitional water body is not currently assessed for fish. However, the Severn Estuary Dataset (SEDS)[27] provides long term data on the abundance and species richness of fish in the Inner Bristol Channel, a total of 83 estuarine and marine fish species have been recorded since surveys began[28]. Henderson[29] reported the most common species as sprat (*Sprattus sprattus*), whiting (*Merlangius merlangus*) and sand goby (*Pomatoschistus minutus*).

10B.4.38. Almost all species of fish living within the Severn Estuary undertake regular migrations and tend to move seasonally in waves up and down the estuary. Both species richness and the total abundance reach a maximum in late summer and autumn – the timing of this peak varies between the upper and lower estuary. The estuary is also primarily used as a nursery ground for marine species due to the extensive areas of shallow marginal mudflat that provide feeding opportunities to juveniles.

10B.4.39. Seven diadromous fish species are known to migrate through the Severn Estuary; Atlantic salmon (*Salmo salar),* twaite shad (*Alosa fallax*), allis shad (*Alosa alosa*), river lamprey (*Lampetra fluviatilis*), sea lamprey (*Petromyzon marinus*), sea trout (*Salmo trutta*), and European eel (*Anguilla anguilla*).

Physico-Chemical Quality Elements and Water Quality

10B.4.40. WFD targets in the form of Environmental Quality Standards (EQS) are set out in The Water Framework Directive (Standards and Classification) Directions (England and Wales) 2015.

10B.4.41. During the baseline data collation for the assessment of coastal water quality in **Chapter 10: Coastal Management and Water Quality** of the EIA, four quarterly water sampling surveys were undertaken offshore at HPB between May 2021 and February 2022 to account for potential seasonal variations (see **Appendix 10A**). The surveys measured water temperature, salinity,

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[27] Medin (2022) Metadata: Severn Estuary Database Phase 2 (online). Available at: https://portal.medin.org.uk/portal/start.php?tpc=007_4f4c4942-4343-5764-6473-303234323637&step=0017 (Accessed 1 August 2022).

[28] Henderson, P.A. and Bird, D.J., 2010. Fish and macro-crustacean communities and their dynamics in the Severn Estuary. Marine pollution bulletin.

[29] Henderson, P.A., 1989. On the structure of the inshore fish community of England and Wales. Journal of the Marine Biological Association of the United Kingdom, 69(1), pp.145-163.

electrical conductivity, dissolved oxygen, nutrients, total metals, and total suspended solids. Depth averaged results are shown in **Table 10B.7.**

Table 10B.7 – Key Water Quality Parameters Recorded (Depth Averaged)

Parameter	Spring (May 2021)	Summer (Aug 2021)	Autumn (Nov 2021)	Winter (February 2022)
Average temperature (°C)	12.5	18.6	12.5	7.8
Salinity (units)	27.7	27.9	27.7	26.2
Electrical conductivity (mS/cm)	32.2	37.9	32.8	27.7
Dissolved oxygen (mg/l)	8.8	7.5	8.9	9.4
Total suspended solids (TSS) (mg/l)	66	159	162	181

10B.4.42. Samples were collected at depths of 1 m, 6 m and 11 m from the water surface, approximately 800 m offshore of HPB. All the parameters have been calculated as an average of three depth locations.

Specific Pollutants, Priority Substances and Priority Hazardous Substances

10B.4.43. With the exception of three individual results for zinc and one for lead, concentrations of all metals recorded in samples taken throughout the quarterly surveys were below the reporting limit for the specific analysis at the time. Overall, the data indicate low levels of metals and do not suggest the presence of significant contamination in the water column.

Dissolved Inorganic Nitrogen

10B.4.44. The EQS established for dissolved inorganic nitrogen (DIN), is applicable during winter only (defined as November to February inclusive). For turbid waters, the 99%ile standard is set at 180 µM, which equates to 2.52 mg/l (as N) as a winter mean. Nutrient results were found not to exceed this EQS value during the winter (November and February) surveys, with the highest DIN concentration (ammoniacal plus nitrate nitrogen) recorded as 1.93 mg/l at 6 m depth in February.

Dissolved Oxygen

10B.4.45. Dissolved oxygen concentrations present variability between sampling at events offshore of HPB. Dissolved oxygen concentrations taken over the period May 2021 to February 2022, indicate that dissolved oxygen concentrations are highest in Winter and lowest in the Summer months, shown in **Table 10B.7.**

Turbidity

10B.4.46. The Severn Estuary is known to have existing high turbidity levels, due to the freshwater input into the coastal area, and hypertidal regime. This is reflected in the measurements taken during the quarterly marine surveys, presented in **Table 10B.7**.

Water Temperature

10B.4.47. Water temperature exhibits seasonal variations in temperature at the quarterly sampling point, with the lowest temperature recorded in February 2022 (7.8°C) and the highest recorded in August 2021 (18.6°C).

Protected Areas

Statutory Sites

10B.4.48. Protected areas reported in the Environment Agency's Catchment Data Explorer within 5km of the Works Area are as follows:

- The Severn Estuary Special Area of Conservation (SAC); and
- The Severn Estuary Special Protection Area (SPA);

10B.4.49. The nearest designated bathing water is at Berrow north of unity farm, over 10 km to the north-east, within the Parrett WFD water body.

10B.4.50. There are no shellfish waters designated under Article 9 of the Water Environment (Water Framework Directive) (England and Wales) Regulations 2017 within the likely zone of influence of coastal zone decommissioning activities at HPB.

10B.4.51. A summary of designated sites within the Bridgwater Bay, Parrett and Bristol Channel Inner South Water Bodies are provided in **Table 10B-8.**

Table 10B-8 - WFD Protected areas within the Bridgwater Bay, Parrett and Bristol Channel Inner South Water Bodies

Site Name	Designation	Approximate distance and orientation from Works Area	Description
Severn Estuary	Special Area of Conservation (SAC)	0 km east/west/north	Includes all of the Parrett transitional water body and parts of the Bridgwater Bay coastal water body and the Bristol Channel Inner South coastal water body
Severn Estuary	Special Protection Area (SPA) and Ramsar site	0 km east/west/north	SPA and Ramsar site include all intertidal area within the Parrett transitional water body and intertidal area along 3.7 km of coast within the Bridgwater Bay coastal water body

Site Name	Designation	Approximate distance and orientation from Works Area	Description
Somerset Levels and Moors	SPA	~36 km inland (by water)	Includes riverbanks of sections of the upper Parrett estuary and Tone Estuary lying within the Parrett transitional water body
Brean	Bathing Water	~15 km north-north east (by water)	Within the Parrett transitional water body
Berrow North of Unity Farm	Bathing Water	~11 km north-north-east (by water)	Within the Parrett transitional water body
Blue Anchor West	Bathing Water	~19.5 km west	Within the Bristol Channel Inner South coastal water body
Dunster Beach	Bathing Water	~22 km west	Within the Bristol Channel Inner South coastal water body
Minehead Terminus	Bathing Water	~24 km west	Within the Bristol Channel Inner South coastal water body
Exmoor Heaths	SAC	28 km west	SAC includes coastal cliff zones at the west end of the Bristol Channel Inner South coastal water body

WFD and Other Protected Area Features

10B.4.52. No high sensitivity WFD habitats were identified within 500 m of the Site, using the MAGIC Map Application (DEFRA)[30].

10B.4.53. Five low sensitivity WFD habitats were identified within 500 m of the Site, and are listed below:

- gravel and cobbles (intertidal and subtidal coarse sediment);
- intertidal soft sediment (sand, mud and mixed);
- subtidal soft sediment (sand, mud and mixed);
- rocky shore (intertidal rock); and
- subtidal rocky reef (infralittoral and circalittoral rock).

[30] Available online: https://magic.defra.gov.uk/magicmap.aspx (Accessed August 2024).

Invasive Non-Native Species

10B.4.54. No invasive non-native species were identified in the benthic or intertidal ecology surveys. However, despite this there are recent reports of marine invasive non-native species (the Australian barnacle (*Austrominius modestus*), mitten crab (*Eriocheir sinensis*), and the Pacific oyster *(Crassostrea gigas))* in Bristol Channel. These could have an impact on native species and habitats but the abundance and impact in the Severn Estuary of these species is unclear[31].

10B.5 WFD Screening

Stage 1: WFD Screening

10B.5.1. The purpose of the WFD screening stage is to identify the extent to which activities involved in the Proposed Works may affect WFD water bodies. Activities can be screened out from further consideration if they are ongoing activities and thus form part of the baseline, or if there is no mechanism by which the activity could affect the status of WFD quality elements in the water bodies considered or result in a pathway for effects in any connecting WFD water body.

Screening of WFD Water Bodies

10B.5.2. WFD waterbodies have been identified within a 10 km radius of the Proposed Works. The Proposed Works are located within the Bridgwater Bay and Parrett WFD water bodies and within 10 km of the Bristol Channel Inner South water body, which is considered to have high connectivity with the Bridgwater Bay and Parrett water bodies, due to the high tidal range in the area. All three of these waterbodies have potential to be affected by the Proposed Changes and have therefore been screened in to the WFD assessment.

10B.5.3. Activities associated with the Proposed Works are detailed in **Table 10B-9**, along with a screening assessment. Those activities screened in are taken forward to the Stage 2 Scoping stage. Where an activity is screened out, no further assessment is required.

Table 10B-9 – Screening of activities for WFD assessment

Activity	Screen In/Out	Justification
Preparations for Quiescence phase and Final Site Clearance		
Discharges of radioactive wastewater	OUT	Discharges of treated radioactive effluent are currently made through the CW system. To enable CW system to the decommissioned alternate arrangements for active effluent discharge will be made. For the purpose of this assessment this is assumed to be delivered by the construction of a new pipe (AEDL) to carry active effluent from its current discharge point into the CW Tunnel, along the tunnel, through the CW Outfall and along the CW Concrete Channel to its end point. This change to existing discharge arrangements may require a variation of the existing permit (CB3735DT) from the Environment Agency.

[31] Natural England (2015). Site Improvement Plan: Severn Estuary.

Activity	Screen In/Out	Justification
		Active discharges are assumed to contain the same as or less radiological load during the Preparations for Quiescence phase than the discharges during operation of HPB. Effects associated with ongoing radioactive discharges from operational/defueling processes are scoped out on the grounds that they are existing discharges, loads are reducing compared with discharges during operation of HPB and the discharges are regulated under the rigorous requirements of the separate nuclear licensing regime.
The demolition of buildings and the undertaking of temporary groundworks on-site, including the construction and removal of the Safestore and waste facilities	OUT	The existing drainage system will be left in place throughout the Proposed Works, with discharges authorised by existing consent 101266, and is designed to sufficiently accommodate site drainage. The existing system includes measures to capture and treat silt and oil interception. There will be no net increase in impermeable footprint on site. Embedded measures, including the water management measures described in the EMP, involving good site management practices, such as wheel washing and tankering off-site of any contaminated water, will ensure compliance with conditions in the existing consents. Thus, there will be no significant change in contaminant levels as a result of the Proposed Works in existing consented surface water runoff from the Works Area to the Bridgwater Bay coastal surface water body that could lead to an adverse effect on quality elements of the coastal water body. This activity can therefore be screened-out from further consideration.
Changes to drainage system – operation of new outfalls	OUT	There is potential for changes in hydromorphology as a result of changes in surface water run-off during construction activity for the decommissioning works and of other discharges in the longer term during the Quiescence phase. Discharges during the Preparations for Quiescence and Quiescence phases are likely to be reduced compared to the operational phase of HPB. Furthermore, new outfalls are located within the vicinity of existing outfalls and given the hypertidal dynamics of the estuary changes in hydromorphological conditions are considered very unlikely as a result of new outfalls. On this basis, this activity can be screened out from further assessment.
Preparations for Quiescence phase		
Discharges of trade effluents via AEDL	OUT	A new AEDL will be installed to enable discharges during the Proposed Works. The consent 101266 and permit 102980 authorises discharges to the Parrett transitional surface water body of cooling water abstracted from the Bridgwater Bay coastal water body and trade effluents from the existing water treatment plant arising from operation of HPB. While

Activity	Screen In/Out	Justification
		discharge of heated cooling water from the condensers has already ceased, a reduced flow of abstracted sea water is maintained to assist in conveying remaining trade effluents associated with defueling and other ongoing processes. The discharge of abstracted sea water will cease completely at an early stage during the Preparations for Quiescence phase of decommissioning, as discharges will be transferred to the AEDL once it has been installed. Therefore, the baseline for this assessment assumes limited discharges of abstracted sea water, reducing to zero early in the Preparation for Quiescence phase. These discharges, including the trade effluents, will continue to be authorised by the existing permits and consents and changes in these discharges are characterised within the baseline and are thus outside the scope of the EIADR and, therefore, this WFD assessment. The existing HPB RSR permit will need to be varied to reflect the change in the nature of the infrastructure, with the existing outfall replaced by the AEDL, which will require a Marine License prior to implementation. As these are existing trade effluent discharges where changes (reduction) in discharges do not form part of the decommissioning process, these discharges are scoped out from further consideration.
Discharges of sewage	OUT	The consent 070408 authorises an existing treated sewage discharge from the sewage treatment plant, into the Parrett transitional Bay coastal surface water body (NGR ST 2150 4653). Discharge of sewage will continue but will be via the new STPL, installed from the CW outlet to carry effluents to the existing CW Outfall in the Severn Estuary. Discharge of treated sewage could affect WFD compliance of Bathing Waters and Shellfish Water Protected Areas, as well as phytoplankton and macroalgae quality elements and supporting physico-chemical elements (specifically nutrients). However, the sewage flows will be reduced compared with the current situation due to a lower number of workers on Site during decommissioning. As the discharge will remain within the same area and bacterial loads associated with the treated sewage discharge will be reduced, there is no mechanism whereby the Proposed Works could result in any deterioration of bacterial quality and compromise the existing good status at relevant Bathing Waters and Shellfish Water Protected Areas. As this is an existing consented discharge which will continue at a reduced flow throughout decommissioning there is no mechanism by which it could cause adverse effects.
Excavation works, and infilling activities on land within the Works	OUT	These activities have the potential to generate the mobilisation of silt or other contaminants. Substances may also be leached during the infilling process, resulting in changes to shallow groundwater quality with consequent effects on the surface water environment. This will be

Activity	Screen In/Out	Justification
Area during decommissioning.		addressed by ensuring that fill used is not contaminated by ensuring 'Suitability for use' criteria are developed for material to be used as infill. Further embedded measures including site water management measures, drainage plan, drainage survey and surface water monitoring will minimise any potential effects upon water quality.
Decommissioning of marine infrastructure associated with the cooling water system (CW Intake Structure and Outfall)	IN	The removal of the CW Intake structure to seabed level may affect hydromorphology, aquatic ecology and water quality elements due to the activities being carried out within the Bridgwater Bay coastal surface water body (removal of intake structure from within the subtidal area) and within the Parrett transitional surface water body (decommissioning of any outfall components from within intertidal area) potentially affecting habitats and biology directly and causing sediment mobilisation which may affect water quality and, indirectly, biological quality elements. This activity is therefore screened-in for further consideration.
Discharges from draining down the cooling water tunnels before sealing and grouting	OUT	The Outfall tunnel is exposed at low tide and therefore, for several hours a day it will be dry, hence there is no need to dewater the cooling water tunnels. This activity is therefore screened-out of further assessment.
Pumping and dewatering schemes	OUT	Pumping of the intake tunnel will occur from the top of the CW Intake Structure into the Severn Estuary. Regulatory controls will be discussed further with the Environment Agency in advance of this work. The potential need for dewatering in other site activities will be considered in advance of excavation work, and if dewatering is anticipated, an assessment will be carried out in advance to identify suitable environmental measures to minimise the potential for contaminant mobilisation and to protect the water environment. Thus, it is considered that existing discharges into the Bridgwater Bay coastal surface water body will not be subject to any significant additional loads of contaminants from dewatering, so there will be no potential for adverse effects on WFD quality elements in the receiving water body. On this basis, potential dewatering activities are screened out from further assessment.
Installation and decommissioning of new coastal outfall structures	IN	A new AEDL and a new STPL will be installed to enable discharges during the decommissioning period. These new discharge lines will be implemented by installing new pipes to carry the effluent from its current discharge point at the entry point to the CW Outfall Tunnel adjacent to the Sea Wall to the sea. These pipes will be laid beyond the existing tunnel exit and discharge at the end of the existing CW Outfall Channel

Activity	Screen In/Out	Justification
		approximately 220 m beyond the existing CW Outfall (approximately 400 m from the Sea Wall). The implementation of these works may require a variation of the existing HPB RSR permit and discharge consent and will require a marine licence prior to implementation. At the end of the Preparations for Quiescence phase the new AEDL and STPL will be made safe and remain in-situ. Further detail on the optioneering of active effluent discharge arrangements for decommissioning are provided in **ES Chapter 3: Alternatives.** Installation of new outfalls for active waste discharges and treated sewage, envisaged to reach the sea via the existing outfall channel, could lead to habitat damage and disturbance effects during the construction works sub-tidally, due to the use of a Jack up Barge see **Chapter 9: Marine Biodiversity**). This activity is therefore scoped-in for further consideration.
Final Site Clearance		
Ground remediation	OUT	There is potential for sediment laden or contaminated run off being released into the marine environment from areas of ground disturbance during ground reinstatement. The existing drainage system will be left in place throughout the Proposed Works, with discharges authorised by existing consent 101266, and is designed sufficiently to accommodate surface water runoff. The existing system includes measures to capture and treat silt and oil interception. There will be no net increase in impermeable footprint on site. Embedded measures, including the water management measures described in the EMP, involving good site management practices, such as wheel washing, best practice in remediated of contaminated land tankering off site of any contaminated water, will ensure compliance with conditions in the existing consents. Thus, there will be no significant change in contaminant levels as a result of this activity in existing permitted surface water runoff from the Works Area to the Bridgwater Bay coastal surface water body or the Parrett transitional water body that could lead to an adverse effect on quality elements of the coastal water body. This activity can therefore be screened-out from further consideration.
Pumping and dewatering schemes	OUT	The potential need for dewatering will be considered in advance of excavation work and, if dewatering is anticipated, an assessment will be carried out in advance to identify suitable environmental measures to minimise the potential for contaminant mobilisation and to protect the water environment. Also, relevant temporary dewatering permits would be attained from the Environment Agency. Thus, existing surface water drainage from the Site will not be subject to any significant additional

Activity	Screen In/Out	Justification
		loads of contaminants from dewatering, so there will be no potential for adverse effects on WFD quality elements in the receiving Bridgwater Bay coastal surface water body. On this basis, potential dewatering activities are screened-out from further assessment

Stage 2: WFD Scoping

10B.5.4. The WFD scoping stage defines the need and level of detail required for any further WFD assessment by identifying risks to the WFD receptors from the Proposed Works activities screened in in **Table 10B-9**.

10B.5.5. These results are presented for each WFD quality element in **Table 10B-10** to **Table 10B-13**, using the Environment Agency's scoping template for estuarine and coastal waters. Note that these include the single type of activity screened-in and taken forward to scoping.

Hydromorphology

10B.5.6. **Table 10B-10** assesses the potential impact of the single screened-in Proposed Works activity against the WFD hydromorphology quality elements for the relevant coastal surface water bodies.

Table 10B-10 – WFD scoping of the Proposed Works activities against WFD hydromorphology receptors

Consider if your activity may impact hydromorphology:	Risk to receptor (Yes/No)	Scoping outcome justification
Could the Proposed Works impact on the hydromorphology (for example morphology or tidal patterns) of a water body at high status?	Bridgwater Bay Coastal Water Body GB670807410000	
	Yes	The Bridgwater Bay coastal surface water WFD water body is currently assessed at High status.
	Parrett Transitional Water Body GB540805210900	
	No	The Parrett transitional water WFD water body is currently assessed at Good status.
	Bristol Channel Inner South Coastal water body GB640807670000	
	No	The Bristol Channel Inner South water body is currently assessed at Good status.
Could the Proposed Works significantly impact the	Bridgwater Bay Coastal Water Body GB670807410000	
	Yes	The removal of the marine infrastructure associated with the intake structure 540m from the Sea Wall comprising a tower approximately 35m in diameter will remove a minor obstruction to

Consider if your activity may impact hydromorphology:	Risk to receptor (Yes/No)	Scoping outcome justification
hydromorphology of any water body?		tidal currents and waves and marginally reduce the shelter of the coastline immediately to the south of the structure.
	Parrett Transitional Water Body GB540805210900	
	Yes	The installation of a new AEDL and STPL will potentially have a minor effect on tidal currents offshore of the Proposed Works due to the presence of a new weighted pipe that will be laid 220 m beyond the existing CW Outfall tunnel (approximately 400 m from the Sea Wall). Effects are likely to be minor as the new pipes will be located within the existing rock-cut outfall channel.
	Bristol Channel Inner South Coastal Water Body GB640807670000	
	No	Given the distance from the end of the CW Intake and Outfall Structures to the boundary of this water body (>5 km), the minimal footprint of the intake structure and new AEDL and STPL, the potential for hydromorphological effects in this water body can be scoped out of the assessment.
Are the Proposed Works in a water body that is heavily modified for the same use as your activity?	Bridgwater Bay Coastal Water Body GB670807410000	
	No	The Bridgwater Bay coastal surface water WFD water body is not a HMWB.
	Parrett Transitional Water Body GB540805210900	
	No	The Parrett transitional water body is heavily modified due to physical modifications for flood protection purposes.
	Bristol Channel Inner South Coastal Water Body GB640807670000	
	No	The Bristol Channel Inner South coastal surface water WFD water body is not a HMWB.

Biology

10B.5.7. **Table 10B-11** assesses the potential impact of the screened-in Proposed Works activities against the WFD biological quality elements for the relevant coastal surface water bodies.

10B.5.8. The assessment against biological receptors requires consideration against the presence of higher and lower sensitivity habitats:

- higher sensitivity habitats present:
  - polychaete reef;
- lower sensitivity habitats present:
  - intertidal soft sediments (sand and mud), subtidal soft sediments, shingle.

Table 10B-11 – WFD scoping of the Proposed Works activities against WFD biological receptors

Consider if the footprint of the activity may impact the biological receptors:	Risk to Receptor (Yes/No)	Scoping Outcome Justification
Is the footprint of the Proposed Works 0.5km^2 or larger?	Bridgwater Bay Coastal Water Body GB670807410000 and Parrett Transitional Water Body GB540805210900	
	No	The total footprint of the Marine Works Area associated with the Proposed Works is 3.595 ha (0.3595km^2).
Is the footprint of the Proposed Works 1% or more of the water body's area?	Bridgwater Bay Coastal Water Body GB670807410000	
	No	The total footprint of the Works Area associated with the Proposed Works in the Bridgwater Bay coastal water body is approximately 1.5009 ha (0.01501km^2), representing 0.016% of the water body area of 92.245 km^2.
	Parrett Transitional Water Body GB540805210900	
	No	The total footprint of the Works Area associated with the Proposed Works in the Parrett Transitional water body is approximately 2.0941 ha (0.02094km^2), representing 0.030% of the water body area of 70.844km^2.
	Bristol Channel Inner South Coastal Water Body GB640807670000	
	No	The works will not extend into this water body.
Is the footprint of the Proposed Works within	Bridgwater Bay Coastal Water Body GB670807410000	
	Yes	The Proposed Works are within 500 m of polychaete reef *(Sabellaria alveolata)*.

Consider if the footprint of the activity may impact the biological receptors:	Risk to Receptor (Yes/No)	Scoping Outcome Justification
500m of any higher sensitivity habitat?	Parrett Transitional Water Body GB540805210900	
	Yes	The Proposed Works are within 500 m of polychaete reef *(Sabellaria alveolata)*.
Is the footprint of the Proposed Works 1% or more of any lower sensitivity habitat?	Bridgwater Bay Coastal Water Body GB670807410000	
	No	The Proposed Works Area in this water body comprises principally subtidal soft sediment. Although the exact footprint of this lower sensitivity habitat within the water body is unknown, the works area comprises less than 1% of the area within the water body shown on **Graphic 10B.1** as having subtidal soft sediment.
	Parrett Transitional Water Body GB540805210900	
	Yes	The Proposed Works Area in this water body comprises mainly intertidal rocky shore and comprises more than 1% of the area within the water body shown on **Graphic 10B.1** as comprising littoral rock habitat.
Biology – Fish		
Are the Proposed Works in an estuary and could they affect fish in and outside the estuary, could it delay or prevent fish entering it and could it affect fish migrating through the estuary?	Parrett Transitional Water Body GB540805210900	
	Yes	Some of the proposed works are in the Parrett transitional (estuary) water body and includes activities that could disturb fish through the mobilisation of sediments and associated sediment bound contaminants and noise and vibration disturbance. Therefore, effects on fish migration for the construction and operational phase has been scoped in for this assessment.
Could the Proposed Works impact on normal fish behaviour like movement, migration or spawning (for example creating a physical barrier, noise, chemical change or a change in depth or flow)?	Parrett Transitional Water Body GB540805210900	
	Yes	Noise and vibration, predominantly from marine infrastructure deconstruction/decommissioning, and mobilisation of sediments and associated sediment-bound contaminants has the potential to have a notable impact on fish behaviour.
	Bridgwater Bay Coastal Water Body GB670807410000	
	Yes	Noise and vibration, predominantly from marine infrastructure deconstruction/decommissioning, and the mobilisation of

Consider if the footprint of the activity may impact the biological receptors:	Risk to Receptor (Yes/No)	Scoping Outcome Justification
		sediments and associated sediment bound contaminants has the potential to have a notable impact on fish behaviour.
Could the Proposed Works cause entrainment or impingement of fish?	Bridgwater Bay Coastal Water Body GB670807410000	
	No	Cessation of abstraction of sea water does not form part of the decommissioning process but will remove the potential for impingement.

Water Quality

10B.5.9. **Table 10B.12** assesses the potential impact of the single screened-in Proposed Works type of activity against the WFD water quality elements for the relevant coastal surface water bodies.

Table 10B.12 – WFD scoping of the Proposed Works activities against WFD water quality receptors

Consider if the activity may impact water quality:	Risk to Receptor (Yes/No)	Scoping Outcome Justification
Could the Proposed Works affect water clarity, temperature, salinity, oxygen levels, nutrients or microbial patterns continuously for longer than a spring neap tidal cycle (about 14 days)?	Bridgwater Bay Coastal Water Body GB670807410000	
	Yes	The Proposed Works involve activities which have the potential to affect the water clarity, temperature, salinity, oxygen levels, nutrients or microbial patterns. To avoid mobilisation of contaminated sediments and consequent effects on water quality when removing the intake structure, infrastructure will not be removed below seabed level. Any effects on water quality due to minor unavoidable sediment mobilisation will be temporary and minimal.
	Parrett Transitional Water Body GB540805210900	
	Yes	To avoid mobilisation of contaminated sediments and consequent effects on water quality, installation and decommissioning of the new AEDL and STPL will utilise low tides where practicable and works will largely be undertaken within the existing concrete channel and tunnel system to reduce the potential for sediment disturbance. Any effects on water quality due to minor unavoidable sediment mobilisation will be temporary and minimal.

Consider if the activity may impact water quality:	Risk to Receptor (Yes/No)	Scoping Outcome Justification
	Bristol Channel Inner South Coastal Water Body GB640807670000	
	No	Given the distance from the Site to the water body boundary (>5km), and embedded mitigation measures, any effects on water quality due to minor unavoidable sediment mobilisation will be temporary and minimal.
Are the Proposed Works in a water body with a history of harmful algae?	Bridgwater Bay Coastal Water Body GB670807410000	
	No	Harmful algae have not been monitored and therefore the assessment assumes that there is no known history of harmful algae.
	Parrett Transitional Water Body GB540805210900	
	No	Harmful algae have not been monitored and therefore the assessment assumes that there is no known history of harmful algae.
Are the Proposed Works in a water body with a phytoplankton status of moderate, poor, or bad?	Bridgwater Bay Coastal Water Body GB670807410000	
	Yes	Moderate WFD phytoplankton classification
	Parrett Transitional Water Body GB540805210900	
	N/A	Unknown WFD Phytoplankton classification.
	Bristol Channel Inner South Coastal Water Body GB640807670000	
	No	Good WFD phytoplankton classification.
If your activity uses or releases chemicals (for example through sediment disturbance or building works) consider if the chemicals are on the Environmental Quality Standards Directive (EQSD) list.	Bridgwater Bay Coastal Water Body GB670807410000	
	Yes	Marine sediments in the vicinity of the Works Area may be contaminated due to the historical presence of industry in the area.
If your activity uses or releases chemicals (for example through sediment disturbance or building works) consider	Bridgwater Bay Coastal Water Body GB670807410000	
	Yes	Marine sediments in the vicinity of the Works Area may be contaminated due to the historical presence of industry in the area. Seabed sediment sampling was undertaken off Hinkley Point

Consider if the activity may impact water quality:	Risk to Receptor (Yes/No)	Scoping Outcome Justification
if it disturbs sediment with contaminants above Cefas Action Level 1.		in 2009, and analysed for metals, organotin compounds, total hydrocarbons, polycyclic aromatic hydrocarbons, organochlorine pesticides and polychlorinated biphenyls (PCBs). A comparison with Cefas Action Levels found that mean concentrations of chromium lead, nickel, zinc and PCB ICES 7 were above Cefas Action Level 1 but below Action Level 2.
If your activity has a mixing zone (like a discharge pipeline or outfall) consider if the chemicals released are on the Environmental Quality Standards Directive (EQSD) list.	Bridgwater Bay Coastal Water Body GB670807410000	
	No	Discharges through the AEDL and STPL will be made in accordance with the varied environmental permits. It is not expected that discharges will contain priority substances.

Protected Areas and INNS

10B.5.10. **Table 10B-13** assesses the potential impact of the Proposed Works against the WFD Protected Areas and INNS receptors for the screened coastal water bodies.

Table 10B-13 – WFD scoping of the Proposed Works activities against WFD Protected Areas and INNS receptors

Consider if the Activity may Impact Protected Areas or INNS:	Risk to Receptor (Yes/No)	Scoping Outcome Justification
Is the Proposed Works within 2km of any WFD protected area?	Yes	The Works Area lies within the Severn Estuary SAC and SPA.
Could the Proposed Works introduce or spread INNS?	No	There is potential to spread the INNS during the deconstruction of the marine infrastructure. No INNS were identified during the marine ecology surveys, however, there are known to be INNS present in the Severn Estuary. A Biosecurity Management Plan will be established for the Proposed Works, implemented as part of the EMP, effectively reducing the risk of INNS spread.

10B.6 WFD compliance assessment

WFD Quality Elements

10B.6.1. **Table 10B-14** assesses the potential impact of the Proposed Works against each of the WFD quality elements for surface water bodies scoped in at the scoping stage. Risks and quality elements scoped-out are not included in **Table 10B-14**.

10B.6.2. Note that the risks identified during scoping relate to the single type of activity screened in to be taken forward to scoping, which relates to:

- marine works associated with decommissioning and removal of marine infrastructure associated with the cooling water system (CW Intake Structure);
- installation and decommissioning of a new coastal outfall structure (AEDL and STPL).

Table 10B-14 – Potential impacts of the Proposed Works activities against WFD quality elements for coastal water bodies

WFD Quality Elements	Potential Impacts
Hydromorphological Quality Elements	
Depth variation	Removal of the CW Intake Structure is unlikely to have any significant effects on the local wave climate, currents (direction and speed) and associated changes in sediment transport due its limited size (35 m diameter tower in an estuary over 20 km wide), meaning water and sediment is already able to be transported around the infrastructure by tidal flows with no significant perturbation at a water body scale. Similarly, the CW Outfall has no features to be removed that have any significant effect on tidal currents. Thus, there will be no significant effect on the hydrodynamic regime in the vicinity. Therefore, it is not anticipated that the removal of marine infrastructure will have any significant effects on hydromorphological elements of any of the water bodies considered.
Quality, structure and substrate of the bed	
Structure of the intertidal zone	
Freshwater zone	
Wave exposure	
Biological Quality Elements	

WFD Quality Elements	Potential Impacts
Benthic invertebrates	The Severn Estuary is a highly turbid environment due to regular sediment mobilisation by strong tidal currents, meaning that benthic invertebrates inhabiting these waters have adapted to these conditions. The temporary changes will have a minimal and temporary impact on background fine and coarse sediment transport. Once the works have ceased, natural recovery would be expected to commence immediately, with recolonisation from neighbouring undisturbed areas by some motile species. Settlement of larval sessile fauna would occur in the following spring with the development of a mature community occurring over the following several years. The removal of structures at seabed level will affect seaweed habitat. However, losses will not be significant at a water body scale and, therefore, the effects on benthic species associated with these species will similarly be insignificant. Sediment resuspension may temporarily affect the characterising species (*Tubificoides amplivasatus, Limecola bathica,* and *Sabellaria alveolata*) within the area of the Works. These receptors are already well adapted to high instability of the seabed habitats in the River Severn due to the prevailing dynamic sedimentary regime and development of *Sabellaria* reef depends on presence of turbidity. It has been observed that increased turbidity can reduce growth and increase mortality of some deposit feeders, but this is in circumstances where high concentrations have occurred over protracted periods, whereas any increases due to the Proposed Works will be short-term in nature. Therefore, the magnitude of change expected due to a temporary increase in turbidity is very low. The Proposed Works are of very small extent (<0.03% of the water body area in each case), so any seabed disturbance will be very localised and temporary. As defined in **Chapter 2: The Decommissioning Process**, The total area of seabed impacted via the deployment of Jack up Barge feet is anticipated to be 16 m^2 and 182 m^2 as a result of anchor placements. Suspended sediments will be readily dispersed by the high-water flow in the environment. The higher sensitivity habitat present in the vicinity of the CW intake (*Sabellaria* reef) has low sensitivity to changes in turbidity. Sediment mobilised by the Works at the former CW intake will be carried parallel to the shore by the tides, so impingement of sediment plumes on the *Sabellaria* reef in the intertidal and shallow subtidal areas will be negligible. Most works in the vicinity of the former CW Outfall will take place in the intertidal area at low tide, so sediment disturbance will not be an issue and direct impact of valuable habitats will be minimised in determining access routes.

WFD Quality Elements	Potential Impacts
	Therefore, residual effects on the WFD benthic biological quality element in the subtidal and intertidal areas will be negligible and not significant at water body scale.
Phytoplankton Macroalgae	Decommissioning activities including deconstruction of marine infrastructure have the potential to mobilise sediments which could affect the water quality within the Study Area and therefore affect phytoplankton and macroalgae communities. However, the Severn Estuary is already highly turbid, experiencing high levels of suspended sediment and sediment deposition. The Proposed Works are of very small extent (<0.03% of the water body area in each case), so any seabed disturbance will be very localised and suspended sediments will be readily dispersed by the high-water flow in the environment. The Proposed Works are therefore unlikely to have a significant impact at a water body scale on macroalgae and phytoplankton as a result of a minor, temporary increase in suspended sediment or direct disturbance of the small area of intertidal or subtidal habitat directly affected during the Proposed Works. The intertidal area accommodates valued habitats including *Corallina* spp. communities. Thick fucoid cover and *Corallina* sward are identified across the shore at HPB. Changes in suspended solids and

WFD Quality Elements	Potential Impacts
	remobilisation could impact photosynthesis and therefore inhibit growth and density of canopy forming seaweeds when turbidity increases by 0.1/m (light attenuation coefficient). However, sediment mobilised by the Works at the CW Intake Structure will be carried parallel to the shore by the tides, so impingement of sediment plumes on the intertidal area will be negligible. Most works in the vicinity of the former CW Outfall will take place in the intertidal area at low tide, so sediment disturbance will not be an issue and direct impact of valuable habitats will be minimised in determining access routes. Given the short-term nature of disturbance and the very limited geographical extent, residual effects on the WFD benthic biological quality element in the subtidal and intertidal areas will be negligible and not significant at water body scale.
Fish	The Severn Estuary is important to migratory fish, including protected species; Atlantic salmon (*Salmo salar*), twaite shad (*Alosa fallax*), allis shad (Alosa alosa), river lamprey (*Lampetra fluviatilis*), sea lamprey (Petromyzon marinus), sea trout (Salmo trutta), and European eel (*Anguilla anguilla*). Species richness and abundance reach a maximum in late summer and autumn. Underwater marine works in the Parrett transitional water body and the Bridgwater Bay coastal water body may result in underwater noise generation, habitat loss, and disturbance to local fish populations in the Parrett transitional water body. Furthermore, disturbance, noise, and sediment plumes may impact upon migratory fish pathways, within the Parrett transitional water body and nearby transitional water bodies including the Severn Lower transitional water body (GB530905415401). The mouth of the River Parrett lies approximately 7.5 km east of the Proposed Works. The prevailing direction of the tides between Brean and Steep Holm is north-east/south-west, so the sediment plume is likely to travel in a north-easterly direction, away from the mouth of the River Parrett. Thus, sediment plumes produced by the Proposed Works are unlikely to hinder fish migrating up the River Parrett. In addition, due to the very narrow tidal ellipse at this location, sediment plumes will not extend across more than 25% of the cross-section of the Bristol Channel, which is more than 20 km in width between Hinkley Point and South Wales. Therefore, migratory fish passing to and from the Severn Lower transitional water body are unlikely to be obstructed. Similarly, assessment of the potential underwater noise impacts associated with the Proposed Works in the marine environment, has concluded that the worst-case impact rage for all impairment responses in fish hearing groups is 433 m. Marine works will not be undertaken during the months July-September to minimise effects upon local ecological receptors in the estuary. These works will be temporary and minimal in nature, with the majority of the works associated with the outfall taking place at low tide where

WFD Quality Elements	Potential Impacts
	possible to reduce the effects of noise and vibration. With this mitigation, and the timing of the works, the magnitude of impact is considered to be very low and not significant at water body scale.
Chemical/Physico-Chemical and Chemical Quality Elements	
Turbidity Water temperature Oxygenation conditions Nutrient conditions Specific pollutants Hazardous substances	Any mobilisation of sediments during dismantling works in the sea will cause a temporary increase in the total suspended solids concentration and turbidity. The increase in turbidity is unlikely to be significant due to the temporary and localised nature of the works and very high levels of background suspended sediments in the area. Furthermore, the hyper tidal regime of the estuary will disperse sediment plumes and associated contaminants very rapidly. Treated sewage discharge will be made through the STPL. As the number of personnel on site is not expected to increase, sewage discharges will be at most be maintained and may reduce. Thus, there will be no potential for adverse effect on bacterial levels at any nearby designated bathing waters or at any commercial shellfish activities (the nearest being the Porlock Bay Oyster Farm ~30km west of the Works).

10B.7 Water body compliance

10B.7.1. The conclusion of the WFD compliance assessment is that, subject to implementation of the embedded measures proposed in the EMP, there will be no deterioration or adverse effects of current or future WFD status arising from the Proposed Works for the following water bodies:

- Bridgwater Bay coastal surface water body GB670807410000;
- Parrett transitional water body GB540805210900; and
- Bristol Channel Inner South water body GB640807670000.

10B.7.2. Compliance with WFD requirements will, however, be subject to effective implementation of the embedded environmental measures set out within Section 5 of the EMP.

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Surface water and flood risk

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Flood Risk Assessment

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Executive summary

WSP UK Ltd (WSP) has been appointed by EDF Energy Nuclear Generation Limited ('the Applicant'), to undertake a Flood Risk Assessment and Drainage Strategy for the decommissioning of Hinkley Point B Power Station (HPB), Bridgwater, Somerset, TA5 1UD.

This document has been written in accordance with the requirements of the National Planning Policy Framework 2023 (NPPF) and other relevant national and local policy and guidance documents and forms an Appendix to the Environmental Statement to support the application for consent to decommission Hinkley Point B nuclear power station under the Nuclear Reactors (Environmental Impact Assessment for Decommissioning) Regulations 1999 (as amended) (EIADR). The Proposed Works will be undertaken in three phases: Preparations for Quiescence; Quiescence; and Final Site Clearance. Initially, dismantling and deconstruction of the majority of plant and buildings within the Indicative Dismantling Works Area ('Works Area') will be undertaken during the Preparations for Quiescence phase which will occur over approximately 12 years. Also, during the Preparations for Quiescence phase, the existing reactor building will be modified into a Safestore. A temporary Operational Waste Processing Facility (OWPF) and Decommissioning Waste Processing Facility (DWPF) will be constructed, and demolished by the end of the Preparations for Quiescence phase. The existing Sewage Treatment Plant (STP) will also be demolished during this phase. The Quiescence phase follows, assumed to commence by the start of 2039, during which time, the Safestore will remain, and only occasional on-site maintenance will be required. At the end of this approximately 70-year long Quiescence phase, the Final Site Clearance phase will commence and the Safestore will be dismantled and ultimately the Works Area returned to a brownfield site status which can be available for future uses. It is assumed that all Proposed Works will be completed by 2120.

The Works Area is approximately 22.7 ha in size and lies adjacent to the Severn Estuary on a raised platform at approximately 10 mAOD. The majority of the Works Area lies within Flood Zone 1 in the existing (current baseline) situation, apart from the lower south-western part of the Works Area where the existing STP is located, which lies at a lower elevation of approximately 5 mAOD and is within Flood Zone 3a. The current primary access route to the Works Area via Wick Moor Drove also partially lies within Flood Zone 3a.

The flood risk has been assessed through the use of publicly available data and additional supporting information provided by EDF, the findings of which are summarised in the table below. The table outlines the potential sources of flooding and mitigation measures proposed which will inform the evolving design and form part of the Safety Case for overarching decommissioning requirements. These relevant issues primarily relate to the proposed floor levels of the OWPF and DWPF and protection from future external flooding (from the sea and surface water) for these buildings and the Safestore, allowing for the impact of future climate change (noting that the assessment is based on the Environment Agency's categorisation of flood risk).

Quoted return period events including appropriate allowances for climate change are identified for each phase.

Table 11A-1 - Summary of Flood Risk for the Proposed Works Area

Source of Flooding	Baseline	End of Preparations for Quiescence Phase (Start of 2039)	End of Final Site Clearance Phase (End of 2120)	Mitigation Assumed (for negligible change in flood risk to receptors)
Fluvial	Works Area and access route not flooded in a 1 in 1,000 year event (i.e. in fluvial Flood Zone 1).	Works Area and access route not flooded in a 1 in 1,000 year event (i.e. in fluvial Flood Zone 1).	Access route and former STP area flooded in a 1 in 1,000 year event. Potential for access route to flood during a 1 in 100 year event.	Use of flood and weather warning systems to manage risk associated with access.
Tidal	Majority of Works Area not flooded in a 1 in 1,000 year event (i.e. in tidal Flood Zone 1). STP and access route flooded in a 1 in 200 year event if flood embankment east of HPB is breached (in defended Flood Zone 3a).	STP* and access route flooded in a 1 in 200 year event if flood embankment east of HPB is breached.	Lower parts of the Works Area (adjacent to the sea wall) and potentially the access route flooded in a 1 in 200 year event. Under a worst-case scenario floods could reach the Safestore, where depths would be less than 0.3 m.	Existing HPB sea wall (not gabion wall) to remain intact to 2120. Safestore to be protected for a 0.3 m flood depth Use of flood warning systems to manage risk associated with access and on-site flooding.
Surface Water (Pluvial)	Some parts of Works Area (mainly roads) flooded in a 1 in 30 year to 1 in 1000 year event, including adjacent to the existing reactor building / Safestore, with depths of up to 0.3 m.	Some parts of Works Area (mainly roads) flooded in a 1 in 100 year event, including sites of proposed OWPF* and DWPF* buildings and Safestore, with depths of up to 0.3 m.	Some parts of Works Area (mainly roads) flooded in a 1 in 100 year event, including Safestore with depths of up to 0.3 m.	OWPF and DWPF finished floor levels to be set 0.3m above surrounding ground levels or flood-resilient to this depth. Safestore to be protected as for tidal flooding above. Surface water drainage system to be maintained
(Foul) Sewers	Flooding unlikely but possible due to blockages / capacity exceedance (no	Sewers decommissioned so source removed	Sewers decommissioned so source removed	Foul drainage system decommissioned

Source of Flooding	Baseline	End of Preparations for Quiescence Phase (Start of 2039)	End of Final Site Clearance Phase (End of 2120)	Mitigation Assumed (for negligible change in flood risk to receptors)
	significant rainwater entering foul sewers)			
Groundwater	Flooding at the surface unlikely. Flooding of basements possible if pumps fail.	Flood at the surface unlikely. Flooding of basements of buildings waiting to be decommissioned and demolished possible if pumps fail.	Flood at the surface unlikely. Flooding of basements of demolished buildings possible, but no longer a receptor. Flooding of Safestore basement possible if pumps fail.	Continued use of pumps in building basements (including reactor building) until decommissioned and demolished
Reservoirs / Artificial Sources	No sources affecting the area	No sources affecting the area	No sources affecting the area	None required

**The STP, OWPF and DWPF are due to be demolished by the end of the Preparations for Quiescence phase.*

Based on the findings of this Flood Risk Assessment, the requirements of the NPPF have been achieved with respect to flooding. Under the Sequential Test, the Proposed Works should be directed to the areas of lowest flood risk. However, as the Proposed Works are for decommissioning of an existing site, existing structures cannot be moved. Proposed temporary structures (OWPF and DWPF) would only potentially be at risk of flooding from surface water due to local topography. The topography will be changed due to construction and any residual impacts will be mitigated by embedded measures, i.e. designing the buildings to be flood resilient and /or raising them above surrounding ground levels. The Proposed Works would be classified as "*more vulnerable development*" and hence permitted in Flood Zones 1, 2 and 3a, subject to the Exception Test for Zone 3a, which this Appendix demonstrates is satisfied.

11A Flood Risk Assessment

11A.1 Introduction

Overview of the proposed works

11A.1.1. WSP have been commissioned by the Applicant to prepare a flood risk assessment (FRA) to support an application for consent from the Office for Nuclear Regulation (ONR) to decommission HPB. The FRA forms an Appendix to **Chapter 11: Surface Water and Flood Risk**, of the Environmental Statement (ES), and also relevant to **Chapter 6: Climate Change** and **Chapter 10: Coastal Management and Water Quality**.

11A.1.2. Decommissioning works at HPB which are subject to ONR consent are referred to as the 'Proposed Works'. The Proposed Works will include the dismantling and deconstruction of buildings and structures in areas within and outside of the Nuclear Site Licence (NSL) boundary ('the Site') that are part of the power station. The Proposed Works will be undertaken in phases as outlined in **Section 11A.5** within the Works Area, which is approximately 22.7 ha in size. The Site and Works Area boundaries are shown on the Flood Map Pack Site Location Plan in **Annex 11A**, together with key existing / proposed buildings, namely the Reactor Building / Safestore, and potential locations for the DWPF and OOWPF[1]. Further details are provided in see **Section 11A.5**. The Proposed Works also includes the decommissioning and dismantling of the existing STP, which lies to the south of the NSL boundary.

11A.1.3. The assessment has been conducted in accordance with the NPPF[2] and the supporting Planning Practice Guidance for Flood Risk and Coastal Change 2024 (PPG)[3], local planning policy, and other relevant standards. Whilst planning policies, including local policy and the NPPF, do not contain specific policies for applications relating to nuclear decommissioning which are determined by the Office for Nuclear Regulation (ONR), they are material considerations.

11A.1.4. A review of the Environment Agency's Flood Map for Planning[4] (FMfP) indicates that a small area of the southern extent of the Works Area, where the STP is located, lies within Flood Zones 2 and 3a. However, the majority of the Works Area currently lies within Flood Zone 1 (see **Section 11A.4**).

11A.1.5. The assessment includes the following:

- summary of the sources of flooding which may affect the Proposed Works at HPB;
- an assessment of the risk of flooding to the Proposed Works for their proposed design life, including the analysis of Environment Agency data and previous modelling work undertaken by Royal Haskoning / Amec in 2012 as part of the Applicant's Japanese Earthquake Response work (hereafter referred to as the "JER Study")[5];

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[1] At the time of writing optioneering is being undertaken to whether the DWPF and OWPF will be new, purpose built facilities or modified from existing structures on Site. For the purposes of this FRA, it is assumed they will be new build.

[2] Ministry of Housing, Communities and Local Government (2023). Revised National Planning Policy Framework (online). Available at: National Planning Policy Framework (publishing.service.gov.uk) (Accessed August 2024).

[3] Ministry of Housing, Communities and Local Government (2024). Planning Practice Guidance. Available at: https://www.gov.uk/government/collections/planning-practice-guidance (Accessed August 2024).

[4] Environment Agency (2022). Flood Map for Planning (online). Available at: https://flood-map-for-planning.service.gov.uk/ (Accessed August 2024).

[5] Royal Haskoning, AMEC (2012), EDF Energy, Japanese Earthquake Response Flood Modelling, Flood Summary Report Hinkley Point B.

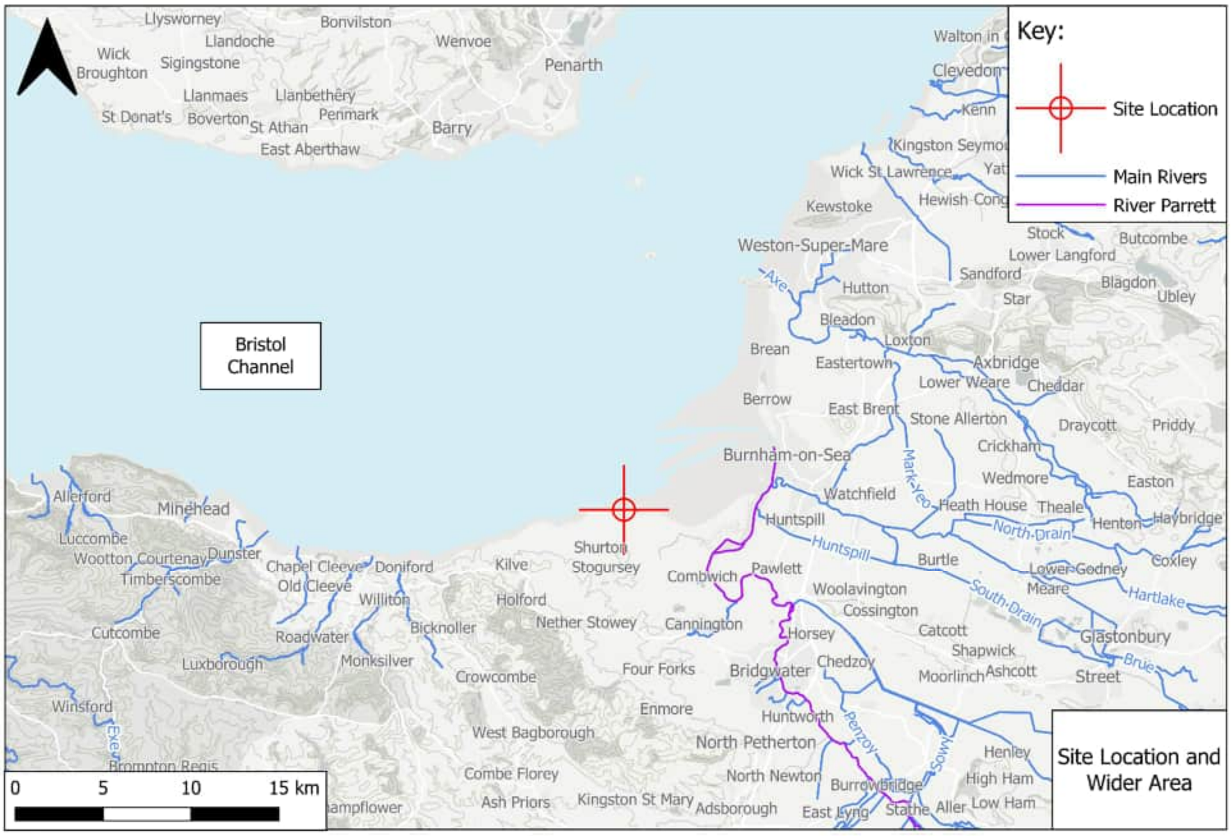
- consideration of potential impacts of the Proposed Works on flood risk elsewhere;
- identification of possible measures which could reduce flood risk to acceptable levels and a summary of residual risks; and
- a proposed surface water drainage strategy.

Location

11A.1.6. The Proposed Works is located near Bridgwater, within the administration area of Somerset Council (SC)[6], next to the Bristol Channel. The location of the Proposed Works can be seen in **Graphic 11A-1**.

11A.1.7. The Works Area is approximately 22.7 ha in size and the Site (i.e. the land within the NSL boundary) is approximately 40 ha (see **Figure 11.1** at the end of this report and the Flood Map Pack Site Location Plan in **Annex 11A**). The majority of the Works Area lies within the NSL boundary except for areas to the north of the NSL boundary (which includes offshore HPB marine infrastructure) and one area to the south (which includes the existing STP). The northern Site boundary is adjacent to the Severn Estuary with a small areas of the Works Area extending into the Estuary. The existing electricity substation lies outside of the Works Area boundary, to the south.

Graphic 11A-1 – Site location and wider area



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[6] HPB was previously under the jurisdiction of Somerset West and Taunton Council which, in April 2023, was one of five councils that were merged into a new unitary authority called Somerset Council.

Consultation

11A.1.8. Relevant flood risk and drainage information was requested for HPB from the Environment Agency and Somerset Council. Their responses are provided in **Annex 11B**.

11A.1.9. A technical engagement meeting was held with the Environment Agency on 11 July 2024. Discussion focused on seeking agreement assumptions used in the FRA and embedded measures. In particular, the categorisation of the Proposed Works as 'more vulnerable development' was agreed.

11A.1.10. A technical engagement meeting was also held with the Somerset Drainage Boards' Consortium on 21 August 2024, in which the Proposed Works, potential impacts and mitigation were outlined and opportunities for comments and questions provided.

11A.2 Assessment methodology

Overview

11A.2.1. The tasks involved in the completion of this FRA are as follows:

- a site walkover completed in relation to flooding in August 2021; and
- a review of available relevant flood risk information to identify existing risks from all sources, including:
  - Environment Agency online maps for flood risk;
  - Environment Agency North Coast Tidal Model (2012 / 2016);
  - Environment Agency Coastal Flood Boundary Levels (2018);
  - Royal Haskoning / Amec JER flood modelling outputs and report[5];
  - Flood Estimation Handbook rainfall data; and
  - Environment Agency groundwater mapping (hosted on The Multi-Agency Geographic Information for the Countryside (MAGIC)[7] online map) (accessed February 2024).

Definition of Flood Risk

11A.2.2. Flood risk is the product of the likelihood or chance of a flood occurring (flood frequency) and the consequence or impact of the flooding (flood consequence).

Flood frequency

11A.2.3. Flood frequency is identified in terms of the return period and annual probability. For example, a 1 in 100 year flood event has a 1% annual exceedance probability (AEP) of occurring. **Table 11A-1** provides a conversion between return periods and annual flood probabilities.

Table 11A-1 – Flood probability conversion table

Return Period (Years)	2	5	10	30	50	100	200	1,000	10,000
Annual Exceedance Probability %	50	20	10	3.33	2	1	0.5	0.1	0.01

[7] Department for Environment, Food and Rural Affairs (Defra) (2022). Magic Designated Sites Mapping (online). Available at: https://magic.defra.gov.uk/ (Accessed August 2024).

11A.2.4. The Flood Risk and Coastal Change PPG identifies Flood Zones in relation to flood frequency. The zones refer to the probability of river (fluvial) and sea (tidal) flooding, whilst ignoring the presence of (raised) defences, as these may fail or be overtopped.[8] **Table 11A-2** summarises the relationship between Flood Zone category and the identified flood probability, as defined in the PPG.

Table 11A-2 - Flood Zones

Flood Risk Area	Annual Probability of Fluvial Flooding	Annual Probability of Tidal Flooding
Zone 1	< 0.1 %	< 0.1 %
Zone 2	1 % - 0.1 %	0.5 % - 0.1 %
Zone 3a	> 1 %	> 0.5 %
Zone 3b	> 3.3 %	> 3.3 %

Flood Consequences

11A.2.5. The consequence of a flood event describes the potential damage, danger and disruption caused by flooding. This is dependent on the mechanism and characteristics of the relevant flood event under consideration and the vulnerability of the resultant affected land and the land use.

11A.2.6. The NPPF identifies five classifications of flood risk vulnerability and provides recommendations on the compatibility of each vulnerability classification with the Flood Zones. Full details of the Flood Zones and flood risk vulnerability classifications can be found in the PPG and Annex 3 of the NPPF respectively and are discussed below.

Potential Sources of Flooding

11A.2.7. All sources of flooding have been considered in this assessment. These are:

- fluvial flood risk;
- surface water flooding;
- surcharging of sewers and other infrastructure;
- tidal flood risk;
- groundwater flooding; and
- flood risk from other artificial sources such as impounded reservoirs.

Potential Effects of Climate Change

11A.2.8. Scientific consensus is that the global climate is warming, predominantly due to anthropogenic greenhouse gas emissions. While there remain uncertainties as to how a changing climate will affect flooding in the UK, the UKCP18 climate projections show a strong trend of short-duration, high-intensity rainfall events increasing alongside an increase of long-duration rainfall events. Sea level rise is also projected to continue. These increases will most likely lead to an increase in the likelihood of flooding over the long term. The precise extent of the impacts of climate change is currently unknown. UKCP18 considered various Representative Concentration Pathways (RCPs)

[8] UK Government (2024). Flood Map for Planning (online). Available at: https://flood-map-for-planning.service.gov.uk/ (Accessed August 2024).

that specify the concentrations of greenhouse gases that will cause four 'Radiative forcing' scenarios of 2.6, 4.5, 6.0 and 8.5 W/m^2 by 2100 compared to pre-industrial levels, known as RCP 2.6, RCP 4.5, RCP 6.0 and RCP 8.5. Coastal projections are available for three of these.[9]

11A.2.9. The ONR and British environment agencies (including the Environment Agency in England) have provided joint guidance on how these climate projections should be used[9] and how flood issues should be considered in FRAs prepared for planning applications[10] (for nuclear new build development). These documents both refer extensively to the Environment Agency guidance "Flood risk assessments: climate change allowances"[11], last updated in 2022.This provides climate change allowances which are predictions of anticipated changes for peak river flow, peak rainfall intensity and sea level rise. Sea level rise allowances are provided by the Environment Agency on a river basin district spatial basis; peak river flow and peak rainfall intensity are available on a management catchment level. Management catchments are sub-catchments of river basin districts. The Environment Agency guidance provides 'Central', 'Higher Central' and 'Upper End' estimates that are based on the 50th, 70th and 95th percentile predictions for climate change using RCP 8.5.

Legislative Framework and Guidance

11A.2.10. The coordination of policies for flood risk management is managed by the UK Government and is split into the following jurisdictions:

- the Environment Agency has a strategic overview regarding the management of all sources of flooding and an operational responsibility for managing the risk of flooding from main rivers, reservoirs, estuaries and tidal sources.
- Lead Local Flood Authorities (LLFAs) are responsible for managing the risk of flooding from local sources, including surface water, groundwater and ordinary watercourses. The LLFA relevant to HPB is Somerset Council.
- Internal Drainage Boards (IDBs) are public bodies that manage water levels in an area, known as an internal drainage district, where there is a special need for drainage. IDBs undertake works to reduce flood risk to people and property and manage water levels for agricultural and environmental needs within their district, particularly managing ordinary watercourses. The IDB relevant to HPB is the Parrett IDB.

European legislation

11A.2.11. On 31 December 2020, the UK exited the EU following the expiry of the "transition period", as provided for by the European Union (Withdrawal) Act 2018 (Withdrawal Act 2018)[12]. Sections 2-3 of the Withdrawal Act 2018, as amended, provide that direct EU legislation, and EU-derived domestic legislation, continue to have effect in UK domestic law after that date. In summary, the interpretation of any retained EU law is to be the same as it was before that date, insofar as the retained EU law

[9] Office for Nuclear Regulation, Environment Agency, Natural Resources Wales and Scottish Environment Protection Agency (2022). Use of UK Climate Projections 2018 (UKCP18) Position Statement (Online). Available at: https://www.onr.org.uk/media/ismlkpqi/ukcp18-position-statement-rev-2.pdf (Accessed August 2024).

[10] Office for Nuclear Regulation and Environment Agency (2022). Principles for Flood and Coastal Erosion Risk Management (Online). Available at: https://www.onr.org.uk/media/gsrb1k1p/principles-for-flood-and-coastal-erosion-risk-management.pdf (Accessed August 2024).

[11] Environment Agency (2022). Guidance on Flood Risk Assessments: Climate Change Allowances (Online). Available at: https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances (Accessed August 2024)

[12] UK Government (2018). European Withdrawal Act 2018 (Online). Available at: www.legislation.gov.uk/ukpga/2018/16/contents/enacted (Accessed August 2024)

remains unmodified in UK law and regulations have not been made providing otherwise (s. 6(3) of the Withdrawal Act 2018).

Floods directive (2007/60/EC)[13]

11A.2.12. The key objective of the Floods Directive is to coordinate the assessment and management of flood risks. Specifically, it requires the assessment of all watercourses and coastlines that are at risk of flooding, to map the flood extent, assess the flood assets and the humans at risk in these areas, and to take adequate and coordinated measures to reduce this risk.

National Legislation

Nuclear Reactors (Environmental Impact Assessment for Decommissioning) Regulations 1999[14]

11A.2.13. TEIADR provide consent to be obtained for the Proposed Works at HPB (excluding the removal of fuel from the reactors, and the management of waste arisings and decontamination where such activities are undertaken as part of normal operations) for the purpose of permanently preventing the continued operation of that station. The Proposed Works are subject to Environmental Impact Assessment pursuant to EIADR.

The Flood Risk Regulations 200915

11A.2.14. The Floods Directive has formalised flood risk management planning. The Flood Risk Regulations 2009 implements the EU Floods Directive and requires LLFAs, and the Environment Agency to prepare and publish Flood Risk Management Plans (FRMPs) on a six year cycle.

Land Drainage Act 1991[16]

11A.2.15. Local Authorities and IDBs have additional duties and powers associated with the management of flood risk under the Land Drainage Act 1991 (Land Drainage Act). As Land Drainage Authorities, consent must be given for any permanent or temporary works that could affect the flow within an ordinary watercourse under their jurisdiction, in order to ensure that local flood risk is not increased.

11A.2.16. The Land Drainage Act specifies that the following works would require formal consent from the appropriate authority:

- construction, raising or alteration of any mill dam, weir, or other like obstructions to the flow of a watercourse;
- construction of a new culvert; and
- any alterations to an existing culvert that would affect the flow of water within a watercourse.

11A.2.17. The Land Drainage Act also sets out the maintenance responsibilities riparian owners have in order to reduce local flood risks. Riparian owners, who are landowners with a watercourse either running

[13] European Environment Agency (2007). Floods Directive 2007/60/EC (Online). Available at: https://www.eea.europa.eu/themes/water/interactive/by-category/floods-directive (Accessed August 2024)
[14] UK Government (1999). Nuclear Reactors (Environmental Impact Assessment for Decommissioning) Regulations (Online). Available at: https://www.legislation.gov.uk/uksi/1999/2892/contents/made (Accessed August 2024)
[15] UK Government (2009). The Flood Risk Regulations (Online). Available at: https://www.legislation.gov.uk/uksi/2009/3042/contents/made (Accessed August 2024)
[16] UK Government (1991). Land Drainage Act (Online). Available at: https://www.legislation.gov.uk/ukpga/1991/59/contents (Accessed August 2024)

through their land or adjacent to, have the responsibility to ensure that the free flow of water is not impeded by any obstruction or build-up of material within the watercourse.

Flood and Water Management Act 2010[17]

11A.2.18. The Flood and Water Management Act 2010 (Flood and Water Management Act) extended the role of the LLFA (SC) set out in the Flood Risk Regulations (2009)[15] to take responsibility for leading the co-ordination of local flood risk management in their areas. In accordance with the Flood and Water Management Act, the Environment Agency is responsible for the management of risks associated with main rivers, the sea and reservoirs. LLFAs are responsible for the management of risks associated with local sources of flooding such as ordinary watercourses, surface water and groundwater. The Flood and Water Management Act is also guiding the role of the LLFA in the review and approval of surface water management systems.

11A.2.19. Schedule 3 of the Flood and Water Management Act introduces National Standards for Sustainable Drainage Systems (SuDS) against which proposed drainage systems should comply. Schedule 3 proposes to establish a SuDS approving body (SAB) at the county and unitary level.

Environmental Permitting (England and Wales) Regulations 2016[18]

11A.2.20. The Environmental Permitting (England and Wales) Regulations 2016 (EPR) aim to protect groundwater and surface waters from pollution by controlling the inputs of potentially harmful and polluting substances.

11A.2.21. Additionally, under EPR , any works in, under or near a main river or associated flood defences requires a Flood Risk Activities Permit (FRAP) from the Environment Agency to ensure no detrimental impacts on the watercourse and associated flood risk management infrastructure. Works in the wider area of main river floodplains may also require FRAP if they could result in a loss of floodplain storage.

National Policy

*National Planning Policy Framework 2023**2***

11A.2.22. The NPPF sets out the Government's planning policies for England, providing a framework within which local councils can produce their own plans that better reflect the specific needs of their communities. Whilst the NPPF is not directly applicable to applications relating to consent for nuclear decommissioning which are determined by the ONR, it is a material consideration. PPG[3] has been published alongside the NPPF to set out how certain policies, including those relating to flood risk, should be implemented. The PPG for Flood Risk and Coastal Change is updated regularly to respond to changes in guidance and best practice.

11A.2.23. The NPPF and relevant PPG identify how new developments must take flood risk into account, including making an allowance for climate change impacts, and steer development to those areas of lowest probability of flooding. Under Annex 3 of the NPPF, types of development are classified according to their flood risk vulnerability. The compatibility of each vulnerability classification with different Flood Zones is outlined, stating which combinations are permitted, as shown in **Table 11A-**

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[17] UK Government (2010). Flood and Water Management Act (online). Available at: http://www.legislation.gov.uk/ukpga/2010/29/contents (Accessed August 2024)

[18] UK Government (2016). Environmental Permitting (England and Wales) Regulations (online). Available at: https://www.legislation.gov.uk/uksi/2016/1154/contents/made (Accessed August 2024).

3. This includes the requirement for an 'Exception Test' in some cases (see below). For application of this table to HPB see **Section 11A.5.**

Table 11A-3 – Flood risk vulnerability and Flood Zone compatibility

Flood Risk Vulnerability Classification		Essential Infrastructure	Water Compatible	Highly Vulnerable	More Vulnerable	Less Vulnerable
Fluvial/Tidal Flood Zone	Zone 1	✓	✓	✓	✓	✓
	Zone 2	✓	✓	Exception Test Required	✓	✓
	Zone 3a	Exception Test Required	✓	✗	Exception Test Required	✓
	Zone 3b	Exception Test Required	✓	✗	✗	✗

The Sequential Test

11A.2.24. The Sequential Test, as defined in the NPPF, ensures that a sequential approach is followed to steer new development to areas with the lowest probability of flooding. The application of the Sequential Test to the Proposed Works is outlined in **Section 11A.5**.

The Exception Test

11A.2.25. The Exception Test is a method to demonstrate and help ensure that flood risk to people and property would be managed satisfactorily, while allowing necessary development to go ahead in situations where suitable sites at lower risk of flooding are not available. Essentially, the two parts to the test require the proposed development to show that it would provide wider sustainability benefits to the community that outweigh flood risk, and that it would be safe for its lifetime, without increasing flood risk elsewhere and where possible reduce flood risk overall.

11A.2.26. The PPG also sets out the requirement to consider SuDS within all new development where appropriate. It states that developments should aim to discharge surface water run-off as high up the following hierarchy of drainage options as reasonably practicable:

- into the ground (infiltration);
- to a surface water body;
- to a surface water sewer, highway drain, or another drainage system; and
- to a combined sewer.

Non-Statutory Technical Standards for Sustainable Drainage Systems 2015[19]

11A.2.27. The Non-Statutory Technical Standard for SuDS, published by Defra in March 2015 (NSTS for SuDS), sets out the core technical standards for SuDS proposed within England. The NSTS for SuDS should be used in accordance with the NPPF and PPG. The NSTS for SuDS include guidance on controlling flood risk within a development boundary and elsewhere, peak flow and runoff volume control, and the structural integrity of SuDS.

Local Policy

11A.2.28. Regarding local planning policy, HPB is located in the Somerset Council administrative boundary, however, this area was previously under the jurisdiction of Somerset West and Taunton Council. Therefore, where local policy has not been superseded with new local policy from Somerset Council, local policy from Somerset West and Taunton Council (SWT) is referred to.

Somerset Waste Core Strategy Development Plan Document up to 2028 (2013)[20]

11A.2.29. Policy DM7 states that development proposals will need to demonstrate that surface water quality has been given sufficient consideration, and that there will not be impacts on the flow regime and flood risk. It also states that an FRA will be required where the proposals within an existing flood risk area or where they could lead to flood risk elsewhere.

Somerset West and Taunton Local Plan Issues and Options Document (consultation document) (2020)[21]

11A.2.30. Policy 5.7 '*The Natural and Historic Environment'* states that water quality should be protected and enhanced, and water use from development should be minimised through the use of SuDS and ensuring that it is supported by adequate sewage treatment facilities and surface water drainage.

11A.2.31. SWT are no longer progressing this Local Plan due to the establishment of a new unitary council in April 2023. The information gathered for this plan through consultation and evidence base will inform the Development Plan(s) for the new unitary council.

Adopted West Somerset Local Plan to 2032 (2016)[22]

11A.2.32. Policy CC2 'Flood Risk Management' states development proposals should be located to mitigate against, and to avoid increased flood risk elsewhere, in accordance with the NPPF. Development must be designed to mitigate any adverse flooding impact, and where possible should help contribute towards a reduction of existing flood risk.

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[19] Defra (2015). Sustainable drainage systems: non-statutory technical standards (Online) Available at: https://www.gov.uk/government/publications/sustainable-drainage-systems-non-statutory-technical-standards (Accessed August 2024)

[20] Somerset County (2013). Council Waste Core Strategy Development Plan Document up to 2028 (online). Available at: https://www.somerset.gov.uk/waste-planning-and-land/somerset-waste-core-strategy/ (Accessed August 2024)

[21] Somerset County (2020). Somerset West and Taunton Local Plan Issues and Options Document (consultation document) (online). Available at: https://democracy.somerset.gov.uk/Data/SWT%20Executive/201911201815/Agenda/Appendix%20A%20Local%20Plan%20Issues%20and%20Options.pdf (Accessed August 2024)

[22] West Somerset Council (2016). West Somerset Local Plan to 2032 (online). Available at: https://www.somerset.gov.uk/planning-buildings-and-land/adopted-local-plans/?district=Somerset+West+and+Taunton (Accessed August 2024)

11A.2.33. Policy CC6 '*Water Management*' states development that would have an impact an adverse impact on the availability and use of existing water resources and areas at risk of flooding tidal, fluvial and surface water runoff will only be permitted if suitable mitigation measures can be incorporated.

North Devon and Somerset Shoreline Management Plan (SMP2) 2010[23]

11A.2.34. This is a non-statutory policy document for coastal defence management planning within sub cells 7d30, 7d31 and 7d32. It includes proposals for:

- holding the line at Hinkley Point (7d31) in the short, medium and long term (to 2105);
- no active intervention west of Hinkley Point between Lilstock and Hinkley Point (7d30); and
- the creation of secondary lines of coastal defence between Hinkley Point and Stolford (7d32) as part of a policy of managed realignment in the medium term (2025 to 2055).

Local guidance

Somerset Council Sustainable Drainage Guidance 2024

11A.2.35. As a Lead Local Flood Authority, Somerset Council are a Statutory Consultee on the drainage aspects of Major Planning Applications and advise that: [These] '*are expected to make sure that sustainable drainage systems for the management of run-off are put in place, unless demonstrated to be inappropriate'.*[24]

11A.3 Site description

11A.3.1. This section provides a description of the current baseline conditions with respect to the water environment.

11A.3.2. As illustrated in **Graphic 11A-1** HPB is situated next to the Bristol Channel in the county of Somerset. The Works Area is located on the north Somerset coast and is accessed via Wick Moor Drove. The nearest settlements are Wick, just under 1.5 km to the south and Stolford, approximately 1.5km to the east of the station. The immediate surrounding area is dominated by the Hinkley power stations, including the Hinkley Point A power station (immediately west of HPB) which is being decommissioned and the construction of the Hinkley Point C power station west of that, with agricultural land and the coast bordering these areas. The main features surrounding the Works Area are mudflats to the north and east. The intertidal mudflats of Bridgwater Bay are separated from HPB by a low cliff, of around 5 m to 10 m in height. At low tide the shore adjacent to HPB comprises a narrow rock platform, interspersed with and fringed by mudflats; while to the east, the mudflats extend up to 500 m from the shoreline at low water. Bridgwater Bay forms part of the Severn Estuary.

Site topography

11A.3.3. Site topography can be seen in **Graphic 11A-2** below, based on LiDAR data.

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[23] North Devon and Somerset Coastal North Devon and Somerset Coastal Advisory Group (N Advisory Group (NDASCAG) (2010). North Devon and Somerset Shoreline Management Plan (SMP2) (online). Available at: http://southwest.coastalmonitoring.org/wp-content/uploads/NDASCAG_SMP2/Statement_Environmental_Particulars.pdf (Accessed August 2024)

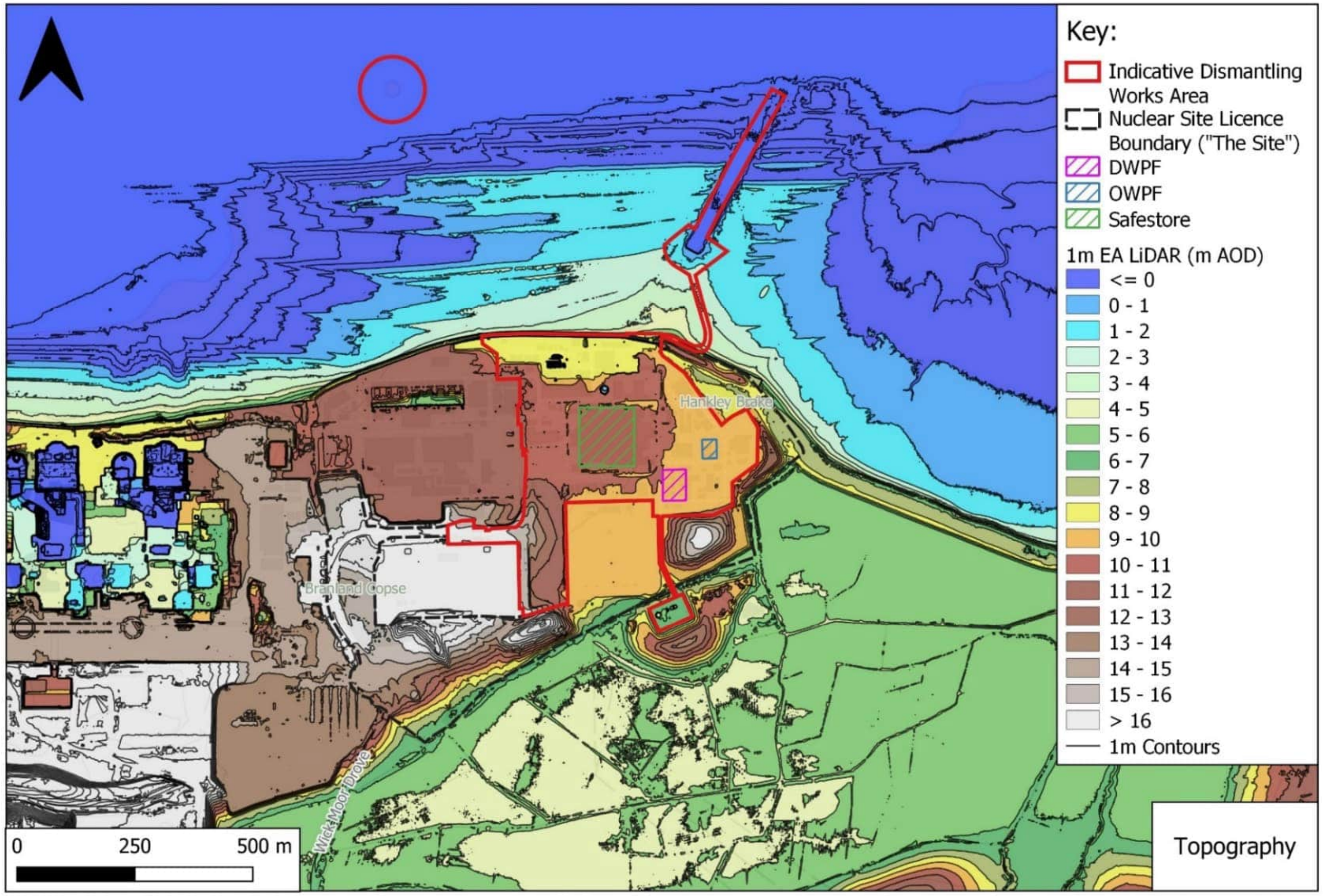
[24] Somerset Council (2024). Sustainable Drainage, Information about the impact of new development on flood risk and resilience to flooding (online). Available at: https://www.somerset.gov.uk/planning-buildings-and-land/sustainable-drainage-in-somerset/ (Accessed August 2024)

11A.3.4. HPB itself is located on a relatively flat raised platform which extends to its northern coastal boundary, with ground levels of the order of 8 mAOD to 10 mAOD. Levels immediately behind the flood defence are approximately 8.3 mAOD and those around the existing reactor building are approximately 10 mAOD. Immediately south of the platform, in the vicinity of Wick Moor, including the area in which the STP is located, levels drop significantly and are of the order of 4 mAOD to 5 mAOD. Within the Works Area there is a maximum elevation of approximately 17 mAOD (see **Graphic 11A-2**) along the western access route. There are also some local low spots relating to various chambers and shafts.

11A.3.5. The majority of the western boundary for the Works Area, adjacent to Hinkley Point A is approximately 1m higher than the HPB Site. In addition, there are three areas of raised land of up to 18 mAOD to the south of the Works Area, in particular, a crescent-shaped mound of up to 12 mAOD partially surrounding the STP.

11A.3.6. To the north of the Works Area, beyond the flood defence line, lies a rocky off-shore platform at approximately 2 mAOD to 3 mAOD.

Graphic 11A-2 - HPB topography



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Existing surface water features

11A.3.7. There are no main rivers in proximity to the Works Area. The nearest main river is the tidal River Parrett, approximately 5.3 km to the east of the Works Area(see **Graphic 11A-1**).

11A.3.8. There are a series of ditches, locally known as 'rhynes', to the south and east of the Works Area, as shown on **Figure 11.1** (a separate figure at the end of this report). These rhynes are ordinary watercourses, which are located in the operational area of the Parrett IDB. In addition, the Somerset Drainage Board Consortiums' online mapping[25] shows that several of the larger rhynes are designated as 'IDB-maintained', meaning that the IDB controls water levels within them via the operation of a number of sluices and outfalls, and carries out regular maintenance work to ensure drainage is maintained for agricultural purposes.

11A.3.9. There are no surface water features flowing through the Works Area, however, there is a drain that flows along the southern boundary of the Site.

11A.3.10. The nearest rhyne to HPB is the Wick Moor/Outfall Rhyne, which flows underneath Wick Moor Drove. It then passes underneath two culverted crossings of an existing access track which connects HPB to the STP. The rhyne then flows in a north-easterly direction for 450 m before discharging into the Severn Estuary at Hankley Brake via an outfall with a tidal flap-valve which is identified as an Environment Agency asset (ST 21774 46106).

11A.3.11. Adjacent to the western access track crossing, the Wick Moor/ Outfall Rhyne bifurcates (ST 21291 45719) and another rhyne, the Hinkley Point Rhyne, bypasses to the south of the STP and flows in an easterly direction past the Coal Lane Sluice (Tilting Weir, SK001) into the Sharpham/Coal Lane Sluice Rhyne. This passes through the Sharpham/Coal Lane Sluice (Penstock, SK011) before entering the West Brook which discharges into the Severn Estuary at the Great Arch outfall (SK012) via a tidal flap-valve, approximately 1.1 km to the east of HPB (ST 22468 45777). Surface water features in the immediate vicinity of the Works Area can be seen in **Figure 11.1**.

11A.3.12. The catchment area of the above inter-connected rhynes is approximately 2.3 km^2. This catchment is separate from the River Parrett main river catchment as it discharges directly to the estuary as outlined above via the two outfalls.

Existing surface water and foul drainage

11A.3.13. Within the Works Area, the existing surface water sewers receive storm water from the HPB buildings, car parks and roads.

11A.3.14. Drainage arising from plant sources is conveyed to the drain pit where it is pumped to the surface water drainage system via an oil interceptor.

11A.3.15. The surface water drainage system is kept separate from the cooling water arisings which are both then discharged to the tidal waters of the Severn Estuary at separate locations via consents 101266/TR1 and 101266/TR2 (see **Chapter 11: Surface Water and Flood Risk** of the **ES** for further detail).

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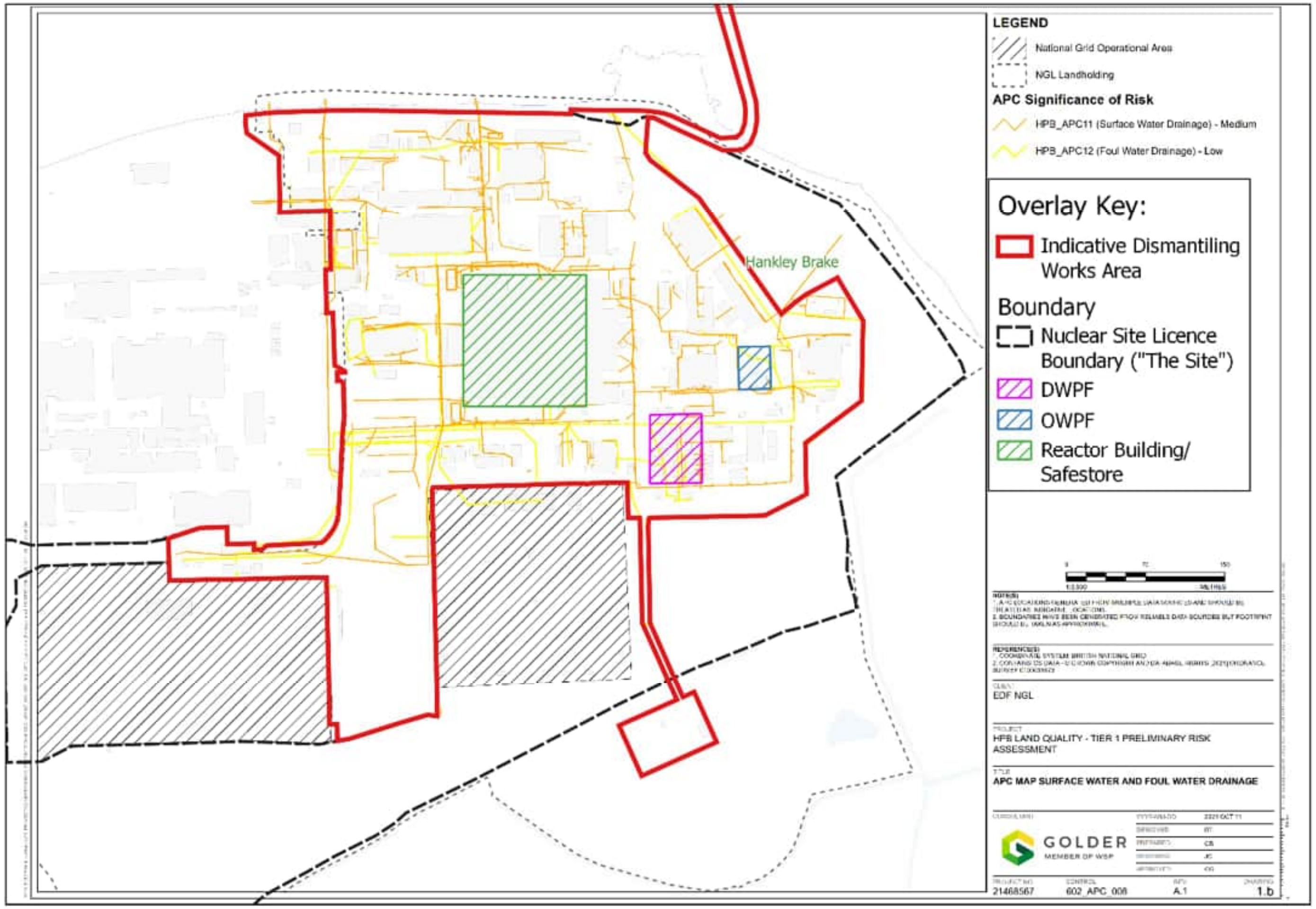
[25] Somerset Drainage Boards Consortium (2024). Axe Brue, Parrett and North Somerset Levels Internal Drainage Boards Map (online). Available at: https://somersetdrainageboards.gov.uk/boards-membership/maps-2/ (Accessed August 2024).

wsp

Graphic 11A-3 – HPB surface water and foul drainage



11A.3.16. Foul drainage for the Site is collected via a separate piped system and treated at the STP located to the south-east of the Site boundary (included within the Works Area). Effluent is then carried back round the eastern side of the Site and out to the Severn Estuary to the north (Wessex Water consent 07048, discharging at ST 2150 4653), where it is monitored in line with permit conditions.

11A.3.17. No detailed drainage plans are available, however, **Graphic 11A-3** indicates the positioning of surface and foul water drainage runs and outfalls[26]. No details of capacity of the surface water drainage are known, however, as it was constructed in the late 1960s, it is a reasonable assumption that water would not flood the ground during a 1 in 2 to 1 in 5 year pluvial event.

Existing flood defences

11A.3.18. As outlined in **Section 11A.2**, in the North Devon and Somerset SMP2[23] the coastline is split into cells; HPB lies immediately to the west of the boundary between sub-cells 7d31 (Hinkley Point) and 7d32 (Hinkley Point to Stolford). For the coastline at HPB the plan is to continue to provide protection to the existing power station against flood and erosion for the short, medium and long term, with managed realignment by the creation of secondary lines of coastal defence in the medium term (2025 to 2055) to the east of the Works Area.

11A.3.19. Information from the Environment Agency's Asset Information Management System (AIMS) [27] has been used to develop an understanding of the current status of flood defences in the vicinity of the Works Area. There are two main coastal flood defences currently protecting the Site (see **Annex 11B**). A 1040 m long concrete sea wall lies along the northern boundary of both HPB and HPA, with an effective crest level of 8.34mAOD (AIMS ID 103072). This is approximately equivalent to ground levels immediately behind the defence. East of this lies a 137m long embankment with rock armour with an effective crest level of 8.67 mAOD (ID 104524).

11A.3.20. Beyond the HPA boundary to the west, there is a new 1261 m long defence for the HPC site, which has a 1 in 10,000 year standard of protection and is set at 13.50 mAOD. To the east of the Site boundary lies a 715 m long rock revetment and sea wall (ID 4842) at 8.19 mAOD and beyond that a 639 m long embankment with rock armour (ID 102490) at 8.23 mAOD; these protect the Site from flooding along its eastern and southern boundaries. The Wick Moor Outfall and West Brook rhynes discharge through the embankments east of the Site via tidal flap-valves, as discussed above and as shown in **Figure 11.1**.

11A.3.21. Not recorded in the AIMS is a gabion basket wall, reaching up to approximately 12 mAOD, running along most of the frontage of HPB and HPA, behind the sea wall and set back from it. The JER report[5] states that the strength of the gabion wall is questionable and the study therefore included modelling of extreme tidal flood events with the gabion wall absent. It is understood that the JER study assumptions about the gabion wall continue to reflect the current situation.

Geology and hydrogeology

11A.3.22. The majority of the Works Area is underlain by up to 5 m of made ground, largely composed of Liassic limestones and shales excavated from the deeper foundations and has a ground level of

[26] Golder (2021). HPB Land Quality – Tier 1 Preliminary Risk Assessment 21468567.602/A.1.

[27] Environment Agency (2024). Asset Information Management System (online). Available at: https://www.data.gov.uk/dataset/cc76738e-fc17-49f9-a216-977c61858dda/aims-spatial-flood-defences-inc-standardised-attributes (Accessed August 2024)

approximately +10 mAOD (see **Section 11A.2**). Several structures within the Works Area have deep foundations, notably:

- reactor building (-0.4 mAOD);
- turbine hall (-3.1 mAOD);
- central fuel building (-1.4 mAOD);
- cooling water pumphouse (-23 mAOD); and
- cooling ponds (+1.8 mAOD).

11A.3.23. Geological mapping and previous borehole records on the BGS GeoIndex[28] show the Works Area is underlain by 50 to 70 m of Lower Lias mudstones with subordinate bands and lenses of limestone that dip gently to the north. The mudstones in the made ground and in the upper 5 to 10 m of Lower Lias strata have been weathered to silty clay. Beneath the Lower Lias are rocks of the Mercia Mudstone Group, which comprise interbedded mudstones and siltstones. The Lower Lias rocks outcrop on the foreshore to the north of the Works Area and the Mercia Mudstone Group beds outcrop about 500 m to the south of the Works Area. On the low land to the east of the Works Area there is a superficial covering of up to 5 m of estuarine organic clays overlying 2 to 5 m of fluvial-glacial sands. There is a prominent geological fault which runs northeast to southwest across HPB.

11A.3.24. Beneath the Works Area groundwater is present in the made ground, fluvio-glacial sands and within limestone bands in the Lower Lias. The limestone bands are up to 1 m thick but are more typically about 0.25 m thick. Groundwater flow is mainly related to fractures and joints within the limestones, with vertical groundwater movement restricted by the intervening lower permeability mudstones. The Environment Agency defines the Lower Lias as a Secondary Aquifer, i.e. permeable strata capable of supporting water supplies at a local rather than strategic scale. The Defra Magic Map[7] aquifer designations further define the bedrock beneath the Works Area as a Secondary A aquifer, and the superficial drift as unproductive. As can be seen from the Flood Map Pack in **Annex 11A**, the Site and Works Area do not lie within any Environment Agency Source Protection Zones (SPZ).

11A.3.25. Groundwater elevations across the Works Area typically vary between approximately 4.5 and 9.0 mAOD (<1 to 6 m bgl). Quarterly groundwater monitoring from 2015 to 2018 undertaken by Golder as part of the HPB Site Protection and Monitoring Programme (SPMP), indicates that the annual range in groundwater level in any of the 16 monitored boreholes is typically less than 0.5 m between low and high levels. Despite the proximity of the Site to the coast, previous investigations have indicated relatively limited tidal impact on groundwater flow in response to tidal movements.

11A.3.26. The SPMP data is reviewed every four years. The 2023 review[29] confirms that there is a groundwater divide on the Works Area. An east-west trending groundwater divide runs across the central part of the Works Area through the reactor buildings and cooling ponds dividing the groundwater flow direction on-site. Groundwater in the northern area of the Works Area flows towards Bridgwater Bay in a north westerly direction and is likely to be influenced by the north-east to south-west trending fault line which transects the Works Area. Locally to the western boundary there is an indication of a northerly flow direction which forms a flow direction onto HPB. Flow in the

[28] British Geological Survey (BGS) (2022). Geoindex (onshore) (online). Available at: https://www.bgs.ac.uk/map-viewers/geoindex-onshore/ (Accessed August 2024).

[29] WSP (2023). HPB Site Protection and Monitoring Programme Review. Ref. 70103015-WSP-RP-107-C02.

southern area flows in a south to south-easterly direction towards the surface water channels (rhynes) which are located beyond the eastern boundary.

11A.4 Existing (baseline) flood risk

Historic flood records

11A.4.1. The Environment Agency's historical flood outline and Historic Flood Map is shown on page 7 of the Flood Map Pack in **Annex 11A**. There have been no recorded floods within the Works Area, however, the most southern part of the Works Area, where the STP is located, lies within the recorded flood outline. The mapping includes the following events:

- tidal flooding from a breach of defences on 13-15 December 1981 (STP not affected);
- tidal flooding from overtopping of defences on 5 December 1960 (STP was affected); and
- fluvial flooding (ordinary watercourse) on 5 February 2014 (STP not affected).

Fluvial and tidal flood risk

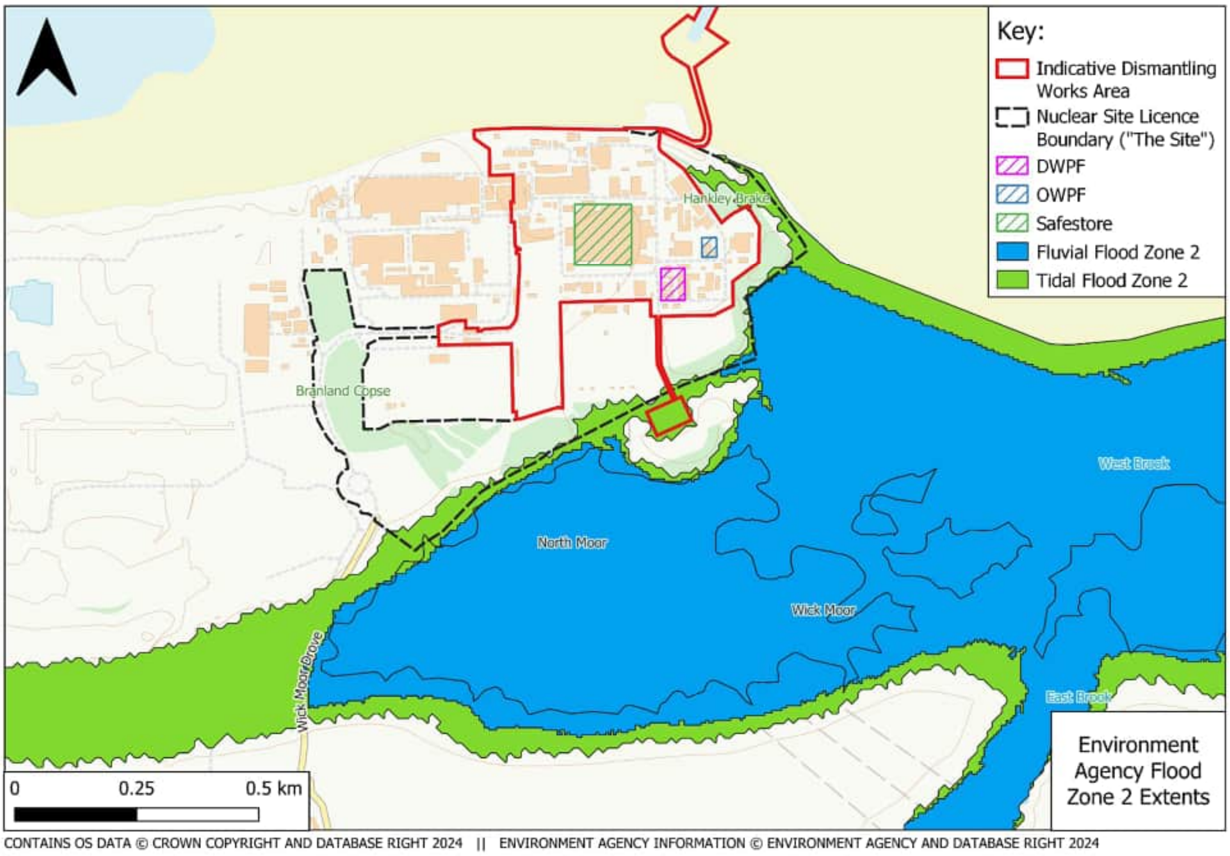
Environment agency flood map for planning

11A.4.2. The Environment Agency's FMfP shows the risk of fluvial or tidal flooding in accordance with the Flood Zones outlined in **Figure 11.1**. A review of the FMfP (see page 3 of the Flood Map Pack in **Annex 11A**) indicates that the majority of HPB is predominantly located in Flood Zone 1. This is a combined risk of both fluvial and tidal sources. There are also small areas along the southern and eastern boundary of the Site that are within Flood Zones 3 and 2, but these lie outside of the Works Area. The exception is the STP and surroundings which lie within the Works Area to the south of the Site boundary and are in Flood Zone 3. Access to the Works Area is from the south-west via Wick Moor Drove. Part of this route (outside of the Works Area boundary) lies within Flood Zone 3 (see **Figure 11.1**).

11A.4.3. Further interrogation of the mapping layers behind the FMfP shows that the STP lies within Flood Zones 2 and 3 based on tidal modelling flood outlines. The extents of Flood Zones 2 and 3 based on fluvial modelling (with a tidal downstream boundary) do not extend to the STP or Wick Moor Drove, i.e. they are not flooded in a fluvial 1 in 1,000 year event. The outlines of the components of Flood Zone 2 are shown in **Graphic 11A-4**.

11A.4.4. The flood risk reflects the Site's general site elevation of approximately 10 mAOD, which is raised above the surrounding area, giving it natural protection from both tidal and fluvial flooding. Flood defences to the east of the Site further reduce tidal flood risk from this direction, including to the lower area of the STP. The reduced risk areas associated with these flood defences are indicated by the hatching on page 3 of the Flood Map Pack (see **Annex 11A**).

Graphic 11A-4 – Flood Zone 2 tidal and fluvial mapping extents



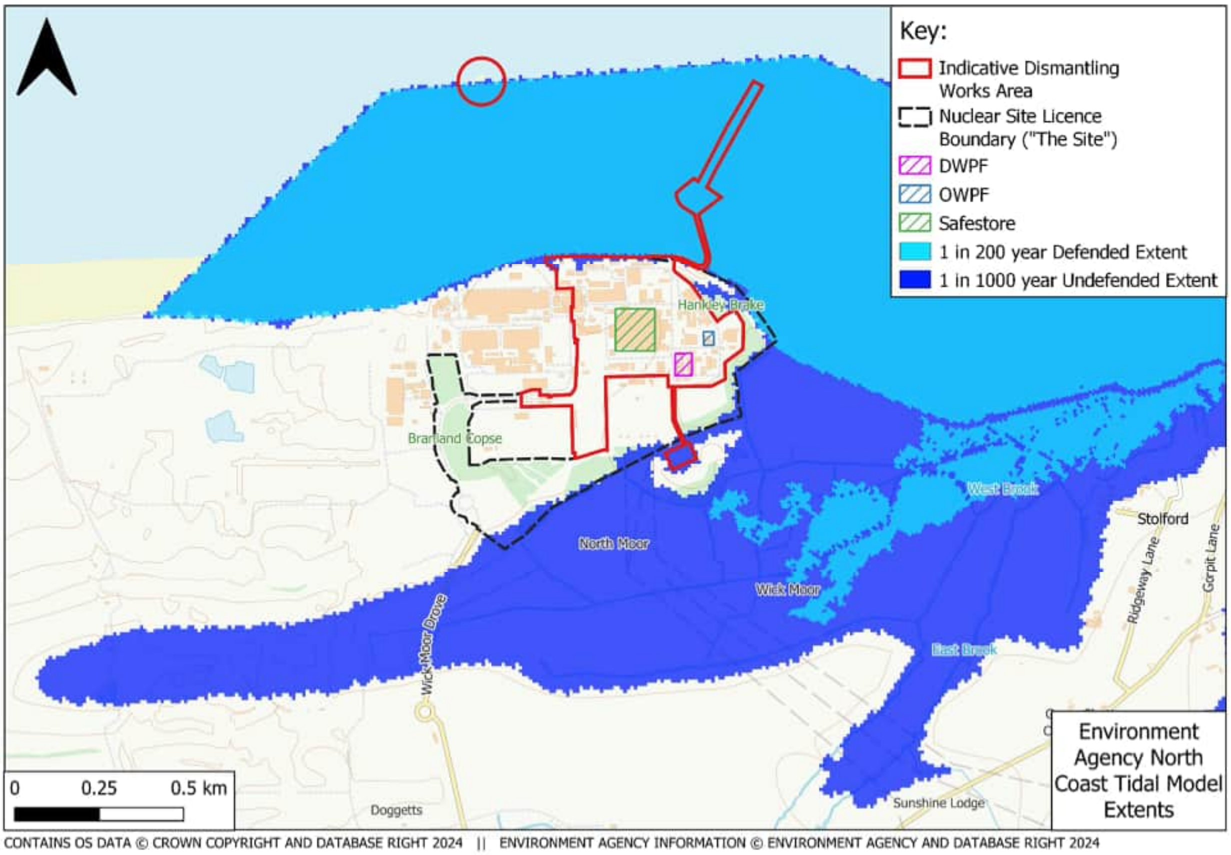
Environment Agency Risk of Flooding From Rivers and Sea Map

11A.4.6. The Environment Agency Risk of Flooding from Rivers and Sea map is provided on page 4 of the Flood Map Pack in **Annex 11A**. This is similar to the FMfP but also shows areas that may flood during a 1 in 30 year event, which would be classified as 'functional floodplain'. These areas all lie outside of the Site boundary and Works Area boundary and therefore confirm that the areas of the Works Area that are within Flood Zone 3 would be sub-classified as Flood Zone 3a in accordance with **Table 11A-3**.

Environment agency North coast tidal model

11A.4.7. The Environment Agency's North Coast Tidal Model was developed in 2012 and updated in 2016 (provided in Product 5 and 6 data, see **Annex 11B**). This indicates that, in a defended 1 in 200 year tidal flood event, the Works Area including the STP would not be at risk from flooding. Furthermore, a 1 in 1,000 year undefended tidal flood event (defended information not available) follows the same extent as the Environment Agency FMfP Flood Zone 3 outline, which only affects the STP area (see **Graphic 11A-5**). Note, this work pre-dates the Coastal Flood Boundary Levels 2018 update, discussed below.

Graphic 11A-5 – Environment Agency North Coast Tidal Model present day flood extents



Environment Agency Coastal Flood Boundary Levels 2018

11A.4.8. The Environment Agency calculate Extreme Sea Levels (ESLs) around the British coast, last updated for a base year of 2017 in 2018[30]. Data outputs are provided for points at 2 km spacing. The point applicable to HPB is at Chainage 326. At this location, the Highest astronomical tide (HAT) is +7.0 mAOD and the mean high water spring (MHWS) level is +5.72 mAOD.

11A.4.9. ESLs are provided for a range of AEP events. These are provided to two decimal places for purposes of comparison but are noted to only be considered accurate to one decimal place. ESLs include the effects of storm surge and astronomical tides but do not specifically account for any localised increase in water level due to on shore wave action, orientation or topography. Data provided include confidence intervals. Those at Chainage 326 for the 2017 base year are as follows:

[30] Environment Agency (2018). Coastal Flood Boundary Conditions for the UK: update 2018. Technical Summary Report SC060064/TR6 (online). Available at: https://www.gov.uk/government/publications/coastal-flood-boundary-conditions-for-uk-mainland-and-islands-design-sea-levels (Accessed August 2024).

Table 11A-4 – Coastal Flood Boundary Levels at HPB

	1 in 200 year ESL (0.5% AEP) mAOD	1 in 1,000 year ESL (0.1% AEP) mAOD	1 in 10,000 year ESL (0.01% AEP) mAOD
Year 2017 ESL for Ch 326 central estimate	7.78	8.06	8.54
2.5% confidence interval	7.64	7.79	7.99
97.5% confidence interval	8.07	8.74	10.03

11A.4.10. The above predicted levels show that under the standard 1 in 1,000 year scenario for 2017, the predicted still water sea level of 8.06 mAOD lies below the existing flood defence levels of 8.34 / 8.67 mAOD (HPB Site) and 8.19 / 8.23 mAOD (embankments east of HPB). Although a simple comparison of still water levels does not account for the effects of wave overtopping, which can be significant, it provides an indication of the flood risk situation under a defended scenario.

Jer Fluvial and Tidal modelling

11A.4.11. The JER study undertook tidal and fluvial modelling for HPB including climate change allowances for the year 2035. This modelling and results will be discussed further in Chapter 13A of this FRA. However, of relevance to the existing flood risk situation was the conclusion that tidal flood risk is the dominant influence in the vicinity of HPB and fluvial flood extents are dominated by the downstream tidal boundary conditions.

Fluvial and tidal flooding summary

11A.4.12. The dominant source of flooding at HPB is tidal. Based on the Environment Agency Flood Zone categorisation and supporting information, the majority of the Works Area is within Flood Zone 1 (not affected in a 1 in 1,000 year tidal or fluvial event), except for the STP and off-site access (via Wick Moor Drove) which lie within Flood Zone 3a. The STP and access route may be flooded during a 1 in 200 year tidal event if the tidal defence embankment to the east of HPB is breached or fails. The 1 in 1,000 year fluvial event does not affect the Works Area (including the STP) or access route.

Surface water (pluvial) flood risk

11A.4.13. Surface water flooding occurs when rainwater does not drain away through the normal drainage systems or when rainfall cannot soak into the ground due to the ground being fully saturated and subsequently water lies ponded on or flows over the surface. This form of flooding is usually associated with high intensity rainfall events but can also occur with lower intensity rainfall or melting snow where the ground is saturated, frozen, or otherwise has a low permeability.

11A.4.14. The Environment Agency's Risk of Flooding from Surface Water (RoFSW) mapping is shown on page 5 of the Flood Map Pack in **Annex 11A**. This mapping shows the risk of flooding from surface water or smaller watercourses in proximity to HPB not covered by the Environment Agency's flood map for planning. The risk categories are as follows (used for assessment throughout this section):

- Very Low risk: - land that has a less than 0.1% AEP of flooding;
- Low risk: - land that has between a 1% AEP and 0.1% AEP of flooding;
- Medium risk: - land that has between a 3.33% AEP and 1% AEP of flooding; and
- High risk: - land that has greater than a 3.33% AEP of flooding.

11A.4.15. A review of the RoFSW map indicates several areas within both the Works Area and Site boundary that are at high, medium and low risk of surface water flooding. The different areas of varying risk to surface water flooding can be seen on page 5 of the Flood Map Pack.

11A.4.16. The depths of flooding of each risk category have also been obtained from the RoFSW on-line mapping. The high risk areas are small in extent and are found on roads within HPB at depths predominantly up to between 0 m and 0.15 m.

11A.4.17. Medium risk areas are centred around the access routes within the Works Area, comprising two small depressions in the central eastern side of the Works Area and some small, confined areas in the southern extent of the Works Area at depths of predominantly between 0.15 m and 0.3 m. These include areas adjacent to an approximately 20 m length of the reactor building and a 30 m length of the proposed OWPF footprint boundary.

11A.4.18. Low risk areas are found in similar areas to the medium risk areas with slightly smaller extents, predominantly at depths up to 0.15 m, but with some depths reaching up to between 0.3 m - 0.6 m, e.g. along the centre of the road north of the reactor building. Flood depths along the edge of roads near the reactor building are between 0.15 m and 0.3 m deep and up to 0.15 m deep adjacent to an approximately 50 m length of the building itself. A small low risk area is also located at the STP.

11A.4.19. Access to the Works Area via Wick Moor Drove is not at risk from surface water flooding.

11A.4.20. The majority of the Works Area consists of impermeable surfaces, preventing the infiltration of incident rainfall. Surface water sewers are found throughout the Works Area and were considered to be in good condition on the site visit which occurred in 2021.

11A.4.21. It should be noted that the Environment Agency surface water mapping provides a standard 12 mm/hr loss to represent drainage, rather than explicitly modelling drainage networks. It is considered that this provides a reasonable representation of loss to drainage at HPB, as the 1 in 2 year, 1 hour duration present-day rainfall depth is 12.3 mm (based on FEH22 point rainfall for the grid square).

11A.4.22. In summary, in accordance with the Environment Agency RoFSW categories (outlined in paragraph 11A.4.14), much of the Works Area is at very low risk of flooding (not affected by a 1 in 1,000 year event), but some areas lie within the low to high risk categories. These include areas of medium risk (affected by a 1 in 100 year event) adjacent to parts of the reactor building and small areas of high risk (affected by a 1 in 30 year event) on roads.

Sewer flood risk

11A.4.23. Sewer flooding (from foul or combined sewers) is most likely to occur during storms when large volumes of rain enter combined sewers, exceeding capacity and causing water to exit the system elsewhere, flooding the ground or buildings. It can also occur when pipes become blocked or damaged or design capacity is exceeded.

11A.4.24. The Works Area is served by a separate sewer system with independent foul sewers rather than a combined network (taking both foul and surface water drainage together) and therefore, the amount of water likely to enter the system and cause flooding during rainfall events is expected to be minimal. With the assumption that the drainage systems are maintained and in good condition and that the foul network has been designed to take the appropriate flows, sewers are not considered to be a significant source of flooding to HPB.

Groundwater flood risk

11A.4.25. Groundwater flooding occurs when water stored below ground reaches the surface. It is commonly associated with porous underlying geology, such as chalk, limestone and gravels.

11A.4.26. Based on British Geological Survey groundwater vulnerability mapping, HPB lies within an area at high vulnerability to groundwater flooding. However, HPB is raised approximately 5m above the surrounding area.

11A.4.27. Despite this high vulnerability to groundwater flooding classification of the area, groundwater flow across HPB is predominantly related to fractures and joints within the limestones, with vertical groundwater movement restricted by the intervening lower permeability mudstones.

11A.4.28. Groundwater elevations across the HPB typically vary between approximately 4.5 and 9.0 mAOD (<1 to 6 m bgl). Quarterly monitoring undertaken by Golder as part of the Site groundwater monitoring programme (2015-2018) indicates that the annual range in groundwater level in any of the monitored boreholes is typically less than 0.5 m between low and high levels.

11A.4.29. Despite the high groundwater vulnerability categorisation of the area, because the water level monitoring which has been undertaken at HPB show levels continually below the surface and due to HPB being raised above the surrounding area, HPB is not considered to be affected by groundwater flooding at the surface.

11A.4.30. However, groundwater flooding could affect existing basements, particularly those that are deep. It is known that existing buildings have pumps to extract water from the basement areas if needed but they could flood if pumps fail. Therefore, there is a residual risk of groundwater flooding to basements, with pumping used as mitigation.

Artificial sources

11A.4.31. A review of the Environment Agency's Reservoir Flood Extent Map (see **Annex 11A**) shows that HPB is not affected by flooding from potential failure of reservoirs located upstream of the Works Area.

11A.4.32. Further, there are no canals or other artificial water bodies close to the Works Area, so these sources of flooding are not considered to affect HPB.

11A.5 Proposed works and design standards

Outline of proposed works and phases

11A.5.1. Defueling at HPB commenced in September 2022 and is anticipated to continue until approximately the end of 2026. Once complete, it will have removed approximately 99% of the nuclear material off-site, and the Works Area will be 'Fuel-Free Verified' (FFV). Note that ONR consent under EIADR is required for decommissioning, but not for defueling or operational activities which do not form part of the 'Proposed Works'. Decommissioning will take place in three stages and, due to them having different operations and completion dates, the flood risk will be considered separately for each. An indicative decommissioning timeline has been drawn upon for the purposes of assessment. The three phases are:

- Preparations for Quiescence;
- Quiescence; and
- Final Site Clearance.

Preparations for Quiescence phase

11A.5.2. This phase includes the de-planting, dismantling and deconstruction of all plant and buildings apart from a proposed Safestore structure. Most buildings will be demolished, and levels returned to ground level, including the filling (or partial filling) of all basements and tunnels, where possible using material generated on-site. All buildings within the conventional (non-radioactive) site will have their concrete slabs left in-situ.

11A.5.3. The Reactor Building will be modified into a Safestore during the Preparation for Quiescence phase to defer dismantling and ensure that the building and contents remain safe, secure and weatherproof during Quiescence The Safestore structure will be a secure building on the footprint of existing facilities and will enclose the two existing reactors and debris vaults of the defueled power station. The structure will partially retain the existing external structure with replacement cladding. The existing reinforced concrete facades to the circulator halls are expected to be extended to the perimeter to provide effective intruder resistance, which would also provide some flood protection. The location of the Safestore structure in the Flood Map Pack in **Annex 11A** and is planned to be constructed in the 9th year of decommissioning and will have a 100-year design life.

11A.5.4. For the purposes of the assessment, it is assumed that there will be a new DWPF built on-site, approximately 2,000 m^2 in area, to process low-level waste. Its planned location is on the existing contractors' compound, which was used as the fabrication area during the original power station construction. It will be required at the start of the Preparations for Quiescence phase and will be decommissioned at the end of the phase, leading to a design life of approximately 13 years. The design is expected to be a steel-framed structure with external cladding, constructed on a concrete slab. It will consist of waste handling, waste processing and waste storage areas, plus a site office and welfare facilities for staff. The DWPF will connect to the existing adjacent surface water and foul drainage networks. It will be required to have bunding for any spills, and an active drains tank to collect liquids with a means for monitoring and transferring to a portable bowser for appropriate discharge.

11A.5.5. To process operational waste, for the purposes of the assessment, it is assumed that a new OWPF will be built on-site at the location shown on page 2 of the Flood Map Pack in **Annex 11A**. This will be of similar construction to the DWPF, but approximately 1,500 m^2 in area. Following the completion of active area deplanting during the Preparations for Quiescence phase, the OWPF will be dismantled and so will have a maximum design life of 13 years.

11A.5.6. It should be noted that it is assumed that all Intermediate-Level radioactive Waste (ILW) that is processed during this stage will be stored at Hinkley Point A Interim Storage Facility.

Quiescence phase

11A.5.7. The Quiescence phase will commence approximately 13 years after the Preparations for Quiescence phase and will last approximately 70 years. For the purposes of assessment, it is assumed to commence at the start of 2039. During this period the Works Area will be in a quiescent state to allow further radioactive decay to occur on materials within the Safestore, although the Works Area will be under continuous monitoring and surveillance and the Safestore building will undergo periodic care and maintenance.

Final Site Clearance

11A.5.8. Final Site Clearance will involve the deconstruction of the Safestore building. This will take approximately 12 years and upon completion the Works Area will be left as a brownfield site and made available for future development. Temporary facilities may be needed to manage waste generated during this phase. For the purposes of assessment, it is assumed that all Proposed Works will be completed by 2120.

Proposed Works timescales summary

11A.5.9. The approximate timelines for each phase together with works that are scheduled to take place are summarised in **Table 11A-5** below.

Table 11A-5 – Proposed Works and timelines summary

Phase	Approximate timelines	Works
Defueling	2022 – 2026	Removal of 99% of nuclear material from the Site **(outside of current assessment scope)**
Preparations for Quiescence	2026 – 2038 *(approximately 13 years, completed by the end of 2038)*	Dismantling and deconstruction of all buildings apart from the reactor building and infilling of basements. Deconstruction of the STP. Temporary OWPF to be built and then dismantled by the end of the phase. Temporary DWPF to be built and then dismantled by the end of the phase. Safestore to be constructed 2034 – 2038 (including entombment of radioactive material in concrete and re-cladding of the existing reactor structure) with a 100 year design life

Phase	Approximate timelines	Works
Quiescence	2039 – 2106 *(70 years approx. from the start of 2039)*	Only unintrusive maintenance is planned to be undertaken. Safestore building and entombed waste remains in place.
Final Site Clearance	2106 – 2117 *(12 years approx. Assumed to finish by end of 2120 for assessment purposes)*	Deconstruction of the Safestore building. Site remediation and final landscaping.

Design standards and policy application

NPPF Sequential Test

11A.5.10. As outlined in **Section 11A.2**, the Local Planning Authority should apply the Sequential and Exception tests to proposed development under the NPPF. Under the Sequential Test, new development should be steered to areas with the lowest probability of flooding. As the majority of the Proposed Works are for the decommissioning and dismantling of existing structures and facilities, it is not possible for them to be located elsewhere and hence the Sequential Test is considered to be passed by default. In addition, all existing facilities are located in current-day Flood Zone 1, apart from the STP, which is in Flood Zone 3. There are two new temporary proposed structures, the OWPF and DWPF, which will be located in Flood Zone 1. Considering other sources of flood risk, groundwater is not considered to affect choice of location as the OWPF and DWPF will not have basements. Surface water flood risk could affect location, but as this is determined by very localised topography which will be altered by the construction (for example the location and height of kerbs and proposed ground slabs) this can be managed at any location within the Works Area.

Flood Vulnerability Classification

11A.5.11. The NPPF outlines the type of development that is appropriate within each of the Flood Zones, according to its vulnerability classification[2]. Categories and sub-categories that may be considered applicable to the Proposed Works at HPB are as follows:

- Essential Infrastructure, including essential utility infrastructure which has to be located in a flood risk area for operational reasons, including infrastructure for electricity supply including generation, storage and distribution systems; including electricity generating power stations, grid and primary substations storage; and water treatment works that need to remain operational in times of flood.
- Highly Vulnerable, including 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, including landfill and sites used for waste management facilities for hazardous waste.
- Less vulnerable, including:
  - 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;
  - waste treatment (except landfill and hazardous waste facilities).
  - sewage treatment plants, if adequate measures to control pollution and manage sewage during flooding events are in place; and
  - car parks.

11A.5.12. The NPPF also has a 'Water-compatible development' category that is not considered to be applicable to HPB.

Flood Zone Compatibility

11A.5.13. The compatibility of development of different vulnerability classifications within the Flood Zones (and hence the protection from flooding that would be required) is outlined in **Table 11A-3**.

11A.5.14. Under the above classification, the majority of the existing buildings due for demolition are classified as 'less vulnerable' and hence appropriate in Flood Zones 1, 2 and 3a, therefore do not need to be protected from flooding during the Proposed Works.

11A.5.15. The existing STP is classified as 'less vulnerable' development and hence its existing location within Flood Zone 3a continues to be appropriate. The design event applicable is therefore the 1 in 200 year tidal flood event or 1 in 100 year fluvial flood event (including climate change). The facility will be dismantled as part of Proposed Works (during the Preparations for Quiescence phase), reducing any risk of future pollution.

11A.5.16. The existing reactor building which will be modified into the Safestore building has to be located where it is for operational and safety reasons. As it was previously infrastructure for electricity generation, it would have been classified as 'essential infrastructure'. However, as electricity operation has now ceased and the Proposed Works are for decommissioning of a Works Area that will be FFV, a classification of 'more vulnerable' development is considered to be applicable. Its location is therefore appropriate in Flood Zones 1 and 2, or Flood Zone 3a if the Exception Test is passed, and should therefore be designed for a 1 in 200 year tidal event and 1 in 100 year fluvial / pluvial events including climate change.

11A.5.17. The proposed DWPF and OWPF are classified as 'more vulnerable' development (as they would not be subject to hazardous substances consent), hence appropriate in Flood Zones 1 and 2, or Flood Zone 3a if the Exception Test is passed. They should therefore be designed for a 1 in 200 year tidal event and 1 in 100 year fluvial / pluvial events including climate change.

NPPF Exception Test

11A.5.18. Application of the Exception Test is required for certain works within Flood Zone 3a (considering future climate change) as outlined above. The test consists of two parts:

- development that has to be in a flood risk area will provide wider sustainability benefits to the community that outweigh flood risk: It is considered that retaining the existing reactor building on-site as a Safestore, to allow decay of radionuclides before full demolition of the building is the most sustainable option and would have less impact than demolishing it and dealing with the waste now. Construction of the OWPF and DWPF to enable processing of waste on-site, and re-use where applicable (e.g. for filling of basement areas) are also considered sustainable measures. The Proposed Works will also enable return of the Works Area to a brownfield state leaving it available for future development. The following sections will demonstrate that flood risk will be appropriately managed; and
- 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. Mitigation measures built into the design for the required standard to protect buildings and use of flood warning measures to protect people, as outlined in following sections, will ensure that these criteria are met.
- The impact to off-site areas is extremely limited as the Proposed Works are not taking place within the functional floodplain; the primary source of flooding is tidal, and the Works Area is relatively flat with surface water discharging to a tidal estuary (which will have negligible flood risk impact).

Design standards summary

11A.5.19. In line with the Flood Zone compatibility requirements outlined above, the key design events under the NPPF are the 1 in 200 year tidal event and 1 in 100 year fluvial event, both with allowance for climate change. (For allowances applicable to the Proposed Works, see below).

11A.5.20. The NPPF states that flood risk and appropriate mitigation should be considered for all sources of flooding. Therefore, pluvial (surface water) and groundwater flooding will also be considered. The design standard applicable for surface water is the 1 in 100 year rainfall event with an allowance for climate change (for which there should be no increase in flood risk elsewhere and from which the development must be safe from surface water flooding). For groundwater, consideration will be made of the anticipated long-term levels.

11A.5.21. PPG states that flood risk to development should be reduced by design / mitigation measures and residual risks to property and people managed for the appropriate design event. The safety of people should consider safe access, escape routes and places of refuge and residual risks should consider the breach of any flood defences.

Climate Change across the three phases of the proposed works

11A.5.22. Climate change allowances are provided by the Environment Agency for various sources of flooding across a range of timescale and for different confidence intervals, which are applied according to the flood vulnerability classification of the development[11]. As outlined in paragraph 11A.5.16, the proposed Safestore, DWPF and OWPF are best classified as 'more vulnerable' under the NPPF and the existing STP is 'less vulnerable' development.

11A.5.23. The majority of the Works Area lies within Flood Zone 1 and the existing STP lies within Flood Zone 3a. However, the flood risk to HPB is likely to increase with time under climate change, and therefore the future Flood Zones may alter. The allowances applicable to 'more vulnerable development' within Flood Zones 2 and 3 will be used, with the most appropriate for each phase outlined below. In addition, the PPG notes that it may be appropriate to assess a credible maximum scenario[11], for example for nationally significant infrastructure projects (NSIPs, which can include new power stations), new settlements and significant urban extensions. As the Proposed Works are to decommission an existing power station rather than build a new one, it is considered that assessing this is not applicable in this case.

Fluvial Climate Change Allowances

11A.5.24. Peak river flow allowances are available on a management catchment scale. HPB is within the South and West Somerset Management Catchment and peak river flow allowances for this catchment can be seen in **Table 11A-6** below.

Table 11A-6 - Fluvial climate change allowances

Epoch	Central (50th percentile)	Higher Central (70th percentile)	Upper End (95th percentile)
2020s (2015 - 2039)	12%	18%	29%
2050s (2040-2069)	17%	26%	45%
2080s (2070-2125)	37%	50%	82%

11A.5.25. For peak river flow, the central allowance applies to 'more vulnerable' and 'less vulnerable' development in Flood Zones 2 and 3aThe following epochs and allowances would be applicable to each phase:

- Preparations for Quiescence phase: the 2020s central allowance – 12%; and
- Quiescence / Final Site Clearance phases: the 2080s central allowance – 37%.

Peak rainfall allowances

Peak rainfall allowances are available on a management catchment scale. For the South and West Somerset Management Catchment, peak rainfall allowances for both the 1 in 30 year and 1 in 100 year rainfall events can be seen in **Table 11A-7** below.

Table 11A-7 - Peak rainfall allowances

Return Period	Epoch	Central (50th percentile)	Upper End (95th percentile)
1 in 30 year	2050s (Present day – 2060)	20%	35%
	2070s (2061-2125)	25%	40%
1 in 100 year	2050s (Present day – 2060)	25%	40%
	2070s (2061-2125)	25%	45%

11A.5.26. For peak rainfall intensity to assess surface water flood risk for FRAs, the following allowances are applicable for each phase (irrespective of flood vulnerability classification):

- Preparations for the quiescence phase: the central allowance for the 2050s epoch (note, these will be applied when considering design of the temporary OWPF and DWPF. As the Safestore building will remain until the Final Site Clearance phase, the allowances below are to be used for that structure).
  - 1 in 30 year – 20%; and
  - 1 in 100 year – 25%.
- The quiescence / Final Site Clearance phases: the upper end allowance for the 2070s epoch.
  - 1 in 30 year – 40%; and
  - 1 in 100 year – 45%.

11A.5.27. For application of peak rainfall intensity allowances to assess surface water flood risk in FRAs, during the 1 in 100 year event plus climate change event, development should be designed so that:

- there is no increase in flood risk elsewhere; and
- the development will be safe from surface water flooding.

Sea Level Rise

11A.5.28. The Environment Agency provides recommended allowances for sea level rise until the year 2125.[11] These are available on a river basin district level and the Works Area is within the South west district. For each time period, both higher central and upper end allowances are available. For FRAs, both allowances should be assessed.

11A.5.29. Sea level rise allowances can be seen in **Table 11A-8** below, with the predicted total sea level rise for all allowances from a baseline year of 2017 presented in brackets.

Table 11A-8 – Sea level rise allowance rates

Allowance	2000 to 2035 mm/yr (total mm)	2036 to 2065 mm/yr (total mm)	2066 to 2095 mm/yr (total mm)	2096 to 2125 mm/yr (total mm)	Cumulative rise 2000 to 2125 (m)
Higher Central (70th percentile)	5.8 (203)	8.8 (264)	11.7 (351)	13.1 (393)	1.21
Upper End (95th percentile)	7 (245)	11.4 (342)	16 (480)	18.4 (552)	1.62

11A.5.30. Furthermore, the Environment Agency publishes a H++ scenario for sea level rise until 2100 which is an estimate for sea level rise that is beyond the likely range but within physical plausibility and is to be used when assessment of a credible maximum scenario is required. (Although this is not required for the Proposed Works, H++ scenarios have been applied historically to the Site when the power station was in operation, see **Section 11A.7**). A summary of the allowances applicable to the two main phases is provided below.

Table 11A-9 – Total sea level rise since 2017 by phase required for assessment

Allowance	End of Preparations for Quiescence phase (start of 2039) (mm)	End of Final Site Clearance phase (end of 2120) (mm)
Higher Central (70th percentile)	136.6	1052.7
Upper End (95th percentile)	167.2	1415.0

Offshore wind speed and extreme wave height

11A.5.31. The Environment Agency advises that from 2056 to 2125 a 10% increase for both wave height and wind speed should be applied (based on a 1990 baseline).

11A.6 Drainage Strategy

11A.6.1. HPB currently has piped drainage systems for surface and foul water serving the majority of the Works Area, as described in **Section** .

11A.6.2. While the majority of buildings will be demolished during the Preparations for Quiescence phase, areas of hardstanding will remain as at present, although it is expected that surfaces will deteriorate over time and gradually become more permeable. The surface water drainage system will remain in place and will continue to be maintained for the full duration of this phase of the Proposed Works.

The Safestore building will occupy an existing building footprint and will continue to be drained as at present. The OWPF and DWPF will connect to adjacent existing drains, with redundant sections of the system beneath their footprint removed.

11A.6.3. The removal of a large number of buildings on-site will provide more space for surface water to spread across the areas of hard-standing compared to the present situation. As the Works Area is relatively flat, the surface water flood depths on the concrete slabs will be similar to the design rainfall depths. There will be a reduction in positively drained areas (for example, due to the removal of down-pipes from roofs that previously connected to the drainage system), but it is expected that water running off of the slabs will eventually enter the drainage network and be discharged to the estuary as at present. Where basements remain, potentially infilled with crushed inert material from demolition, rainfall is expected to fill up the voids and / or gradually seep into the ground over time if the basement floor and walls deteriorate.

11A.6.4. It is therefore assumed that while possibly becoming less effective in mitigating surface water flooding due to increases in peak rainfall under future climate change, the decommissioning of HPB will reduce the impact surface water flooding will have within the Works Area due to the increased available area for it to spread out. It is therefore considered adequate to only maintain the current drainage features on-site.

11A.6.5. It should be noted that the surface water drainage system is designed for surface water and not to alleviate tidal flooding (although it may slowly convey tidal floodwater back to the sea). As such, the presence of the drainage system is ignored by the tidal flood modelling and mapping of the Works Area outlined in **Section 4A.2** and **7A.2**.

11A.7 Future Flood Risk

Fluvial flood risk

Available flood modelling

11A.7.1. The design standard applicable to the Proposed Works is the 1 in 100 year fluvial event, plus climate change. For assessment, this is required for the years 2039 (start of Quiescence) and 2120 (end of Site Clearance).

11A.7.2. As outlined in paragraph 11A.5.25, central allowances of 12% / 37% for the 2020s / 2080s would be applicable for design purposes.

11A.7.3. Flood modelling results for these exact scenarios are not available, however, proxy data from analogue model scenarios will be used, as discussed below.

11A.7.4. The JER study undertook fluvial flood modelling and mapping for the catchment adjacent to HPB for a 1 in 10,000 year return period for the H++ climate change scenario for the year 2035 (calculated in 2012). The 2011 Environment Agency guidance for H++ river flow allowance for south west England for the ‘2020s’ epoch (2015 to 2039) of 40% was applicable at that time. A range of storm durations were run and the 13 hour event found to be the worst case.

11A.7.5. A comparison of rainfall depths for a range of return period events can provide an indication of the severity of the events for which mapping is available compared to the required situation. Although applying a percentage increase in rainfall depths is not exactly the same as a percentage increase in peak flood flows, it is a good approximation. (Note that the JER study would actually have used

FEH99[31] Rainfall data to simulate the 1 in 10,000 year event plus climate change event in 2012, but as these data are no longer available FEH22[31] has been used.)

11A.7.6. FEH22 rainfall depths for the catchment immediately south of HPB at ST 22600 45900, with various allowances added for different climate change scenarios, are tabulated below in **Table 11A-10**.

Table 11A-10 – FEH22 catchment rainfall depths plus climate change allowances

Storm Duration (hrs)	30 yr Depth (mm)	100 yr Depth (mm)	100 yr + 12% Depth (mm)	100 yr + 37% Depth (mm)	1,000 yr Depth (mm)	1,000 yr + 37% Depth (mm)	10,000 yr Depth (mm)	10,000 yr +40% Depth (mm)
CC scenario	Present Day	Present Day	2020s Central	2080s Central	Present Day	2080s Cenral	Present Day	JER study equivalent
3.0 hrs	47.27	59.06	66.15	80.91	88.18	120.81	116.75	163.45
5.0 hrs	54.19	67.92	76.07	93.05	103.26	141.47	138.28	193.59
13.0 hrs	67.28	87.79	98.32	120.27	137.23	188.01	180.01	252.01
17.0 hrs	71.01	93.82	105.08	128.53	146.09	200.14	190.29	266.41

11A.7.7. By comparing data in **Table 11A-10**, it can be seen that the FEH22 present day 1 in 1,000 year flood depths are slightly greater than the 1 in 100 year plus 37% depths for the 2080s Central event (applicable for assessment of the Proposed Works and hence the Safestore to the end of its design life in 2120). The 1 in 100 year climate change depths for the 2020s epoch (applicable to the Preparations for Quiescence phase) are lower still. Therefore, it is considered appropriate to use the current day 1 in 1,000 year fluvial flood outline that is included within the Environment Agency Flood Zone 2 mapping (as shown on **Graphic 11A-4**) as a proxy for the 1 in 100 year plus climate change scenario to 2120 (equivalent to future fluvial Flood Zone 3) as a worst-case scenario.

11A.7.8. Further, it can be seen that the 1 in 1,000 year plus 37% rainfall depths (representing the 2080s Upper End scenario) are also lower than the approximated 1 in 10,000 year JER depths (which would have used a 40% climate change increase in flood flows to 2035). Therefore, it is considered appropriate to use the JER study fluvial flood outlines for the 1 in 10,000 year event for 2035 as a proxy for the 1 in 1,000 year plus climate change event to 2120 (equivalent to future fluvial Flood Zone 2) as a worst-case scenario.

[31] Centre for Ecology and Hydrology (1999). Flood Estimation Handbook. The FEH consists of manuals and software, which is periodically updated. The software has used three rainfall data sets to date, with the original rainfall data (FEH99) being updated in 2013 (FEH13) and again in 2022 (FEH22).

Preparations for Quiescence phase (to start of 2039)

11A.7.9. The Preparations for Quiescence phase is planned to run until 2039 and so it is advised by the Environment Agency that the higher 12% climate change uplift for river flows is used. As previously stated, the current Environment Agency fluvial Flood Zone 2 (1 in 1,000 year outline) would be a worst-case proxy for the 1 in 100 year plus climate change event (future fluvial Flood Zone 3). As outlined in the existing flood risk section, no buildings within the NSL boundary (including the OWPF, DWPF or reactor / Safestore) are at risk of flooding in this event, and nor is the access route along Wick Moor Drove or the STP. Hence, during the Preparations for Quiescence phase, the Works Area and access route would not be affected by the 1 in 100 year plus climate change fluvial event.

Quiescence / Final Site Clearance phases (to end of 2120)

11A.7.10. The JER 1 in 10,000 fluvial flood event will be used as a worst-case proxy for these phases, when only the Safestore building remains. As outlined above, this is equivalent to the 1 in 1,000 year plus climate change fluvial event representative of the future fluvial Flood Zone 2 to 2120. This is a more stringent standard than the NPPF 1 in 100 year plus climate change requirement. Flood extents and depths for the JER 1 in 10,000 fluvial flood event can be seen in **Graphic 11A-6**.

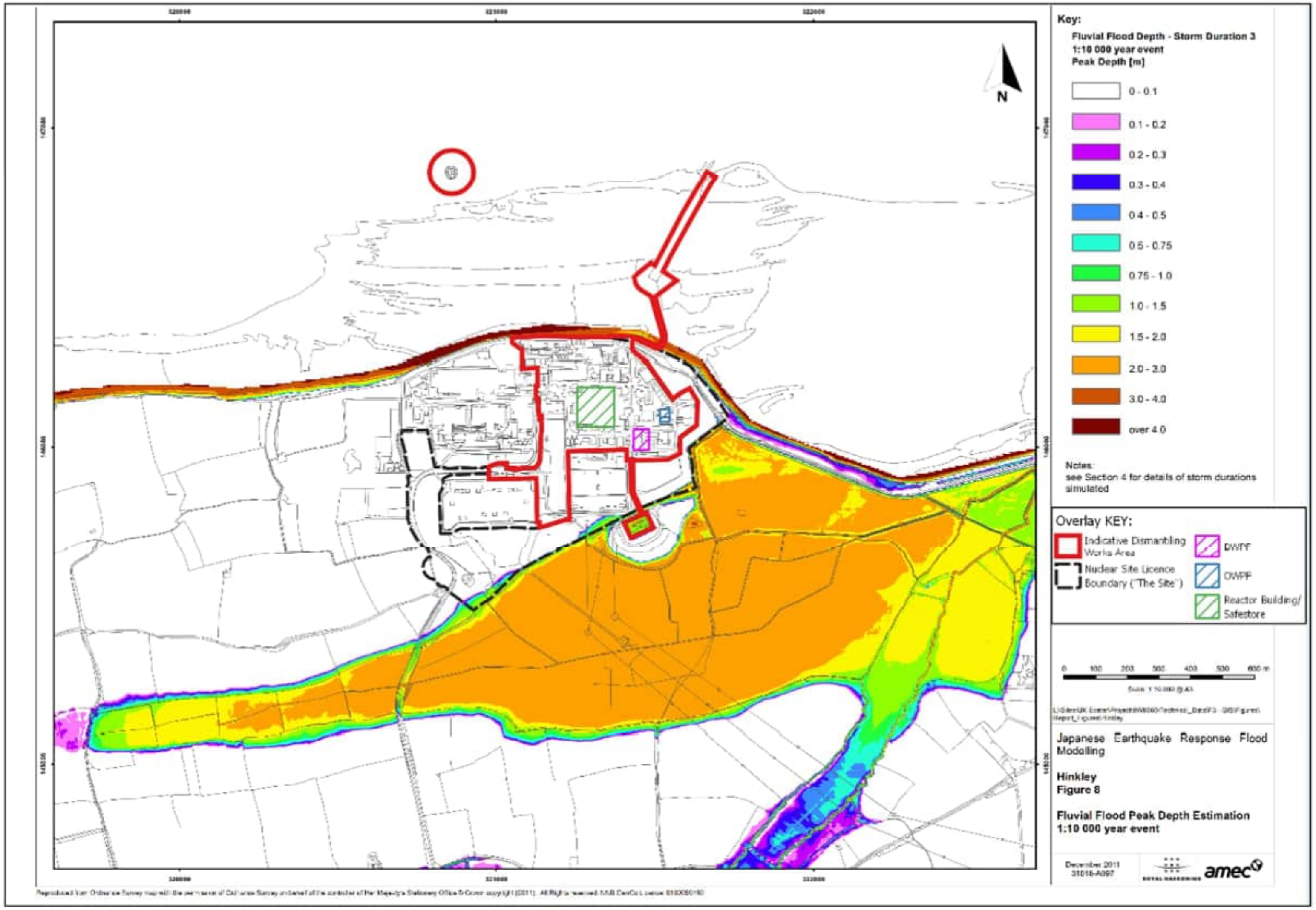
11A.7.11. It should be noted that the fluvial flood risk at HPB is dominated by tidal levels downstream. Due to this the JER modelling assumes that outfall structures in tidal banks are blocked or unable to discharge due to high tide levels; these tide levels represent the 1 in 1 year still water level. It shows that the majority of the Works Area, including the reactor building, the OWPF and DWPF are not within the flood extent and would remain unaffected.

11A.7.12. Under the above event, the access road and the STP are shown to have flood depths of 1.5 m to 2.0 m. In reality, flood depths for the design scenario will be lower than those predicted by the JER study. The STP will have been decommissioned before this phase (by 2039) and hence no site workers are expected to be in this area. However, access to the Works Area could be cut off due to flooding of Wick Moor Drove during a 1 in 1,000 year fluvial event. During the Proposed Works weather forecasts and Environment Agency Flood Alerts for the area will be reviewed, as outlined in the EMP. If there is extreme weather or flood warnings in place, site workers should keep away from the low-lying area near the former STP and the access road is not to be used, rather, workers should stay at home or shelter on-site.

11A.7.13. Mapped outlines equivalent to the 1 in 100 year plus climate change fluvial event are not currently available for these phases, but based on the information outlined above, it can be assumed that the majority of the Works Area would not flood during this event but that Wick Moor Drove and the former STP low-lying area potentially could.

11A.7.14. In summary, the majority of the Works Area lies outside of the mapped flood extents and would not flood during a 1 in 1,000 year plus climate change event (i.e. is located in future fluvial Flood Zone 1). However, flooding of the access route and former STP area would occur during the 1 in 1,000 plus climate change event and could potentially also occur during the 1 in 100 year plus climate change event (although this cannot be confirmed in the absence of specific model scenario results).

Graphic 11A-6 - JER Fluvial modelling (1 in 10,000 year + 40%) with site boundaries and building locations overlain



Tidal Flood Risk

Predicted future (still-water) extreme sea levels

11A.7.15. Future still-water ESLs have been calculated for HPB using the 2017 baseline data (central estimate) provided in **Table 11A-4** and adding the respective climate change allowances provided in **Table 11A-8** and **Table 11A-9**. These are shown below in **Table 11A-11** (levels have been calculated for the Preparations for Quiescence phase to the end of 2038 / beginning of 2039, those for Final Site Clearance are to the end of 2120).

Table 11A-11 – HPB Predicted Future Extreme Sea Levels

Phase	Year	Climate Change Scenario	Total Still Water Sea Level Rise (m)	1 in 200 year Sea Level (mAOD)	1 in 1,000 year Sea Level (mAOD)	1 in 10,000 year Sea Level (mAOD)
Baseline (CFBLs 50th percentile)	**2017**	**N/A**	0.0	**7.78**	8.06	8.54
END of PREPARATION FOR QUIESCENCE	**2039** *(start of)*	**Higher Central** (70th percentile)	0.14	**7.92**	8.20	8.68
	2039 *(start of)*	**Upper End** (95th percentile)	0.17	**7.95**	8.23	8.71
END of SITE CLEARANCE	**2120** *(end of)*	**Higher Central** (70th percentile)	1.05	**8.83**	9.11	9.59
	2120 *(end of)*	**Upper End** (95th percentile)	1.42	**9.20**	9.48	9.96

11A.7.16. It should be noted that the baseline data (Coastal Flood Boundary Levels for 2017 at chainage 326, 50th percentile) are only considered accurate to one decimal place. Two decimal places are provided for the purposes of comparison only. Therefore, predicted still water ESLs should also be considered accurate to one decimal place only. Climate change allowances have been added to the 2017 central estimate ESL.

Modelling of future tidal flooding

11A.7.17. Calculation of ESLs alone is not sufficient to adequately assess the tidal flood risk at HPB. In addition to the ESL (i.e. the 'still-water level', which includes storm surge), the effect of waves including wave run-up and overtopping of any flood defences also need to be considered, which are affected by the fetch (distance from which waves may travel) and wind. Flood volumes from the overtopping of flood defences may be very significant and affect ground levels above the offshore ESL even when protected by a raised flood wall, due to waves rising up the defence and overtopping it.

11A.7.18. The JER report[5] provides modelling results for an extreme 1 in 10,000 year tidal flood event for HPB for the year 2035. The modelling considered the following:

- still-water sea level rise under various future climate change scenarios;
- storm surge;
- wave run-up, overtopping and inundation; and
- wind.

11A.7.19. The model explicitly represented the sea defences (concrete wall and embankment) and the gabion wall, including its 6m gap. The modelling considered two scenarios with respect to modelling of the gabion wall, namely 'breached' and 'unbreached' as follows:

- 'Breached' – the entire gabion wall structure is removed from the model under an assumed 'defence failure' scenario; and
- 'Unbreached' – the gabion wall is present, with a 6m gap above the outfall.

11A.7.20. The breached scenario is considered a best-case representation of future conditions at HPB.

11A.7.21. Due to the uncertainties that surround modelling such a high return period event including future climate change scenarios affecting high water levels and how to model wave attack, JER[5] provided 3 different loading scenarios, the Best, High and Low, these loading scenarios are detailed below:

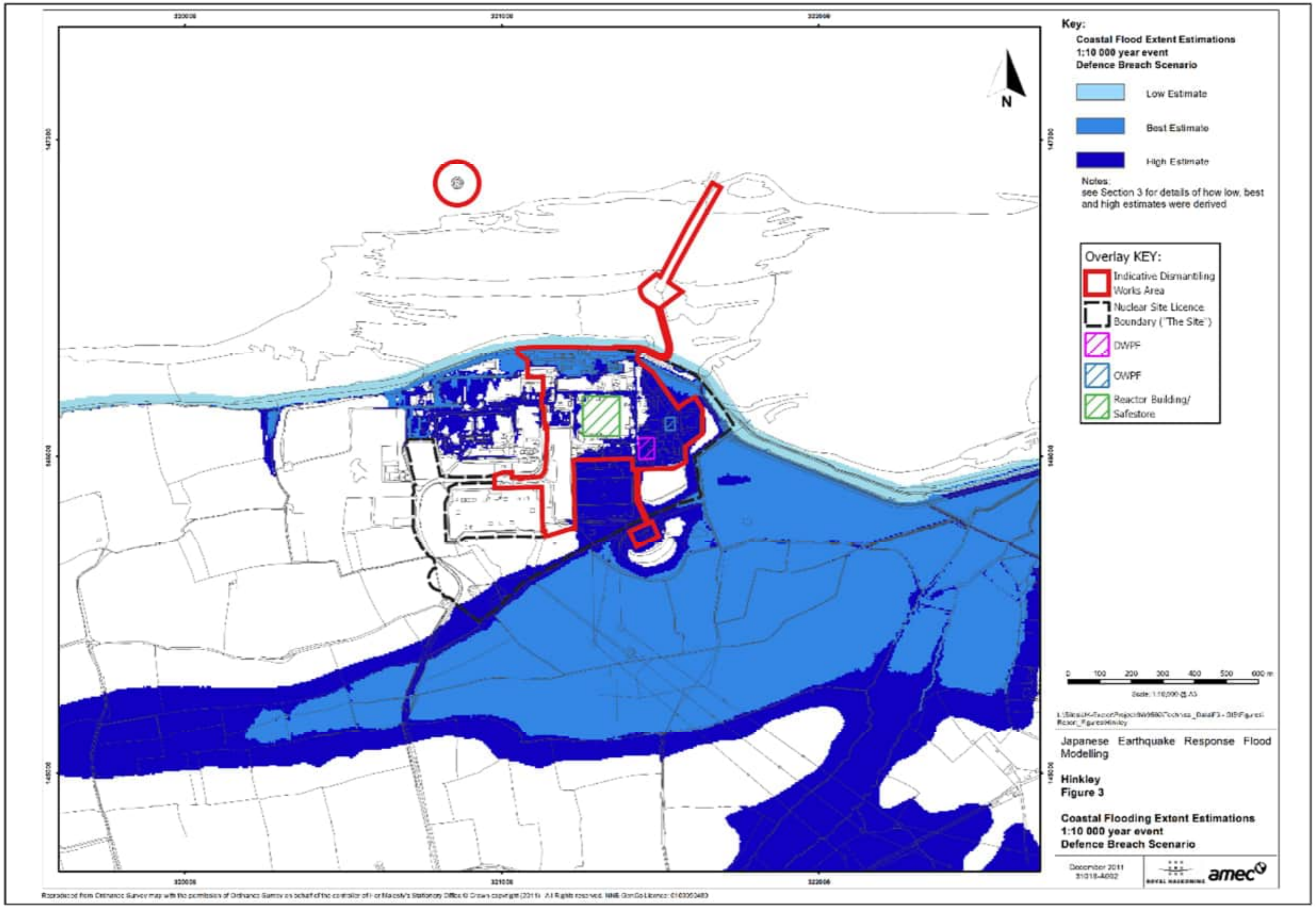
- High – comprising upper estimates for the distributions of extreme water levels and wave height, coupled with a high estimate of the correlation between them;
- Best – comprising middle estimates for the distributions of extreme water levels and wave height, coupled with a central estimate of the correlation between them; and
- Low – comprising lower estimates for the distributions of extreme water levels and wave height, coupled with a low estimate of the correlation between them.

11A.7.22. The still water levels for the different JER loading scenarios (for a 1 in 10,000 year H++ climate change event for 2035) which were used in the model were as follows:

- High – 9.85 mAOD;
- Best – 8.70 mAOD; and
- Low – 7.85 mAOD.

11A.7.23. The modelling also accounted for the effects of wind and waves including a wave overtopping assessment. This assessment concluded that the sea wall plays an important role in dissipating the energy of incoming waves at HPB.

Graphic 11A-7 - JER modelled tidal extents for three loading scenarios



11A.7.24. As there is currently no site-specific modelling available for HPB for the required design standard (1 in 200 year plus climate change event under NPPF) and dates (start of 2039 and end of 2120 for the start of Quiescence and End of Site Clearance respectively), the JER modelled flood extents will be used as a proxy. The appropriateness of this modelling will be considered by comparing the extreme still water flood levels required and used in the JER model. It should be noted that required wind and wave height scenarios might also differ from those assumed by JER, but the JER study is considered a conservative approach as it used H++ conditions. A comparison between the JER scenarios outlined in paragraph 11A.7.22 above and the future predicted ESLs in **Table 11A-11** shows the following (bearing in mind data are accurate to one decimal place):

- End of Preparations for Quiescence phase (start of 2039): JER 'Low' estimate of 7.85 mAOD is very similar to the 1 in 200 year central and upper end estimates of 7.92 mAOD and 7.95 mAOD respectively (within one decimal place); and
- End of Site Clearance (2120): JER 'High' estimate of 9.85 mAOD is higher than both the 1 in 200 year 'Higher Central' estimate of 8.83 mAOD and the 'Upper End' estimate of 9.20 mAOD (as well as being higher than both estimates for the 1 in 1,000 year event and also higher than the Higher Central estimate for the 1 in 10,000 year event). The JER 'Best' estimate of 8.70 m AOD is, on the other hand, lower than both the 1 in 200 year 'Higher Central' and 'Upper End' estimates.

11A.7.25. Therefore, the JER 'Low' estimate mapping will be used as a proxy for the 1 in 200 year plus climate change event applicable to the end of the Preparations for Quiescence phase, and a scenario between the JER 'High' and 'Best' estimate mapping will be used as a proxy for the 1 in 200 year plus climate change event applicable through to the end of the Site Clearance phase.

11A.7.26. The flood extents for each scenario during a breach event (i.e. with no gabion wall behind the concrete sea wall) can be seen in **Graphic 11A-7**.

Preparations for Quiescence phase (to Start of 2039)

11A.7.27. At the start of the Preparations for Quiescence phase, the Works Area is affected as in the current day situation, i.e. the STP and access route could flood during a 1 in 200 year tidal event (if the embankment defences are breached or fail).

11A.7.28. By the end of the phase, in the 1 in 200 year event (indicated by the JER 1 in 10,000 Low estimate outline in **Graphic 11A-7**), the Site is still not inundated, and flood water does not overtop the concrete sea wall. Furthermore, the embankment also provides protection to the STP area and access route, if it is assumed that it does not fail or breach (as in the JER study).

11A.7.29. Hence, throughout this phase, the standard of protection is similar to the current day situation with no flooding in a 1 in 200 year event unless a breach occurs, in which case the STP and access route are affected. HPB lies within the Environment Agency's Flood Alert area "Somerset coast at Dunster Beaches, Blue Anchor, Steart, Stolford and Brean" and so all Environment Agency alerts should be adhered to, as outlined in the Environmental Management Plan, so that workers are not affected by flooding on the lower parts of the Works Area or along the access road.

Quiescence and final site clearance phases (to end of 2120)

11A.7.30. As outlined above, a scenario between the JER 'High' and 'Best' estimate tidal flood events is used as a proxy for the 1 in 200 year plus climate change event to 2120 and hence the worst case scenario throughout the Quiescence and Final Site Clearance phases. (The phases are considered together as the only receptors of significance are the Safestore and potential site workers that may be present during both).

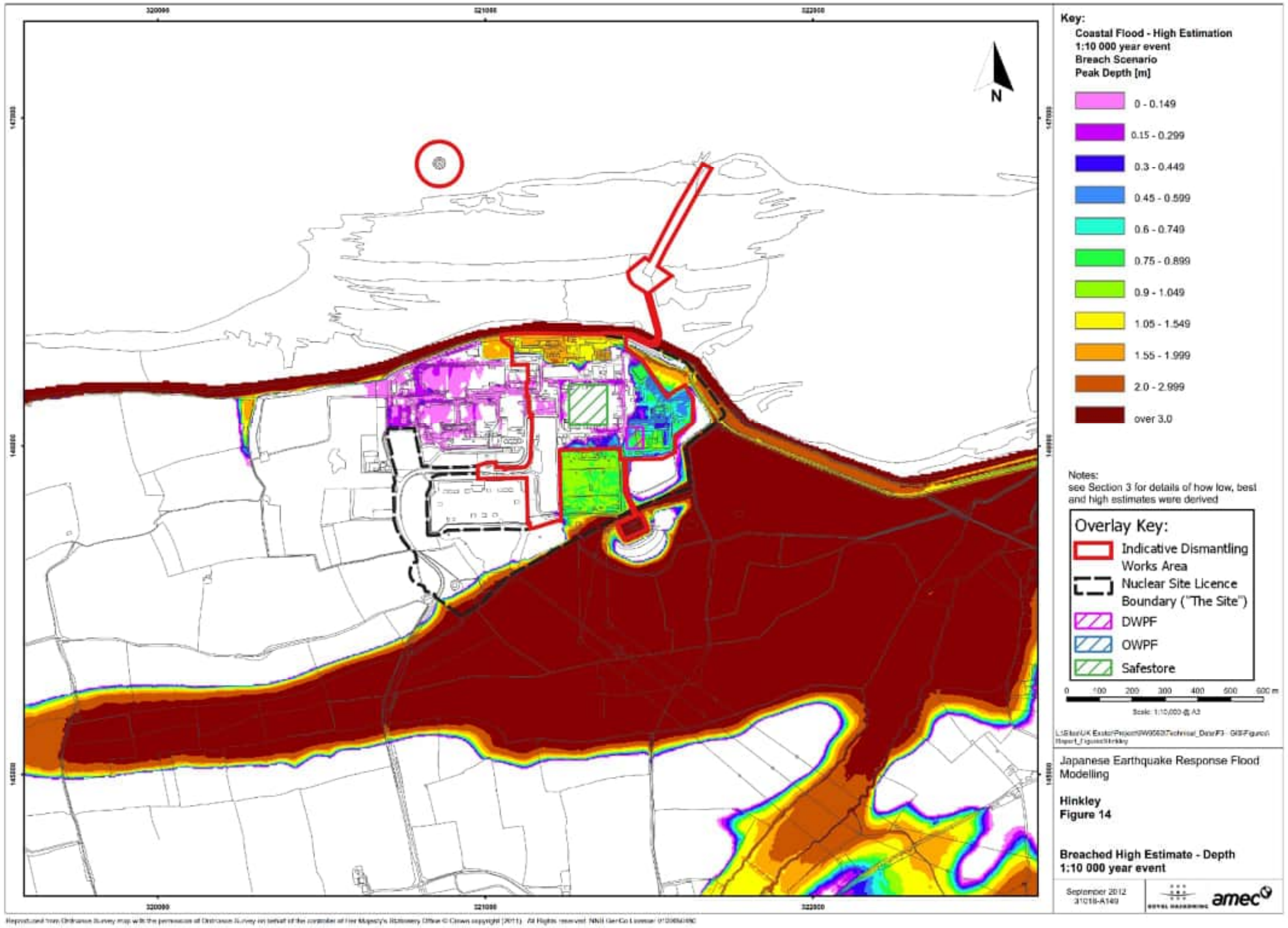
11A.7.31. The extent of both the 'High' and 'Best' events can be seen in **Graphic 11A-7** and the JER modelled 'High' estimate depths for the breached scenario can be seen in **Graphic 11A-8**. During the 'Best' estimate event, tidal flooding only occurs on the slightly lower ground adjacent to the sea wall and does not reach the Safestore. The access route is also not flooded. However, during the 'High' estimate event, much of the Works Area is inundated, including roads surrounding the Safestore and the former STP area. Furthermore, the Wick Moor Drove access road to the south of the Works Area is inundated.

11A.7.32. Under the 'High' scenario (which is worse than the 1 in 200 year plus climate change design scenario applicable), the Safestore building would have depths up to 0.3 m ponding along its walls, whereas under the 'Best' scenario, no water would reach it. Therefore, using the precautionary approach, the Safestore will be designed to withstand a flood depth of 0.3m. Upon decommissioning of the Safestore building there will be an increase in the tidal floodplain, however due to the large amounts of tidal flooding modelled, this effect is likely to be negligible.

11A.7.33. The access road to the south of the Works Area is modelled to be inundated with depths over 3 m under the 'High' scenario, but not be inundated during the 'Best' scenario. Therefore, under the 1 in 200 year plus climate change design scenario, which lies between these JER modelled events, it is possible that the access route would be flooded. In this situation, during an extreme tidal flood event there maybe no access to the Works Area and emergency services would not be able to access the Works Area by land. As parts of the Works Area are also modelled to be inundated during the design tidal event, on-site workers would be at risk and would also not be able to leave the Works Area via land. Tidal flood alerts will be checked periodically, and an evacuation plan put in place outlined in the Outline EMP to ensure all workers have left site long before tidal flooding occurs.

11A.7.34. In summary, part of the Works Area (including areas near to, and possibly adjacent to the Safestore) and the access route are potentially at risk of flooding during a 1 in 200 year plus climate change event to 2120. Therefore, mitigation is required in the form of design of the Safestore to exclude flood water and an evacuation / flood warning plan for workers.

Graphic 11A-8 - JER tidal modelling depths (1 in 10,000 year High scenario, Breached) with site boundaries and buildings overlain



11A.8 Surface Water Flood Risk

Available modelled pluvial outlines

11A.8.1. The Environment Agency Risk of Flooding from Surface Water (RoFSW) data provides flood depths for the current day 1 in 100 and 1 in 1,000 year events, assuming a 12 mm rainfall depth reduction to account for existing surface water systems, which is considered a good representation of drainage losses at HPB.

11A.8.2. The JER study[5] modelled pluvial flooding at HPB for the year 2035 for the 1 in 10,000 year pluvial event, with a 10% increase in rainfall intensity applied for climate change based on guidance at that time. Surface water drainage was not represented in the modelling, rather, it was assumed that drainage systems would be blocked or unable to discharge due to high tidal levels. The 3-hour duration storm was found to be the worst case for HPB.

FEH22 point rainfall data for the 1km grid square applicable to HPB (ST 21300 46100) with allowances added for different climate change scenarios, is provided in **Table 11A-12** below:

Table 11A-12 – FEH22 point rainfall depths plus climate change allowances

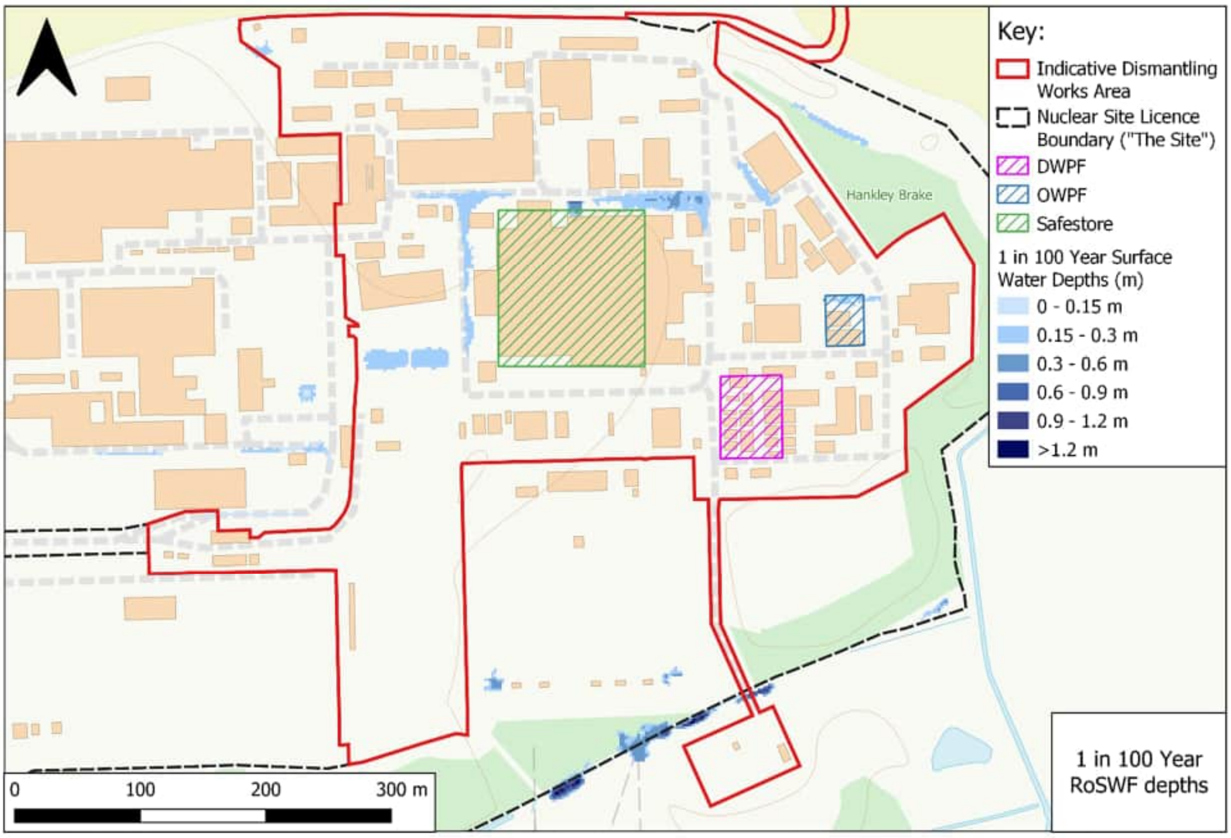
Storm Duration (hrs)	2 yr Depth (mm)	5 yr Depth (mm)	30 yr Depth (mm)	30 yr +20% Depth (mm)	30 yr +35% Depth (mm)	30 yr +40% Depth (mm)	100 yr Depth (mm)	100 yr +25% Depth (mm)	100 yr +40% Depth (mm)	100 yr +45% Depth (mm)	1,000 yr Depth (mm)	10,000 yr Depth (mm)	10,000 yr +10% Depth (mm)
CC scenario	Present Day	Present Day	Present Day	2050s Central	2050s Upper End	2070s Upper End	Present Day	2050s Central	2050s Upper End	2070s Upper End	Present Day	Present Day	JER study equivalent
0.5 hrs	9.8	16.5	28.1	33.7	37.9	39.3	35.8	44.7	50.1	51.9	47.2	62.8	69.1
1.0 hrs	12.3	20.6	35.4	42.5	47.8	49.6	45.5	56.9	63.7	66.0	61.8	83.4	91.8
2.0 hrs	17.8	27.3	44.0	52.8	59.4	61.5	55.2	69.0	77.3	80.0	75.0	102.3	112.5
3.0 hrs	21.1	31.4	49.2	59.0	66.4	68.8	61.4	76.8	86.00	89.1	84.8	116.8	128.4

11A.8.3. As can be seen by comparison of the above events, the 1 in 30 year plus climate change depths for the 2050s Central and 2050s Upper End scenarios lie either side of the existing 1 in 100 year depths, with the 2070s Upper End depths only being slightly greater (when compared to the other return periods). The 1 in 100 year plus climate change depths for the 2050s Central and 2050s Upper End scenarios also lie either side of the existing 1 in 1,000 year depths, and again, the 2070s Upper End depths are only slightly greater. The depths approximating those used by the JER study are much higher than any of the required design scenarios under the NPPF. Note, the JER study would have used FEH99 10,000 year rainfall depths which are no longer available, so FEH22 depths have been used above instead.

11A.8.4. The '2050s' epoch climate change allowances are applicable to the Preparations for Quiescence phase and the '2070s' epoch allowances are applicable to the Quiescence and Final Site Clearance phases. However, as the depth increases are only slightly greater (when compared to other return periods) these epochs and phases will be considered together for assessment. Therefore, the Environment Agency RoFSW depth data for the current day 1 in 100 and 1 in 1,000 year events will be used as a proxy for the future 1 in 30 year and 1 in 100 year plus climate change scenarios across all phases of the Proposed Works.

All phases to end of Final Site Clearance phases (to 2120)

Graphic 11A-9 - 1 in 100 year RoFSW depths used as proxy for 1 in 30 year future flood risk



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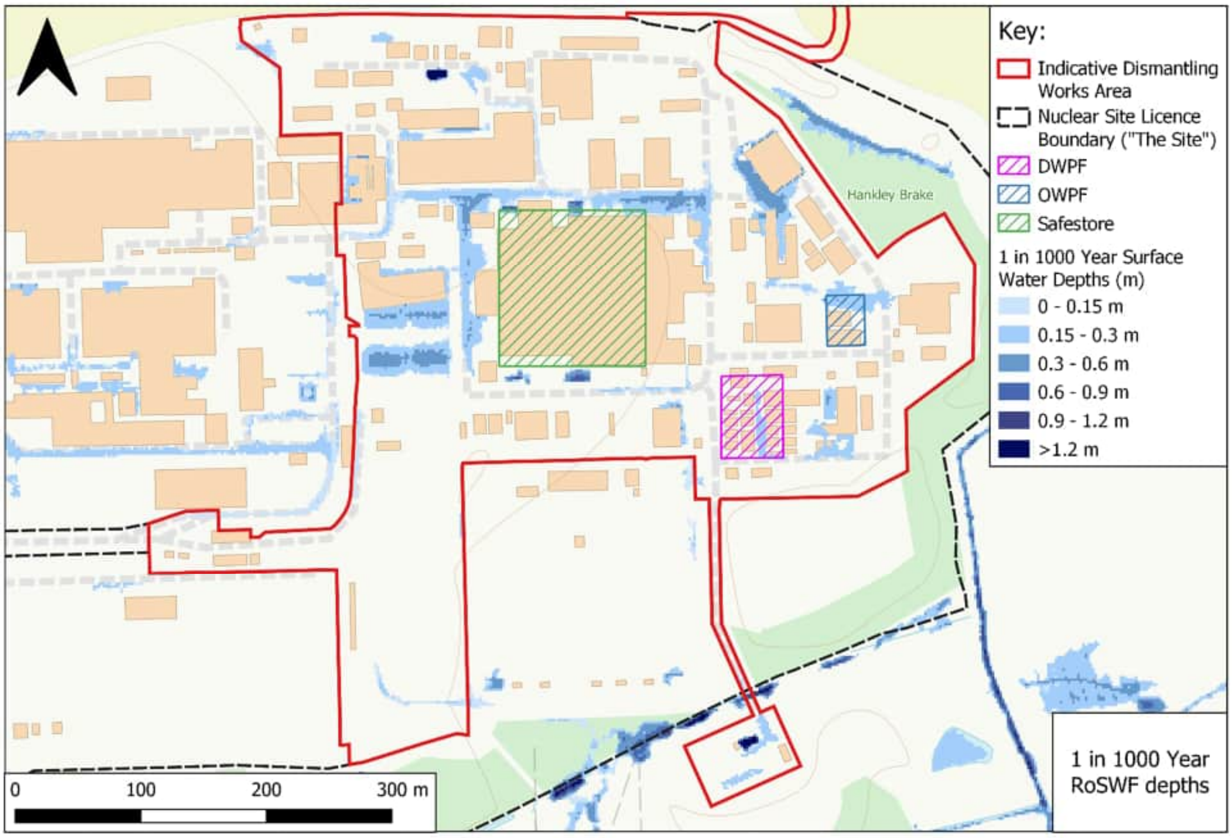
11A.8.5. The existing RoFSW 1 in 100 year flood depths are considered to represent the 1 in 30 year plus climate change future flood depths. These are shown in **Graphic 11A-9**. There are small areas adjacent to the Safestore and along the OWPF northern boundary that are up to 0.3 m deep / above ground level (ignoring the obvious low spot near the Safestore).

11A.8.6. The existing RoFSW 1 in 1,000 year flood depths are considered to represent the 1 in 100 year plus climate change future flood depths. These are shown in

11A.8.7. **Graphic** 11A-10 below. There are more extensive areas along the roads around the Safestore and on the area of the proposed OWPF and DWPF that are up to 0.3 m deep / above ground level (again, ignoring obvious low spots).

11A.8.8. Therefore, mitigation for surface water flooding of the proposed OWPF and DWPF will be provided by setting finished floor levels 0.3 m above surrounding ground levels or ensuring that the buidlings are flood-resilient to 0.3 m flood depth. For the Safestore, design will ensure that flood water of at least 0.3 m deep is kept out of the structure after construction.

Graphic 11A-10 - 1 in 1,000 year RoSWF depths used as proxy for 1 in 100 year future flood risk



11A.8.9. In summary, the majority of the Works Area is not affected by surface water flooding. However, some areas of road, the Safestore, OWPF and DWPF buildings could be affected by a 1 in 100 year plus climate change event throughout the phases. Mitigation for the buildings will be required in the form of their design to keep surface water of depths of up to 0.3 m out of the buildings or ensuring that they are flood-resilient to this depth.

Sewer Flood Risk

All phases

11A.8.10. It is expected that foul discharge rates will significantly reduce throughout this phase until the STP is decommissioned towards the end of the Preparations for Quiescence phase. Hence there is not considered to be a significant risk of flooding from foul sewers to the Proposed Works.

Ground water flood risk

Preparations for Quiescence phase

11A.8.11. The Works Area is generally raised above the surrounding area by approximately 5m, this ensures that the surface areas are not at risk of groundwater flooding, as in the current day situation. During the Preparations for Quiescence phase, pumps for removing water from basements will be required until the buildings are decommissioned, and basements filled and the Safestore construction is complete. Hence the risk of flooding of basements from groundwater remains the same during the preparation for quiescence phase as in the existing situation.

Quiescence / Final Site Clearance phases

11A.8.12. After buildings are demolished, basement areas will be filled. It is expected that these may then fill with water and / or establish a stable long-term groundwater level similar to the surrounding ground if the basement floors and walls deteriorate. As the former basement areas will no longer be considered as receptors, the flood risk from groundwater in these phases is not significant.

Reservoirs / artificial sources

11A.8.13. No new sources of artificial flooding are expected therefore the risk from these remains as Negligible.

Changes to off-site flood risk from the proposed works

11A.8.14. There are no predicted changes to off-site flood risk.

Flood mitigation measures and design

11A.8.15. Mitigation of flood risk to buildings for the design event can be achieved by raising finished floor levels above the design flood level (including allowances for climate change and freeboard where applicable) or by use of resistance or resilience mitigation measures.

11A.8.16. Resistance measures aim to keep flood water out of a building e.g. by the use of permanent or temporary flood barriers across openings / floodwater entry points. If design flood depths are predicted to be more than 0.6 m deep, the structural impact due to hydrostatic pressure on the building needs to be considered. Resilience measures, on the other hand, allow water to enter or pass through buildings with minimal impact and may be more appropriate to mitigate deeper flood waters and / or less vulnerable development.

11A.8.17. Flood mitigation measures will be built into the design of the Proposed Works and incorporated into the Safety Case for HPB. Requirements for buildings are outlined below.

11A.8.18. The OWPF and DWPF will need to be protected throughout their potential 12-year design life and are expected to be dismantled before the end of the Preparations for Quiescence phase (i.e. by 2039). Mitigation measures will include the following:

- Structures will be built with Finished Flood Levels (FFL) of 0.3 m above the surrounding ground levels, or flood-resilient to these depths, allowing some protection from surface water flooding and tidal flooding.

11A.8.19. The Safestore will need to be protected throughout the Quiescence and Final Site Clearance phases (i.e. to 2120 or the date of its demolition if earlier). Mitigation measures will include the following:

- The structure will be designed to be robust, weatherproof and secure against water intrusion up to an assumed external flood depth (from surface water or tidal overtopping) of 0.3 m for the duration of its life.

11A.8.20. The STP will be dismantled by 2039. Therefore, no specific mitigation measures will be incorporated.

11A.8.21. The PPG also states that flood risk to people should be reduced and managed. There will be no people living at HPB during the Proposed Works. During the Preparations for Quiescence and Final Site Clearance phases there will be full time staff working at HPB to undertake the Proposed Works. During the Quiescence phase, staff will only visit to undertake occasional routine maintenance. Flood warning systems (e.g. provided by the Environment Agency) and weather prediction services (e.g. from the Met Office) will be used to alert staff to any significant predicted tidal flood events (e.g. storm surge) or predicted fluvial flooding or rainfall events so that they may evacuate the Works Area in time and avoid Wick Moor Drove (the access road) during times of potential flood. If, for any reason, workers have not been able to evacuate and the Works Area access is cut off due to Wick Moor Drove being flooded, they will be able to take shelter on site in a low risk flood area until the flood event has passed (e.g. in the offices of the OWPF / DWPF during the quiescence phase or in a vehicle or temporary welfare facilities during the Final Site Clearance phase). This would be for a short period of one tidal cycle for the worst case extreme tidal surge event or a few hours for a fluvial / pluvial event.

11A.9 Conclusion

11A.9.1. The dominant source of risk to the Works Area throughout its lifetime is tidal flooding, however, some risk can also be attributed to pluvial sources. Fluvial flooding may affect the access route under future climate change.

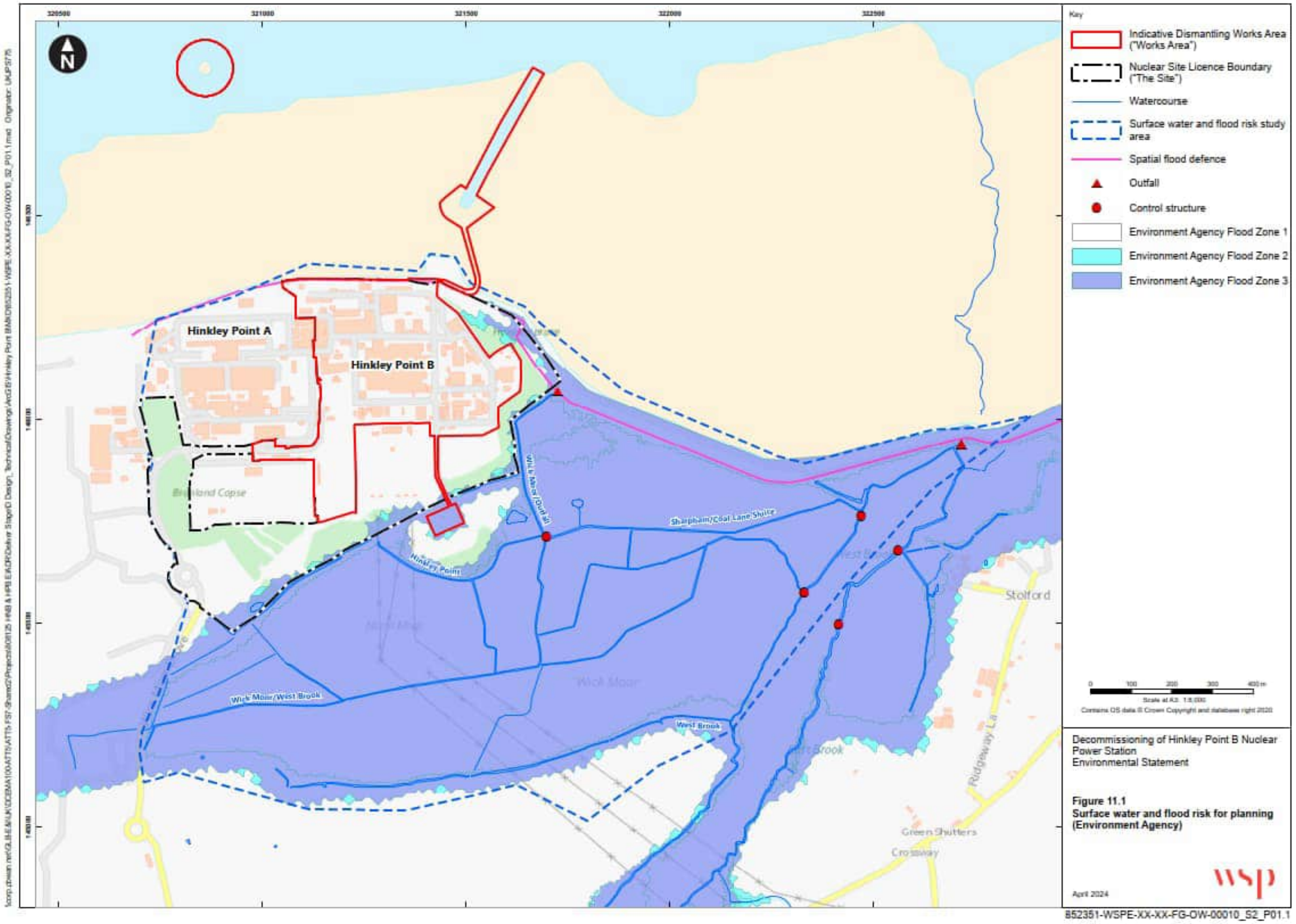
11A.9.2. The Proposed Works will have a negligible impact on flooding to off-site areas.

11A.9.3. Due to climate change, on-site flood risk from tidal and pluvial sources is likely to increase throughout the lifetime of the development. Any potential flood-risk impacts on buildings will be mitigated by design to keep flood-water from tidal or pluvial sources out of any proposed structures for their proposed design life. In particular, this will require raising the proposed OWPF and DWPF at least 0.3 m above surrounding ground levels or ensuring a flood-reslient design to this depth, and protecting the Safestore from tidal floodwater depths of up to 0.3 m. Any potential impact on humans is limited to those that could potentially be working within the Works Area during extreme events (there is no on-site accommodation). This will be mitigated by the use of flood- and weather-warning systems.

11A.9.4. At the end of decommissioning, HPB will be left as a brownfield site which will be flood compatible.

11A.9.5. The NPPF and its supporting PPG state that Planning Authorities should complete a risk based “Sequential Test” which is to “steer new developments to areas with the lowest risk of flooding from any source” (Paragraph 168 of the NPPF). As the majority of the Proposed Works are for the decommissioning and dismantling of existing structures and facilities, it is not possible for them to be located elsewhere and hence the Sequential Test is considered to be passed by default. As the Proposed Works are partly located within Flood Zone 3a an Exception Test is required. It is considered that this FRA demonstrates that this test is met as the Proposed Works will be safe from flooding for their duration while not increasing flood risk elsewhere, and the decommissioning of the Site over a prolonged period and returning it to a brownfield site is in line with sustainability principles.

11A.10 Figures



Annex A

FLOOD MAP PACK

Overview

Site Information

PROJECT
1

SITE
HPB

CLIENT
EDF

EASTINGS, NORTHINGS
321340, 146151

SITE AREA
21.21 hectares

WSP CONTACT
JA

Pages

2 Site Location

3 Flood Map for Planning

4 Risk of Flooding from Rivers and Sea

5 Risk of Flooding from Surface Water

6 Risk of Flooding from Reservoirs

7 Previous Flooding

8 Flood Alert and Warning Areas

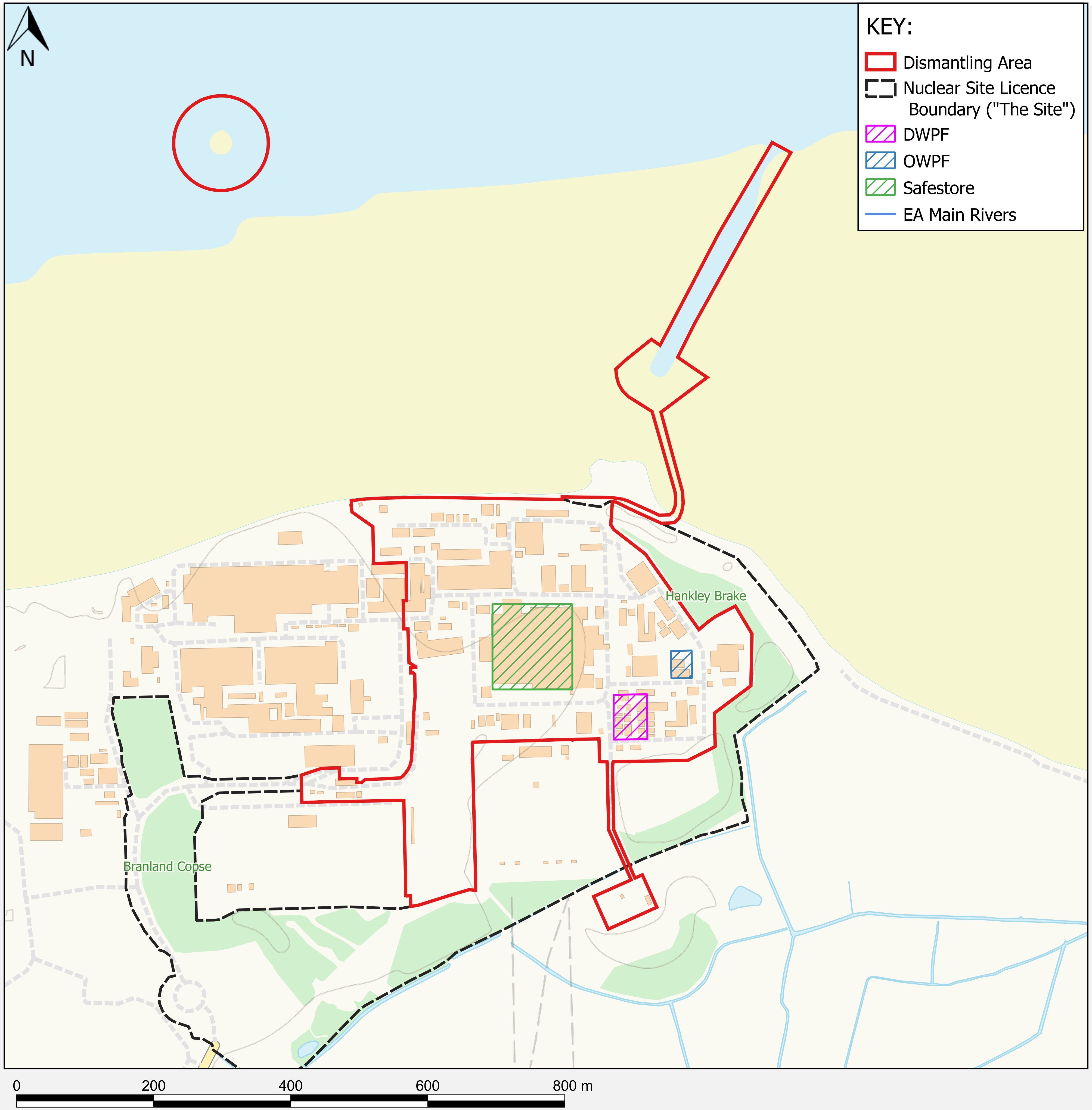
9 Source Protection Zones & Borehole Records

Site Location

2

CLOSEST MAIN RIVER
Parrett (Tidal)

DISTANCE BETWEEN SITE AND CLOSEST MAIN RIVER
5324.6m



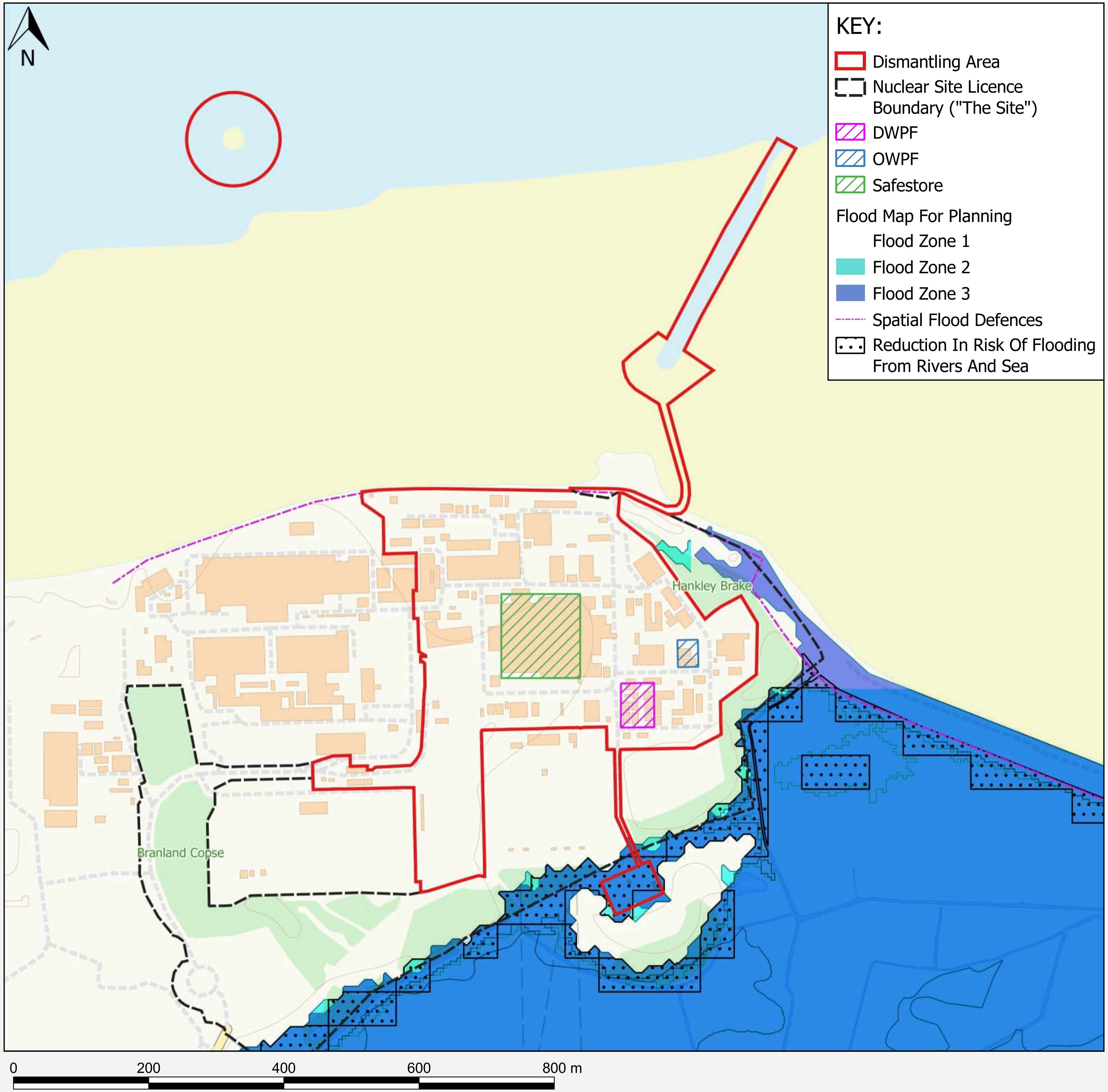
This data is indicative only and reference should always be made to the legal documentation. It should be noted that amendments to the datasets are made frequently and that the information may change.

Flood Map for Planning

Flood zone maps are modelled using local and national river and sea data. This information provides an indication of the likelihood of flooding and is intended for planning use only.

- **Flood Zone 1** - Land having a less than 1 in 1,000 annual probability (0.1% AEP) of river or sea flooding - all land outside Zones 2 and 3).
- **Flood Zone 2** - Land having between a 1 in 100 and 1 in 1,000 annual probability (0.1% - 1.0% AEP) of river flooding; or land having between a 1 in 200 and 1 in 1,000 annual probability (0.1% - 0.5% AEP) of sea flooding.
- **Flood Zone 3** - Land having a 1 in 100 or greater annual probability (>1.0% AEP) of river flooding; or Land having a 1 in 200 or greater annual probability (>0.5% AEP) of sea flooding.

Reduction in Risk of Flooding from Rivers and Sea due to Defences -Reduction in Risk of Flooding from Rivers and Sea due to Defences is a spatial dataset that indicates where areas have reduced flood risk from rivers and sea due to the presence of flood defences. The dataset has been created to help initiate conversations about the impact our flood defences have on the risk of flooding from the rivers and sea,and as a prompt to find out more about the flood defences in a particular area of interest. It does not replace any local, more detailed information.



This data is indicative only and reference should always be made to the legal documentation. It should be noted that amendments to the datasets are made frequently and that the information may change.

Risk of Flooding from Rivers and Sea

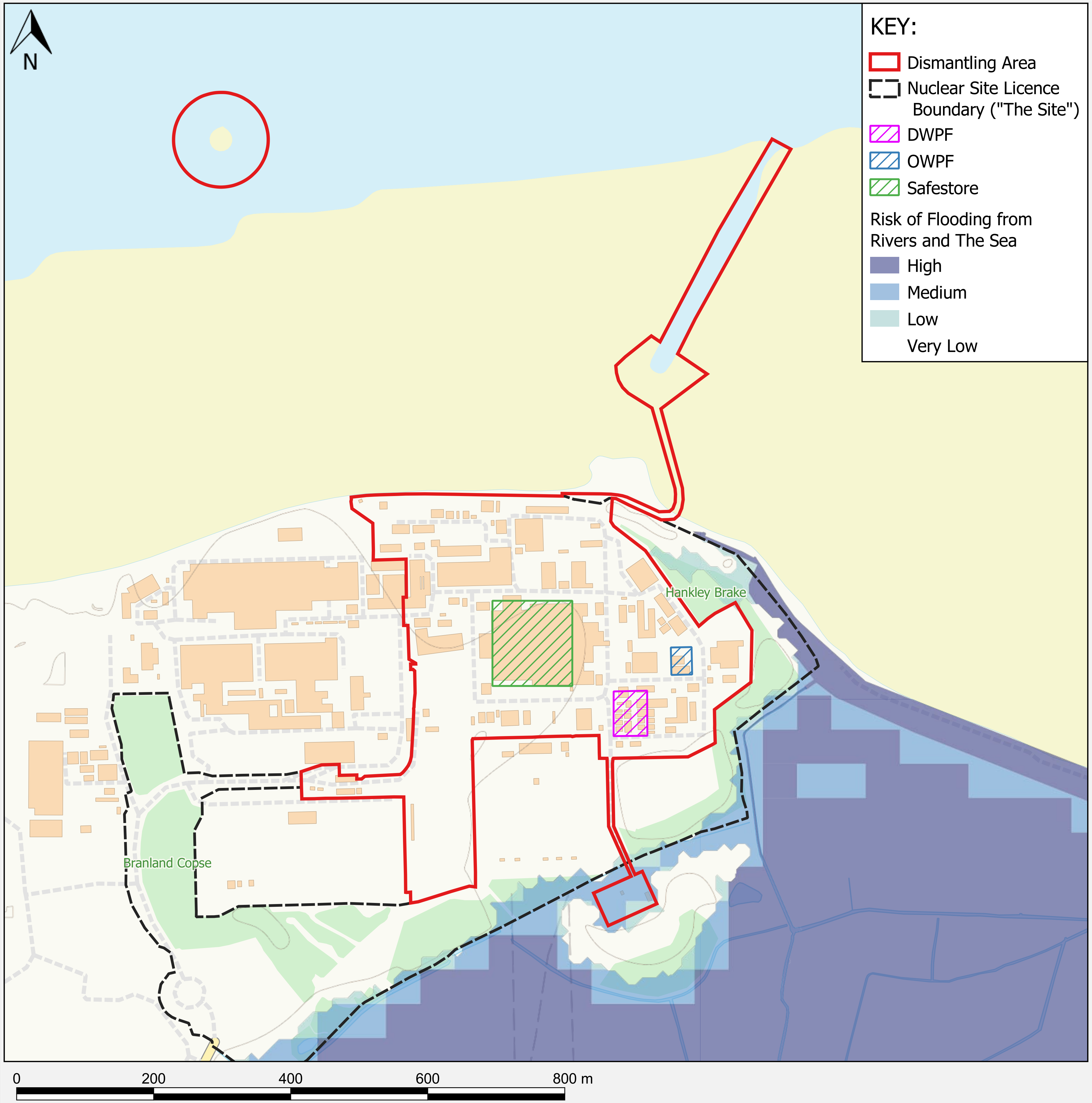
This map takes into account the effect of any flood defences in the area. These defences reduce but do not completely stop the chance of flooding as they can be overtopped, or fail.

High Risk - Land having a 1 in 30 or greater annual probability (>3.3% AEP) of flooding from rivers or the sea.

Medium Risk - Land having between a 1 in 30 and a 1 in 100 annual probability (1.0% - 3.3%) of flooding from rivers or the sea.

Low Risk - Land having between a 1 in 100 and a 1 in 1000 annual probability (0.1% - 1.0%) of flooding from rivers or the sea.

Very Low Risk - Land having a less than 1 in 1,000 annual probability (0.1% AEP) of flooding from rivers or the sea.



This data is indicative only and reference should always be made to the legal documentation. It should be noted that amendments to the datasets are made frequently and that the information may change.

Risk of Flooding from Surface Water

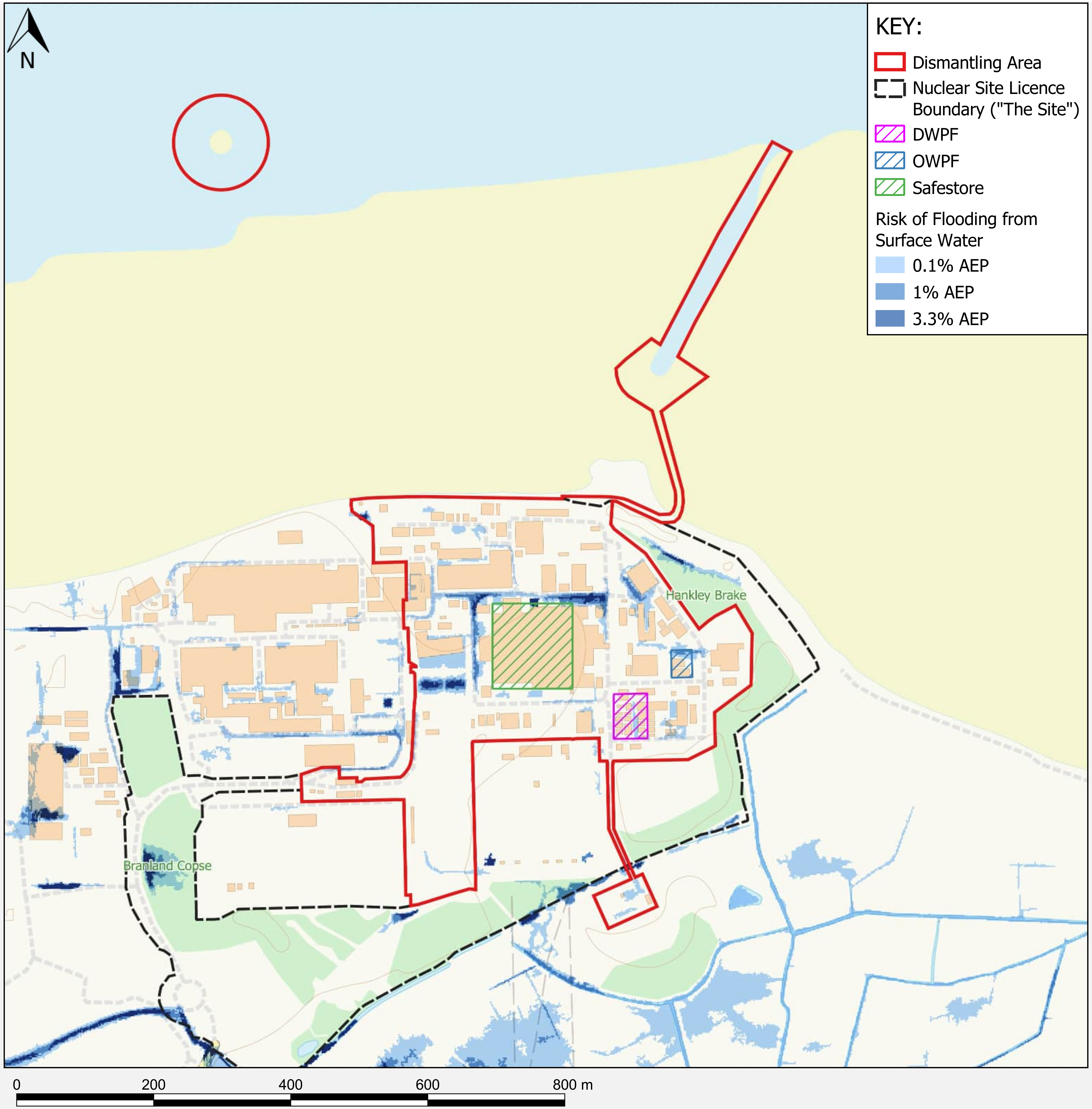
Flooding from surface water is difficult to predict as rainfall location and volume are difficult to forecast. In addition, local features can greatly affect the chance and severity of flooding.

High Risk - Land having a 1 in 30 or greater annual probability (>3.3% AEP) of flooding from surface water.

Medium Risk - Land having between a 1 in 30 and a 1 in 100 annual probability (1.0% - 3.3%) of flooding from surface water.

Low Risk - Land having between a 1 in 100 and a 1 in 1000 annual probability (0.1% - 1.0%) of flooding from surface water.

Very Low Risk - Land having a less than 1 in 1,000 annual probability (0.1% AEP) of flooding from surface water.



This data is indicative only and reference should always be made to the legal documentation. It should be noted that amendments to the datasets are made frequently and that the information may change.

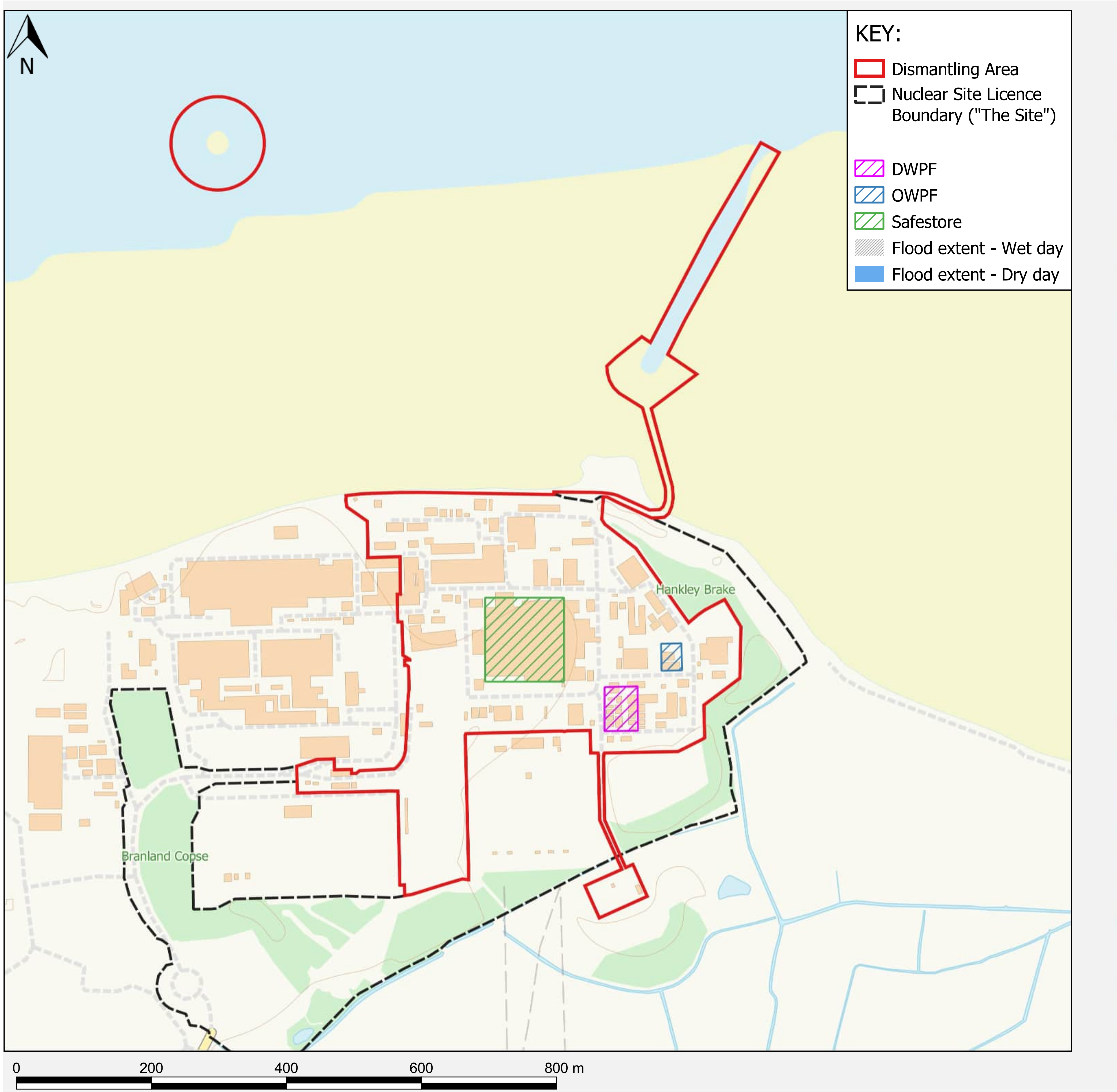
Risk of Flooding from Reservoirs

The Risk of Flooding from Reservoirs (wet day) layer shows the individual flood extents for all large raised reservoirs in the event that they were to fail and release the water held on a "wet day" when local rivers had already overflowed their banks.

It represents a prediction of a credible worst-case scenario, however it's unlikely that any actual flood would be this large. The data gives no indication of likelihood or probability of reservoir flooding.

The Risk of Flooding from Reservoirs (dry day) shows flood extents for all large raised reservoirs in the event that they were to fail and release the water held on a "dry day" when local rivers are at normal levels.

These national datasets are "indicative" not "definitive". Definitive information can only be provided by individual local authorities and you should refer directly to their information for all purposes that require the most up to date and complete dataset.



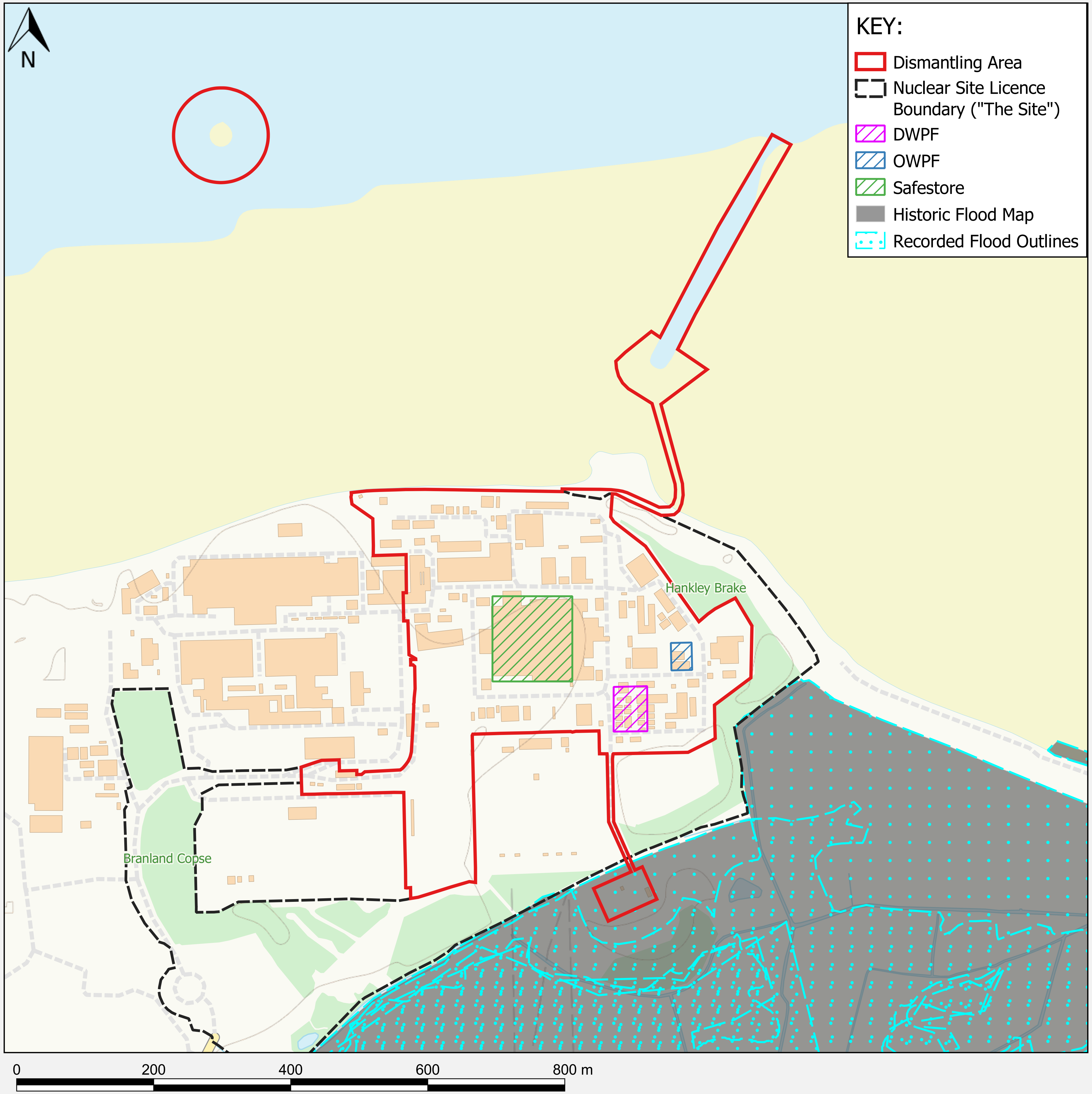
This data is indicative only and reference should always be made to the legal documentation. It should be noted that amendments to the datasets are made frequently and that the information may change.

Previous Flooding

RECORDED FLOOD OUTLINES
Recorded Flood Outlines shows all records of historic flooding from rivers, the sea, groundwater and surface water. The absence of coverage by Recorded Flood Outlines for an area does not mean that the area has never flooded, only that there are currently no records of flooding in this area. It is also possible that the pattern of flooding in this area has changed and that this area would now flood or not flood under different circumstances. The Recorded Flood Outlines take into account the presence of defences, structures, and other infrastructure where they existed at the time of flooding. It includes flood extents that may have been affected by overtopping, breaches or blockages. Any flood extents shown do not necessarily indicate that properties were flooded internally.

HISTORIC FLOOD MAP
The Historic Flooding shows the maximum extent of individual Recorded Flood Outlines from river, the sea and groundwater springs that meet a set criteria. It shows areas of land that has previously been subject to flooding. This excludes flooding from surface water, except in areas where it is impossible to determine whether the source is fluvial or surface water, but the dominant source is fluvial. If an area is not covered by the Historic Flood Map it does not mean that the area has never flooded, only that the EA do not currently have records of flooding in this area that meet the criteria for inclusion. It is also possible that the pattern of flooding in this area has changed and that this area would now flood or not flood under different circumstances. Outlines that don't meet these criteria are stored in the Recorded Flood Outlines dataset. The Historic Flood Map takes into account the presence of defences, structures, and other infrastructure where they existed at the time of flooding. It will include flood extents that may have been affected by overtopping, breaches or blockages. Flooding is shown to the land and does not necessarily indicate that properties were flooded internally.

If an area is not covered by these layers, it does not mean that the area has never flooded, only that there are not currently records of flooding in the area.



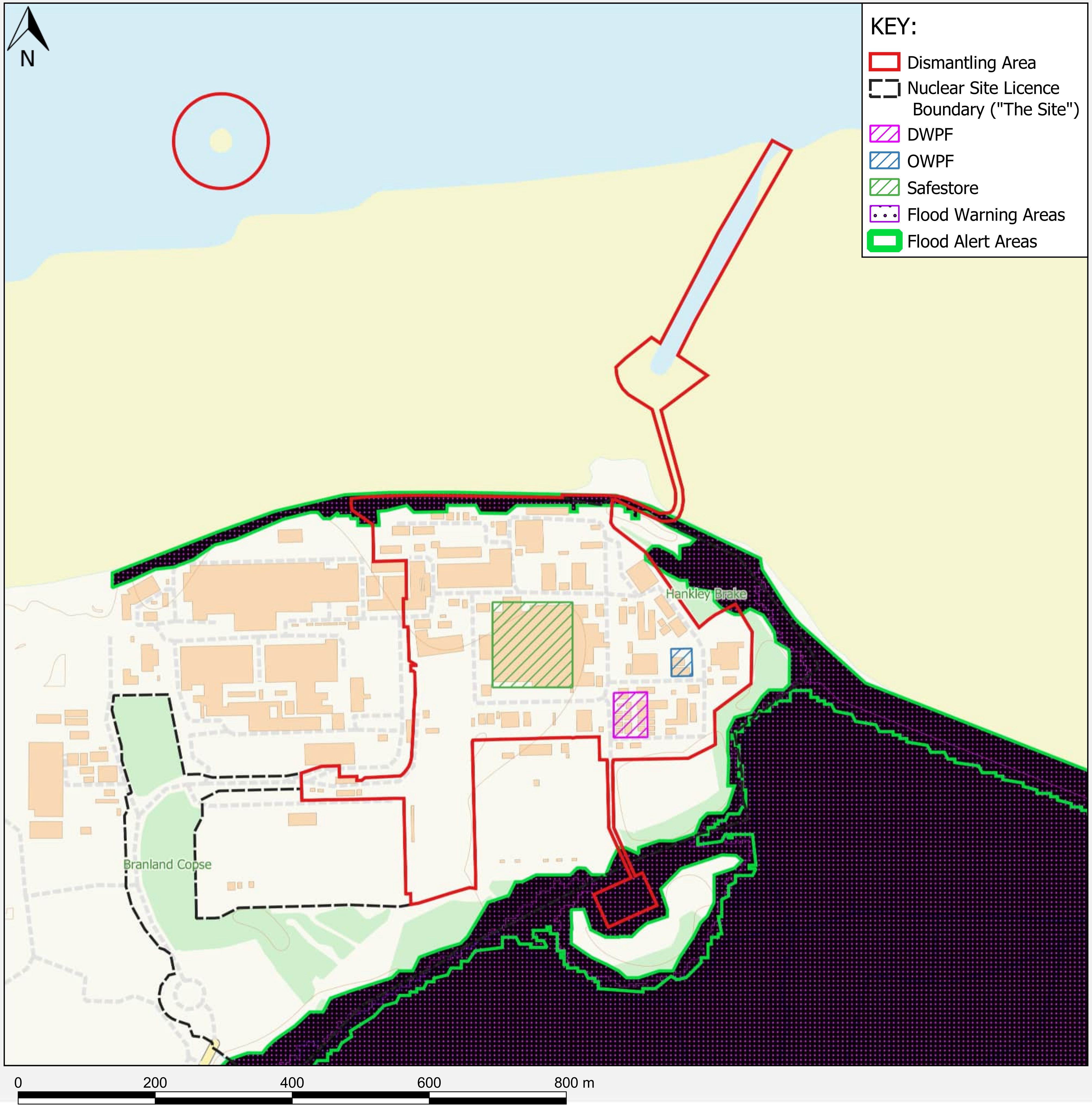
This data is indicative only and reference should always be made to the legal documentation. It should be noted that amendments to the datasets are made frequently and that the information may change.

Flood Alert and Warning Areas

FLOOD ALERT AREAS
Flood Alert Areas are areas where it is possible for flooding to occur from rivers, sea and in some location's groundwater. A single Flood Alert Area may cover the floodplain within the Flood Warning Service Limit of multiple catchments of similar characteristics containing a number of Flood Warning Areas. A Flood Alert Area may also match that of a corresponding Flood Warning Area and warn for the possibility of flooding in that area. In some coastal locations a Flood Alert may be issued for spray or overtopping and be defined by a stretch of coastline. Practical and administrative factors may also influence the exact extent of a Flood Alert Area. A Flood Alert is issued to warn people of the possibility of flooding and encourage them to be alert stay vigilant and make early / low impact preparations for flooding. Flood Alerts are issued earlier than Flood Warnings to provide advance notice of the possibility of flooding and may be issued when there is less confidence that flooding will occur in a Food Warning Area.

FLOOD WARNING AREAS
Flood Warning Areas are areas where flooding is expected to occur and where a Flood Warning Service is provided. Areas generally contain properties that are expected to flood from rivers or the sea and in some areas, from groundwater. Specifically, Flood Warning Areas define locations within the Flood Warning Service Limit that represent a discrete community at risk of flooding. The purpose of Flood Warnings is to alert people that flooding is expected, and they should take action to protect themselves and their property. Flood Warnings are issued when flooding is expected to occur, Severe Flood Warnings are issued to similar areas when there is a danger to life or widespread disruption is expected.

If an area is not covered by these layers, it does not mean that the area has never flooded, only that there are not currently records of flooding in the area.



This data is indicative only and reference should always be made to the legal documentation. It should be noted that amendments to the datasets are made frequently and that the information may change.

Source Protection Zones & Borehole Records

Source Protection Zones
Source Protection Zones (SPZs) are defined around large and public potable groundwater abstraction sites. The purpose of SPZs is to provide additional protection to safeguard drinking water quality through constraining the proximity of an activity that may impact upon a drinking water abstraction.

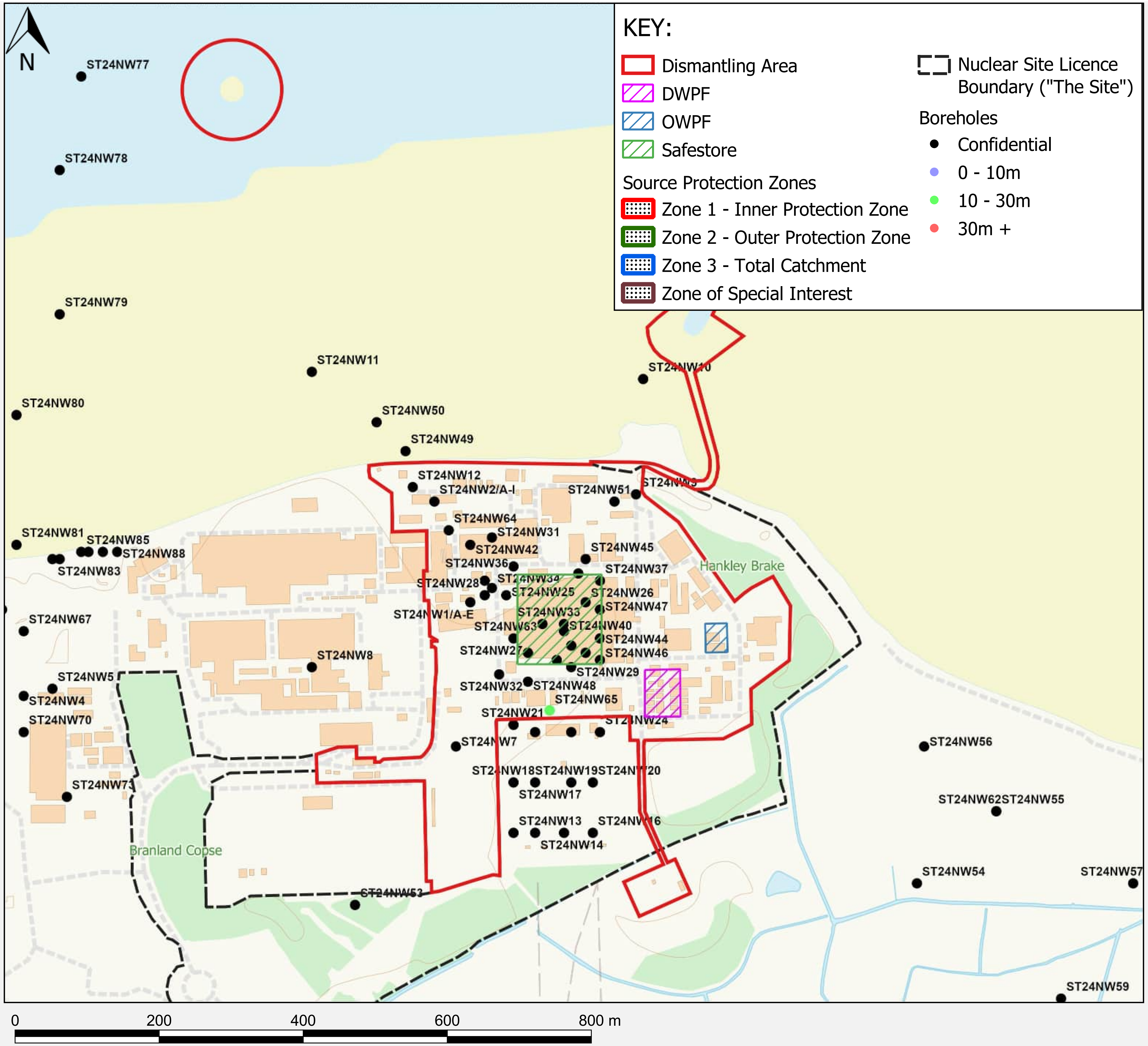
The following subdivisions are defined within SPZs:

Zone 1: (Inner Protection Zone) - This zone is defined by a travel time of 50-days or less from any point within the zone at, or below, the water table. Additionally, the zone has as a minimum a 50-metre radius. It is based principally on biological decay criteria and is designed to protect against the transmission of toxic chemicals and water-borne disease.

Zone 2: (Outer Protection Zone) - This zone is defined by the 400-day travel time from a point below the water table. Additionally this zone has a minimum radius of 250 or 500 metres, depending on the size of the abstraction. The travel time is derived from consideration of the minimum time required to provide delay, dilution and attenuation of slowly degrading pollutants
.
Zone 3: (Total catchment) - This zone is defined as the total area needed to support the abstraction or discharge from the protected groundwater source.

Zone 4, or 'Zone of Special Interest' is occasionally defined for some groundwater sources. These zones highlight areas (mainly on non-aquifers) where known local conditions mean that potentially polluting activities could impact on a groundwater source, even though the area is outside the normal catchment of that source.

Borehole Records
Borehole records are made available from the British Geological Survey. Boreholes range from one to several thousand metres deep. Borehole records are produced from a geologist's or surveyor's observations of the rock core extracted from the ground and typically include locality and lithological descriptions with depth and thickness. Geophysical logs may also be noted from on-site measurements.



This data is indicative only and reference should always be made to the legal documentation. It should be noted that amendments to the datasets are made frequently and that the information may change.

70 Chancery Ln
London
WC2A 1AF

Flood Map Pack | wsp.com

WSP Sustainable Water Management

+44 (0)20 7314 5000

Annex B

Somerset County Council Information Request Team

Information Requests
County Hall
B2S
The Crescent
Taunton
TA1 4DY
Reference: 9137525

11 March 2022

Dear Requester

Environmental Information Regulations 2004

Thank you for your request for information. We have processed your request under the provisions of the Environmental Information Regulations 2004.

Your Request & Our Response:
I am contacting you with regard to a proposal by EDF Energy (the Applicant) to decommission Hinkley Point B (HPB) Nuclear Power Station, and construct and operate waste management facility(ies) to enable the decommissioning. Wood Group UK Ltd, of which I am an employee, have been contracted by the Applicant to complete the baseline data collection required for the Environmental Impact Assessment (EIA) for the waste management facility(ies) at HPB. An initial conference call meeting was held with SCC via Microsoft Teams on the 22nd July 2021 to give a brief overview of proposals and set out the scope of the surface water site survey.

In order to support the baseline assessment I was hoping to obtain the following information from SCC:
* Any coastal or fluvial modelling held for the adjacent coastline and unnamed ditch to the south of the site, including flood level/ depth data and estimates of return period. Any information on flood defences present along the coastline including reference to climate change standards, elevation of defence crest, condition of defences (We have also put in a request for this to the Environment Agency for these datasets if SCC does not hold them)
Not Held - this should be answered by either the EA or the IDB (or both)

*Private water supply data for surface fed supplies in the vicinity of the Site (including information on the location of their source locations and point of consumption, type of use, households served, abstraction type) if applicable.

Wessex Water should hold this information, or the District EHO's may be able to assist for this you will need to contact Sedgemoor District Council.

:I am advising you that the information you requested is not held by Somerset County Council. Therefore regulation 12(4)(a) applies to your request. Regulation 12(4)(a) provides an exception to the duty to disclose information when information is not held.

Enter the reason why the information requested is not held

Please quote the reference number 9137525 in any future communications.

I will now close this request.

If you feel your request has not been answered in sufficient detail, or if you wish to clarify the information given, please contact me, and I will be happy to address the issues you raise.

Alternatively, if you are not satisfied with our response you may request an internal review. This is an independent investigation into the handling of your request, which is carried out by the Information Governance Team. The conclusions of this investigation, and if applicable, a fresh decision about the information to be provided, should be sent to you within twenty working days of receipt of the internal review request.

To request an Internal Review please respond to this letter detailing why you are not satisfied, and your request will be dealt with by the information governance team.

If you are not satisfied with the results of the internal review, you may then appeal directly to the Information Commissioner's Office with your complaint. The Information commissioner can be contacted at: Information Commissioner's Office, Wycliffe House, Water Lane, Wilmslow, Cheshire, SK9 5AF
Telephone: 0303 123 1113
Web address: www.ico.gov.uk
https://ico.org.uk/make-a-complaint/

I will now close your request as of this date.

Yours sincerely

Information Request Officer
CCM Freedom of Information Requests Team

creating a better place

Environment Agency

Guy Douglas
John Wood Group PLC
guy.douglas@woodplc.com

Our ref: 264276-WX
Your ref:
Date: 17 June 2022

Dear Guy

Information request for:

Hinkley Point B, Bridgwater, TA5 1UD

Thank you for your enquiry which was received on 11 May 2022.

Please refer to Open Government Licence which explains the permitted use of this information. The following information is not available under the Open Government Licence, but we may be able to license it to you under the Environment Agency Conditional Licence.

Name	Product 5 and Product 6
Description	North Coast Tidal Model
Sharefile link(s)	https://ea.sharefile.com/d-s880ddfcde25042218fcaa46ab893d786
Conditions	1 You may use the Information for your internal or personal purposes and may only sublicense others to use it if you do so under a written licence which includes the terms of these conditions and the agreement and in particular may not allow any period of use longer than the period licensed to you. 2 Notwithstanding the fact that the standard wording of the Environment Agency Conditional Licence indicates that it is perpetual, this Licence has a limited duration of 5 years at the end of which it will terminate automatically without notice. 3 We have restricted use of the Information as a result of legal restrictions placed upon us to protect the rights or confidentialities of others. In this instance it is because of third party data. If you contact us in writing (this includes email) we will, as far as confidentiality rules allow, provide you with details including, if available, how you might seek permission from a third party to extend your use rights. 4.1 The Information may contain some data that we believe is within the definition of “personal data” under the Data Protection Act 1998 but we consider that we will not be in breach of the Act if we disclose it to you with conditions set out in this condition and the conditions above. This personal data comprises names of individuals or commentary relating to property that may be owned by an individual or commentary relating to the activities of an individual.

	4.2 Under the Act a person who holds and uses or passes to others personal data is responsible for any compliance with the Act and so we have no option but to warn you that this means you have responsibility to check that you are compliant with the Act in respect of this personal data. 5. The location of public water supply abstraction sources must not be published to a resolution more detailed than 1km2. Information about the operation of flood assets should not be published. 6.1 Where we have supplied model data which may include model inputs or outputs you agree to supply to the Environment Agency copies of any assessments/studies and related outputs, modifications or derivatives created pursuant to the supply to you of the Information, all of which are hereinafter referred to as “the Data”. 6.2 You agree, in the public interest to grant to the Environment Agency a perpetual royalty free non-exclusive licence to use the Data or any part thereof for its internal purposes or to use it in any way as part of Environment Agency derivative products which it supplies free of charge to others such as incorporation into the Environment Agency's Open Data mapping products.
Information Warnings	Please be aware that model data is not raw, factual or measured but comprises of estimations or modelled results based on the data available to us. *Any mapping of features provided as a background in this product is © Ordnance Survey. It is provided to give context to this product. The Open Government Licence does not apply.*
Attribution	Contains Environment Agency information © Environment Agency and/or database rights. Contains Ordnance Survey data © Crown copyright 2019 Ordnance Survey 100024198.

Further Information
We advise that you also contact the Flood Risk Management Team, by email flooding@somerset.gov.uk, or by telephone, 0300 123 2224 at Somerset County Council, County Hall, Taunton, Somersetthe Flood Risk Management Team, by email flooding@somerset.gov.uk, or by telephone, 0300 123 2224 at Somerset County Council, County Hall, Taunton, Somerset as they may be able to provide further advice with respect to localised flooding and drainage issues.

Further details about the Environment Agency information supplied can be found on our website:
https://www.gov.uk/browse/environment-countryside/flooding-extreme-weather
You MUST first check the supporting information and the above link to determine if the conditions on use are suitable for your purposes. If they aren’t, this information is not provided with a licence for use, and the data is provided for read right only.

We hope you find this information helpful.

Yours sincerely

Corinne Moyse

Customer & Engagement, Wessex
Rivers House, East Quay, Bridgwater, Somerset, TA6 4YS
Telephone number: 02030 250 376
Email: wessexenquiries@environment-agency.gov.uk

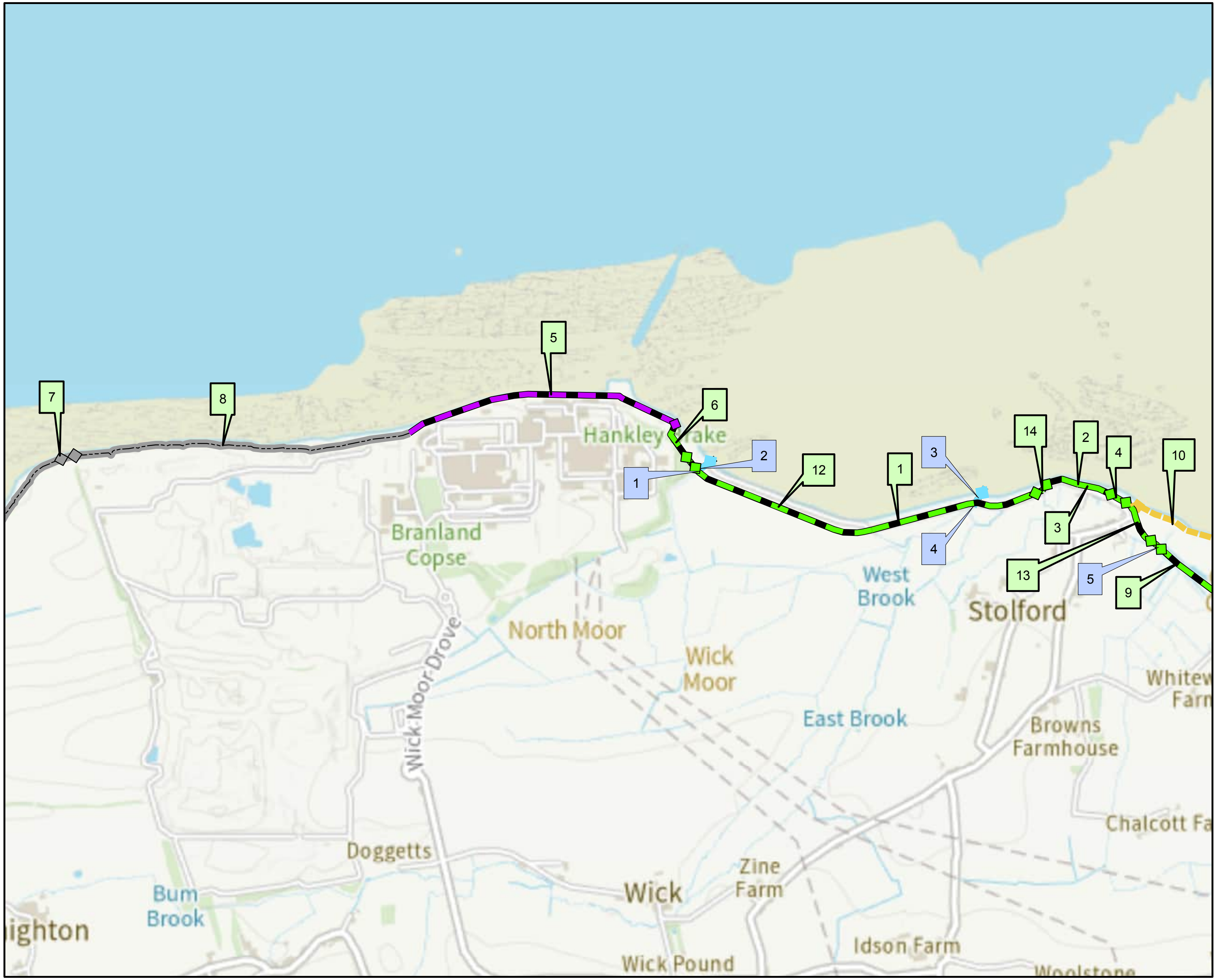
Product 4 - AIMS Information **264276-WX** **Date:** **13/06/2022**

Map Ref	Asset ID	Asset Type	Right or left bank	Asset Description	Approx length (m)	Actual fluvial downstream crest level (mAOD)	Actual fluvial downstream crest level accuracy	Actual fluvial upstream crest level (mAOD)	Actual fluvial upstream crest level accuracy	Actual fluvial coastal crest level (mAOD)	Actual fluvial coastal crest level accuracy	NGR	Most recent inspection	Overall condition
1	102490	Embankment	Coastal	Stolford, Rock Armour both sides of Great Arch Outfall	639.20	DNR	DNR	DNR	DNR	8.23	1 - +/- 0.01m to 0.05m vertical accuracy (Typically on site survey)	ST22794594	09/03/2021	2 - Good
2	102491	Embankment	Coastal	Sea Wall, Rock Armour	33.36	DNR	DNR	DNR	DNR	8.41	1 - +/- 0.01m to 0.05m vertical accuracy (Typically on site survey)	ST23114601	09/03/2021	3 - Fair
3	102492	Embankment	Coastal	Roadway, Embankment, Rock Armour. Formal defence crest is roadway	112.89	DNR	DNR	DNR	DNR	8.30	1 - +/- 0.01m to 0.05m vertical accuracy (Typically on site survey)	ST23184599	09/03/2021	3 - Fair
4	102493	Embankment	Coastal	Roadway, Embankment, Rock Armour. Formal defence crest is roadway	64.78	DNR	DNR	DNR	DNR	8.27	1 - +/- 0.01m to 0.05m vertical accuracy (Typically on site survey)	ST23274594	09/03/2021	3 - Fair
5	103072	Wall	Coastal	Hinkley Point Power Station Wave Return Seawall, Gabions behind The protection of the three Hinckley Point sites is not the responsibility of the EA, it falls to the operators and they carry out their own asset surveys, maintenance, adaptation projects	1040.37	DNR	DNR	DNR	DNR	8.34	1 - +/- 0.01m to 0.05m vertical accuracy (Typically on site survey)	ST21114634	04/03/2015	2 - Good
6	104524	Embankment	Coastal	Hinkley Point Rock Armour Layer Defence	137.33	DNR	DNR	DNR	DNR	8.67	1 - +/- 0.01m to 0.05m vertical accuracy (Typically on site survey)	ST21644616	04/03/2015	3 - Fair
7	112208	Cliff	Coastal	Cliff	2588.13	DNR	DNR	DNR	DNR	7.84	1 - +/- 0.01m to 0.05m vertical accuracy (Typically on site survey)	ST18574543	23/01/2007	3 - Fair
8	40039	Cliff	Coastal	new Sea wall for Hinkley C. 1:10,000 SoP. The protection of the three Hinckley Point sites is not the responsibility of the EA, it falls to the operators and they carry out their own asset surveys, maintenance, adaptation projects and most importantly	1261.10	13.50	1 - +/- 0.01m to 0.05m vertical accuracy (Typically on site survey)	13.50	1 - +/- 0.01m to 0.05m vertical accuracy (Typically on site survey)	13.50	1 - +/- 0.01m to 0.05m vertical accuracy (Typically on site survey)	ST19924616	16/11/2010	3 - Fair
9	40040	Embankment	Coastal	Embankment, Rock Armour along foreshore, Track. Formal defence crest is along track. Inner defence, set back approx.100m from shingle ridge, asset id. 45728	1441.38	DNR	DNR	DNR	DNR	8.22	1 - +/- 0.01m to 0.05m vertical accuracy (Typically on site survey)	ST23884550	23/02/2022	3 - Fair
10	45728	Barrier Beach	Coastal	Shingle Ridge, providing protection to defence asset id.40040 behind	1451.41	DNR	DNR	DNR	DNR	7.21	DNR	ST23794574	23/02/2022	5 - Very Poor
12	4842	Embankment	Coastal	ROCK REVETMENT AND SEAWALL	714.59	DNR	DNR	DNR	DNR	8.19	1 - +/- 0.01m to 0.05m vertical accuracy (Typically on site survey)	ST22224585	09/03/2021	3 - Fair
13	522458	Embankment	Coastal	kerbline at top of hillblock revetment is new crest of defence + 8.95 MAoD	168.81	8.95	DNR	8.95	DNR	8.95	DNR	ST23314585	23/02/2022	2 - Good
14	55905	Embankment	Coastal	Seawall, Rock Armour	149.01	DNR	DNR	DNR	DNR	8.42	1 - +/- 0.01m to 0.05m vertical accuracy (Typically on site survey)	ST23014603	09/03/2021	3 - Fair

Map Ref	Asset ID	Asset Type	Right or left bank	Asset Description	Approx length (m)	Actual fluvial downstream crest level (mAOD)	Actual fluvial downstream crest level accuracy	Actual fluvial upstream crest level (mAOD)	Actual fluvial upstream crest level accuracy	Actual fluvial coastal crest level (mAOD)	Actual fluvial coastal crest level accuracy	NGR	Most recent inspection	Overall condition

Map Ref	Asset ID	Asset Type	Right or left bank	Asset Description	Approx length (m)	Actual fluvial downstream crest level (mAOD)	Actual fluvial downstream crest level accuracy	Actual fluvial upstream crest level (mAOD)	Actual fluvial upstream crest level accuracy	Actual fluvial coastal crest level (mAOD)	Actual fluvial coastal crest level accuracy	NGR	Most recent inspection	Overall condition
1	521952	Simple Culvert	DNR	Culvert from upstream headwall to centre flap chamber.	25.95	DNR	DNR	DNR	DNR	DNR	DNR	ST21724607	09/03/2021	3 - Fair
2	521996	Simple Culvert	DNR	tidal section of culvert from to beach to internal tide flap	62.91	DNR	DNR	DNR	DNR	DNR	DNR	ST21764609	01/03/2022	2 - Good
3	522005	Simple Culvert	DNR	Outfall culvert for Great Arch , downstream of the tidal flap chamber.	45.92	DNR	DNR	DNR	DNR	DNR	DNR	ST22744599	28/02/2022	2 - Good
4	522092	Simple Culvert	DNR	Armco Culvert from Great Arch inlet to internal flap valve chamber.	34.75	DNR	DNR	DNR	DNR	DNR	DNR	ST22724595	09/03/2021	3 - Fair
5	523714	Simple Culvert	DNR	Armco culvert	15.64	DNR	DNR	DNR	DNR	DNR	DNR	ST23384579	28/02/2022	3 - Fair

Current Flood Defences centred on NGR ST 21400 46000, created 13/06/2022 Ref: 264276-WX



Environment Agency

Scale: 1:20,000

N
W E
S

Legend

Defences

- Barrier Beach
- Beach
- Bridge Abutment
- Cliff
- Demountable Defence
- Dunes
- Embankment
- Engineered High Ground
- Flood Gate
- Natural High Ground
- Promenade
- Quay
- Spillway
- Wall

Culverts

- Simple Culvert
- Complex Culvert

This data has been extracted from the Asset Information Management System (AIMS OM) which was created to draw various data sources into one database and has been populated with information of varying quality.

Contact Us: National Customer Contact Centre, PO Box 544, Rotherham, S60 1BY. Tel: 03708 506 506 (Mon-Fri 8-6). Email: enquiries@environment-agency.gov.uk

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12

Soils, geology and hydrogeology

PUBLIC

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12A

Preliminary Risk Assessment (PRA)

PUBLIC

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13

Historic Environment

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13A

HPB Survey Report

PUBLIC

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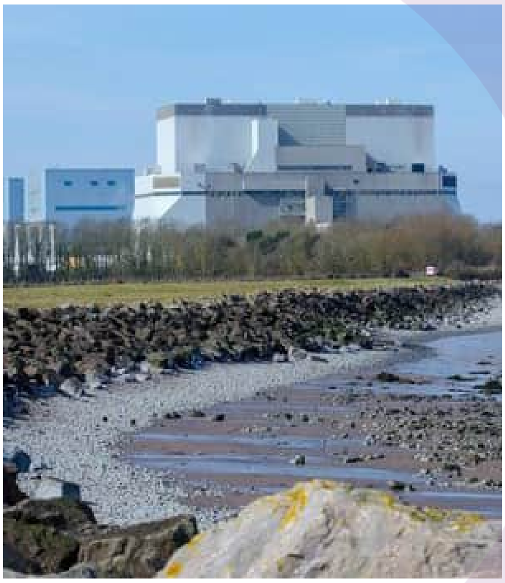
EDF Energy Nuclear Generation Ltd

Decommissioning Hinkley Point B

Historic Environment Survey Report



Wood Group UK Limited – October 2021

wood.

Report for

EDF Energy Nuclear Generation Ltd
Barnett Way
Barnwood
Gloucester GL4 3RS

Main contributors

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Issued by

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Approved by

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Doc Ref. 807184-WOOD-XX-XX-RP-O-00004_S0_P02

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Management systems

This document has been produced by Wood Group UK Limited in full compliance with our management systems, which have been certified to ISO 9001, ISO 14001 and ISO 45001 by Lloyd's Register.

Document revisions

No.	Details	Date
1	Draft	14.09.2021
2	Final	14.10.2021

Executive summary

Purpose of this report

This Historic Environment Survey Report has been produced for the purpose of providing a baseline to consider the historic environment issues associated with the decommissioning of Hinkley Point B. It describes the key considerations of the historic environment at and surrounding the Site, including the archaeological and built heritage potential of the surrounding landscape within a 5 km study area.

Within the Site, there are no known archaeological sites or structures recorded within the National Heritage List for England (NHLE) or the online Somerset Historic Environment Record (HER). The only record shown within the power vicinity relates to a bone ring recovered from the area now occupied by Hinkley Point A, although there are no details of when this was recovered or what period it may relate to. Works necessary to construct the power stations would have disturbed any remains within developed areas and potentially within the wider area due to construction compounds.

Construction of the Hinkley Point B power station began in 1967, with generation beginning in 1976. It was the first Advanced Gas-cooled Reactor (AGR) to generate electricity to the grid in the UK. The majority of the buildings at Hinkley Point B are the original constructions of the 1960s and 1970s, interspersed with newer additions, replacements and cabins across the Site.

Scheduled monument Pixie's Mound (NHLE 1006226) is located 280 m south-west of the Site. Within the wider 5 km study area there are three other scheduled monuments at distances of 3 km and over from the Site.

The closest listed buildings to the Site are over 1.5 km in distance. Six listed buildings in the 5 km study area of the Site were found to have direct or partially obscured views to Hinkley Point B, two of which were within 2 km from the Site.

Given the security sensitivities of the nuclear site, specific building names and numbers are not included in this report, and only general terms of building uses are given.

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Figure 3.1 Detailed Site Plan with original buildings
Figure 3.2 Designated Historic Assets within a 5km study area

Appendix A Hinkley Point B Historic Site Plans
Appendix B Designated Heritage Assets

1. Introduction

1.1 Purpose of this report

EDF Energy (the Applicant) is developing proposals to decommission Hinkley Point B Nuclear Power Station, which would start with construction and operation of waste management facility(ies) ('the Proposed Scheme'). Wood Group UK Ltd has been contracted by the Applicant to complete the baseline data collection to inform the Environmental Impact Assessment (EIA) for the Proposed Scheme.

This report presents details of the Phase 1 Historic Environment survey that was undertaken to inform the EIA for the Proposed Scheme. It includes a brief description of the Proposed Scheme, before setting out information about the Phase 1 Historic Environment survey methodology, results and conclusions.

1.2 Site context

The Hinkley Point B Nuclear Power Station ('the Site') is situated approximately 12 km to the north-west of Bridgwater, in Bridgwater Bay south of the mouth of the River Severn and on the southern flank of the Severn Estuary. The Site location is shown in **Figure 3.1-3.2**. The centre of the Site is at approximate National Grid Reference (NGR) ST 212 459 and the area that is subject to the Nuclear Site Licence (NSL) extends to approximately 40.1 ha.

The majority of the Site is occupied by built structures and hard standing (mainly access roads and car parks). Bridgwater Bay lies immediately to the north. To the south and east of the Site there is a fringe of woodland and scrub, with areas of open grassland. Hinkley Point A borders the Site to the west and further west is the Hinkley Point C Development Project. The wider landscape to the south and east is agricultural.

1.3 Scheme description

The Applicant will be applying to decommission Hinkley Point B. The decommissioning will involve the dismantling and removal of all plant, equipment, services and buildings from the Site for the purpose of permanently preventing the continued operation of the power station. To facilitate the decommissioning of Hinkley Point B, waste management facility(ies) will be constructed and equipped to facilitate plant dismantling and allow retrieval, processing, packaging and storage of potentially mobile operational wastes.

2. Methodology

2.1 Study area

Aspects of the historic environment that are considered by this assessment consist of any designated and non-designated heritage assets within and directly surrounding the Site, as well as designated heritage assets within a 5 km study area in the wider historic environment. Non-designated heritage assets can include artefacts, sites of archaeological interest or surviving structures and manmade features within the landscape that are of historic interest but are not statutorily protected. Designated heritage assets are statutorily protected and include listed buildings, scheduled monuments, registered park and gardens and conservation areas, all of which are present within 5 km of the Site.

Given the security sensitivities of the nuclear site, specific building names and numbers at the Site are not included in this report and only general descriptions of building use are given. The historic site plans of Hinkley Point B are included in **Appendix A** which is provided as a confidential additional document.

2.2 Data gathering methodology

Summary of data sources

This historic environment survey has been supported by a number of data sources. The principal data sources used to inform this report comprise of the following:

- Somerset Historic Environment Record online (HER) (held by South West Heritage Trust)[1];
- National Heritage List for England (NHLE) – data obtained for an area of 5 km from the Site boundary[2];
- Historic Mapping and further information available through the Somerset Heritage Centre[3];
- Historic Environment (Chapter 23) prepared for the Hinkley Point C Development Site (*Environmental Statement - Volume 2 Hinkley Point C Development Site, 2011*[4]) and associated figures; and
- British Geological Survey Mapping.[5]

Zone of Theoretical Visibility (ZTV)

A preliminary ZTV has been generated to inform the scoping study. The ZTV has been based upon a Digital Terrain Model (DTM) (Ordnance Survey (OS) Terrain 5) and height for the tallest component of the Proposed Scheme i.e. the existing reactor building at a height of 64 m above ground level (agl).

The ZTV illustrates the topographic constraints on the visual influence of the existing and Proposed Scheme but does not take account of the built elements or vegetation within the study area, both of which can significantly reduce the area and extent of actual visibility. As a consequence, the DTM data has been amended to include areas of woodland and built form as depicted in OS VectorMap District to allow their

[1] Somerset Historic Environment Record (2021). Available at: https://www.somersetheritage.org.uk/ [Accessed 13 September 2021].
[2] National Heritage List for England (NHLE) (2021). Available at: https://historicengland.org.uk/advice/hpg/heritage-assets/nhle/ [Accessed 13 September 2021].
[3] Somerset Heritage Centre. Available at: https://swheritage.org.uk/somerset-archives/visit/somerset-heritage-centre/[Accessed 13 September 2021].
[4] EDF Energy (2011). *Environmental Statement – Volume 2 Hinkley Point C Development Site*.
[5] British Geological Survey (2021). GeoIndex [online]. Available at: http://www.bgs.ac.uk/geoindex/ [Accessed 13 September 2021].

screening effect to be incorporated in the ZTV calculation. A conservative height of 12 m has been used for the woodland exclusion zones.

Site visit

A site visit was undertaken on 10 August 2021 to survey the buildings at the Site. The whole of the Hinkley Point B Site was surveyed with the exclusion of restricted areas that would require specific health and safety permits or training to enable entry.

Using information from the preliminary ZTV, designated heritage assets within a 5 km radius of the site boundary were visited and intervisibility between the Site assessed. These sites are listed in **Section 3.3**.

3. Current baseline

3.1 Overview

Hinkley Point B Nuclear Power Station

The Hinkley Point B Nuclear Power Station is set on the north coast of Somerset approximately 6.5 km west of the River Parrett. The Site is located on the eastern edge of the Eastern Lowlands within the Quantock Vale character area of West Somerset[6]. This character area has been settled since at least the Romano British period although Stogursey is the largest settlement (designated as a conservation area), all other settlements are small, nucleated villages, hamlets and farms. As a result of the small-scale development within the area, the medieval landscape pattern is still visible in some areas. The Hinkley Point Nuclear Power Station Complex is a notable modern development in the area.

Hinkley Point B's location on the coast provides a setting which minimises risks to the historic environment to the north of the Site due to the lack of protected wreck sites in this area and the intervening distance between the English and Welsh coastlines. Views between Hinkley Point B and assets to the south are also in some instances restricted by areas of woodland and woodland belts that are characteristic of this area.

Within the Site, there are no known archaeological sites or structures recorded within the NHLE or within the online Somerset HER, apart from Hinkley Point B Nuclear Power Station itself. The only record shown within the power station relates to a bone ring recovered from the area now occupied by Hinkley Point A, although there are no details of when this was recovered or what period it may relate to Works necessary to construct the power stations would have disturbed any remains within developed areas and potentially within the wider area due to construction related activities including, for example, contractor compounds and plant and equipment laydown areas.

Designated heritage assets

There are no designated heritage assets within the Site boundary. Approximately 280 m south-west of the Site lies a scheduled monument, Pixie's Mound (NHLE 1006226). Pixie's Mound is a round cairn at the summit of a low hill, which was previously excavated in 19th Century revealing a burial structure with human remains and funerary objects. The dating of this monument is uncertain, but sherds of Neolithic pottery were recovered during the excavation. Within the wider 5 km study area there are three other scheduled monuments listed in **Appendix B: Designated heritage assets** and shown in **Figure 3.2**.

The closest listed buildings are over 1.5 km from the Site and as such any risks to these assets would be a result of visual or audible change in their settings. The listed buildings within the study area consist of a variety of structures ranging from isolated farmhouses and religious structures through to urban developments and manor houses listed in **Appendix B** and shown in **Figure 3.2**.

Stogursey Conservation Area is the only one within the 5 km study area and lies over 2.7 km south of the Site.

[6] WS Atkins (1999). *West Somerset Landscape Character Assessment*. West Somerset District Council [online]. Available at: https://www.somersetwestandtaunton.gov.uk/media/1224/west-somerset-landscape-character-assessment-1999.pdf [Accessed 13 September 2021].

Prehistoric to medieval

The presence of the scheduled round cairn known as Pixie's Mound located within a field directly south of the Site together with the results of excavations, fieldwalking and surveys undertaken to support the Hinkley Point C Development Project demonstrate that this area has been exploited by humans since the Mesolithic period and settled since at least the Bronze Age. Features recorded within the area range from flint spot finds, boundary features and settlements. Further flint scatters have also been recovered to the east of the Site near Stolford. Some of these sites have demonstrated multi-phase activity showing that these early settlements were developed and still in use in the Romano British period.

There is little evidence of Anglo-Saxon activity occurring within the area with the only record dating to this period being a carbon date obtained on the fills of iron working pits excavated in 2016 at Hinkley Point C.

Medieval period to the present day

The majority of settlements in the area surrounding Hinkley Point were established by the medieval period with Lilstock, Shurton, Kilton, Stringston, Stogursey, Fiddington, Otterhampton and Stockland Bristol all being recorded within the Domesday Book. A small settlement name, Seaburton, although no longer present, is also contained within the Domesday Book and this was in the location of what is now Hinkley Point. The grade II registered Fairfield Park (NHLE 1001144), which lies 3.3 km south-west of the Site, also contains evidence of medieval occupation including the grade II* listed Fairfield House (NHLE 1175243; 3.6 km south-west of the Site) which, although rebuilt in the late 16th Century, does have medieval origins.

Some areas of the coastline may also contain evidence of medieval fish weirs, with fishing activity continuing into the post medieval period as evidenced by further fish weirs and traps both recorded through aerial imagery and surviving to the present day.

Other than piecemeal development of existing structures and some shoreline management structures the only feature of note relating to the modern period is the power station itself.

3.2 Hinkley Point B Nuclear Power Station

Construction of the power station began in 1967, with generation beginning in 1976. It was the first Advanced Gas-cooled Reactor (AGR) to generate electricity to the grid in the UK[7].

The majority of the buildings at Hinkley Point B are the original constructions of the 1960s and 1070s. A site visit was undertaken on 10 August 2021 to survey the extant buildings at the Site, which are shown in **Figure 3.1** and in the Site plans (of 1970, 2007 and current) in **Appendix A**. Hinkley Point B and Hinkley Point A were originally one site, which was divided prior to 2007.

[7] EDF Energy (2021). *Hinkley Point B power station* [online]. Available at: https://www.edfenergy.com/energy/power-stations/hinkley-point-b [Accessed 13 September 2021].

The original turbine hall and reactor buildings are in the central area of the Site (**Plates 1-2**).

Plate 1. The original turbine hall and reactor building. View north-east.

Plate 2. The reactor building. View north-west.

There is a mixture of original and modern ancillary buildings in the western area of the Site (**Plate 3**).

Plate 3. Original ancillary building and modern office building in western site area, with original Hinkley Point B turbine hall in the background. View east.

There is a mixture of original and modern buildings in the southern area of the Site (**Plates 4-7**).

Plate 4. Original ancillary buildings and modern cabins to the south of the turbine hall. View south-west.

Plate 5. Modern plant to the south of the reactor building. View south-east.

Plate 6. Area of modern cabins to the south-east of the reactor building. View north.

Plate 7. Area of modern and original ancillary buildings in the south-east corner of site. View north-west.

There was a majority of original buildings in the eastern area of the Site (**Plates 8-9**).

Plate 8. Original ancillary building in the eastern site area. View north-east.

Plate 9. Original ancillary buildings in the eastern site area. View north-west.

There was a mixture of original and modern buildings in the northern area of the Site (**Plates 10-14**).

Plate 10. Original and modern ancillary buildings to the north of the reactor building. View north-west.

Plate 11. Original and modern ancillary buildings to the north of the turbine hall. View north.

Plate 12. Original workshop buildings in the northern area of the Site. View east.

Plate 13. Pumphouse in the northern site area. View east.

Plate 14. Water intake out to sea to the north. View north-east.

The interior of the reactor buildings and turbine hall included original fixtures (**Plates 15-19**).

Plate 15. Interior entrance to Reactor 4 Unit.

Plate 16. Reactor 4 Unit.

Plate 17. Reactor 3 Unit.

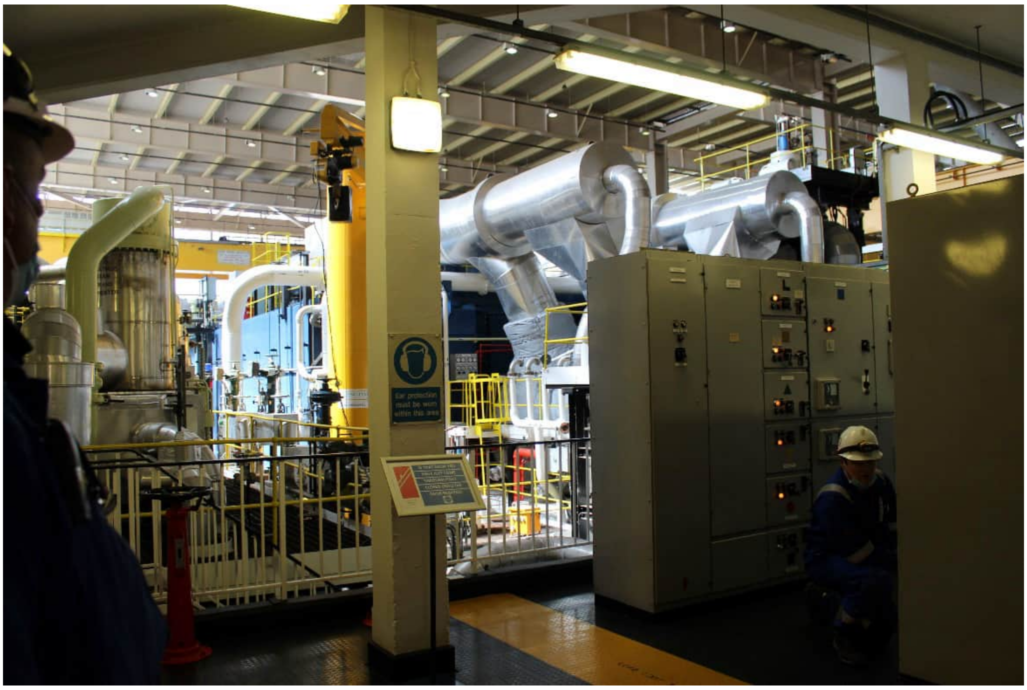


Plate 18. Reactor building interior features.

Plate 19. Turbine hall interior.

Site summary

There are no known designated or non-designated archaeological remains within the Site and the development of the power station would have substantially disturbed any archaeological deposits that may have been present.

The original buildings of the Hinkley B Nuclear Power Station itself survive from the 1960s and 1970s, interspersed with newer additions, replacements and cabins across the Site.

Hinkley Point B holds a limited degree of heritage significance for archaeological, architectural and historical interest:

- **Archaeological interest:** potential to inform study of the technical processes and social/cultural functioning of a nuclear power station, particularly in comparison to the earlier and subsequent generations of nuclear power stations both on this Site and more widely in the UK.
- **Architectural interest:** Hinkley Point B is an example of power station architecture of the late 1960s and can be compared in its architectural treatment and functional layout with later coal-fired power stations of similar age and with earlier and later generations of nuclear power stations. The AGR plants and their associated landscaping schemes were a largely standardised and functional design with some changes made in architectural treatment to suit local circumstances.
- **Historic interest:** the AGR plants were the second generation of nuclear power stations in the UK, and reflected a changing relationship with both nuclear power generation and other power generation technology more widely, representing significant improvements in safety and efficiency over the previous generation of nuclear power generation.

Structures within the Site contribute in varying degrees to this significance. The most notable are the reactor buildings and turbine halls, which present the key architectural response to the design and its location, and incorporate the central elements of the power station. Ancillary buildings of different generations, while of lesser value individually, have the potential to contribute to understanding of the history and operation of the power station.

Visual baseline – existing visibility

The ZTV for the tallest component of Hinkley Point B (the existing reactor building at a height of 64 m) extends widely across the 5 km offset study area. Visibility is concentrated across the lower lying coastal fringes primarily to the east of the existing power station. To the west, visibility is more fragmented along the coast as a consequence of the topography with further fragmentation likely to occur as a consequence of the presence of Hinkley Point A and the emerging Hinkley Point C[8], neither of which have been accounted for in the ZTV.

The fragmented excluded areas are concentrated at distances of ~2.5 km to the south and south-east of the Proposed Scheme. This fragmentation reflects the localised screening provided by the rolling topography and in some cases the small woodlands which are more common on the lower slopes south of the coastline. In reality, visibility is likely to be reduced from that shown in the ZTV as built form and localised tree cover and vegetation provide a screening role. High roadside hedgerows appear to be prevalent across the local landscape and are effective in screening views towards the existing power station complex from the narrow lanes which cross the landscape.

Future baseline

Changes within the study area may occur which could affect visibility of and from the Proposed Scheme. Change can arise through natural processes (e.g. the maturity of woodlands) or due to human activity, land use, management or neglect. The area around the Site is undergoing considerable and continual change as a consequence of the construction and subsequent operation of Hinkley Point C.

3.3 Designated heritage assets and setting

Designated heritage assets in the vicinity of the Proposed Scheme may be subject to change in setting that could give rise to a significant adverse effect. These are shown in **Figure 3.2,** listed in **Appendix B** and comprise:

[8] EDF Energy (2011). *Environmental Statement – Volume 2 Hinkley Point C Development Site* [online]. Available from: https://infrastructure.planninginspectorate.gov.uk/projects/south-west/hinkley-point-c-new-nuclear-power-station/?ipcsection=docs&stage=app&filter1=Environmental+Statement [Accessed 28 January 2020].

Scheduled round cairn known as Pixie's Mound

(NHLE 1006226; 280 m south-west of the Site)

The monument includes a Bronze Age funerary round cairn situated at the summit of a low hill, a prominent location overlooking Bridgwater Bay at Hinkley Point. The barrow survives as a circular mound measuring up to 27 m in diameter and 1.7 m high and has been repeatedly excavated in antiquity. The views towards Hinkley Point B are partially obscured by dense trees (**Plate 20**), but the power station and associated overhead lines are clearly visible.

Plate 20. Scheduled round cairn known as Pixie's Mound (NHLE 1006226), with view towards Hinkley Point B. View north-east.

Grade II listed Church of St Peter

(NHLE 1449993; 1.50 km south-east of the Site)

The Church of St Peter, a prefabricated timber building of 1854 which was erected at its current location in Stolford in 1866, is listed at Grade II for architectural and historic interest. It was previously located in West Quantoxhead (16 km to the west) as a temporary measure, while a stone church was constructed. The views towards Hinkley Point B are obscured by adjacent buildings and tall field hedges.

Grade II listed Chalcot Farmhouse

(NHLE 1175742; 2.20 km south-east of the Site)

17th century farmhouse, enlarged in the early-19th century, being extensively altered internally it was listed primarily for the early 19th century façade. Access to the area of the farmhouse itself was not possible, but adjacent views towards Hinkley Point B are screened by undulating topography and tall hedges.

Grade II listed Zine Farmhouse, Stogursey

(NHLE 1175753; 1.30 km south-east of the Site)

17th century farmhouse subsequently altered. There is a clearly visible direct view to Hinkley Point B from Zine Farmhouse (**Plate 21**).

Plate 21. Grade II listed Zine Farmhouse, Stogursey (NHLE 1175753), with view toward Hinkley Point B. View north-west.

Grade II listed Sea View, Stogursey

(NHLE 1057379; 1.55 km east of the Site)

17th century fisherman's cottage, with extensive later alterations. There is a direct view to Hinkley Point B with the power station being clearly visible above the existing hedges (**Plate 22**).

Plate 22. Grade II listed Sea View, Stogursey (NHLE 1057379), view toward Hinkley Point B. View west.

Grade II listed Water Farmhouse, Stogursey

(NHLE 1295357; 3.05 km south-west of the Site)

16th century farmhouse with later alterations. There are intermittent and partial views to Hinkley Point B, the views are difficult to discern, with the majority obscured by high hedges (**Plate 23**).

Plate 23. Grade II listed Water Farmhouse, Stogursey (NHLE 1295357), with view toward Hinkley Point B. View north-east.

Grade II listed The Poplars, Stockland Bristol

(NHLE 1237562; 3.40 km south-east of the Site)

17th-18th century house. There is a direct view to Hinkley Point B, but at a significant distance (**Plate 24**) and the power station and the associated overhead lines are not readily discernible in most views of or from the asset.

Plate 24. Grade II listed The Poplars, Stockland Bristol (NHLE 1237562), with a view towards Hinkley Point B. View north-west.

Grade II listed Church of St Mary Magdalene, Stockland Bristol

(NHLE 1059049; 3.40 km south-east of the Site)

19th century stone parish church, dated to 1865 from documents with links to the Daniel family of Stockland Manor, located on the Site of an earlier parish church. There was a partial view to Hinkley Point B from the church yard boundary, which was not readily discernible in most views of or from the asset. It was heavily screened by trees and would only be visible if the viewer actively searched (**Plate 25**).

Plate 25. Grade II listed Church of St Mary Magdalene, Stockland Bristol (NHLE 1059049), partial view towards Hinkley Point B. View north-west.

Grade II listed The Old Rectory, Otterhampton

(NHLE 1059048; 4.05 km south-east of the Site)

Early 19th century rectory, now a house. There were no direct views due to undulating topography.

Grade II listed Shurton Mills, Stogursey

(NHLE 1057402; 1.80 km south-west of the Site)

17th century mill owner's house, and attached outbuildings to north. The mill was attached to the south-west and not included in the listing. There were no direct views due to dense wooded vegetation.

Grade II listed Baptist Chapel, Stogursey

(NHLE 1057392; 2.40 km south-west of the Site)

Dated to 1833. There were no direct views due to high field hedges.

Grade II listed The Manse, Stogursey

(NHLE 1057391; 2.40 km south-west of the Site)

Late 18th century house adjoining the Baptist Chapel (NHLE 1057392). There were no direct views due to high field hedges.

Grade II listed Limekiln Complex

(NHLE 1057382; 3.70 km west of the Site)

Mid-19th century limekiln complex on the seashore, in poor condition and overgrown. Comprises part of the 19th century port of Lilstock. The limekiln complex was heavily overgrown and vegetation obscured direct views to Hinkley Point B, which was not readily discernible in most views of or from the asset. However, there were direct long-distanced views from the adjacent seashore (**Plate 26**).

Plate 26. Grade II listed Limekiln Complex (NHLE 1057382), view from the adjacent seashore towards Hinkley Point B. View east.

4. Summary and conclusions

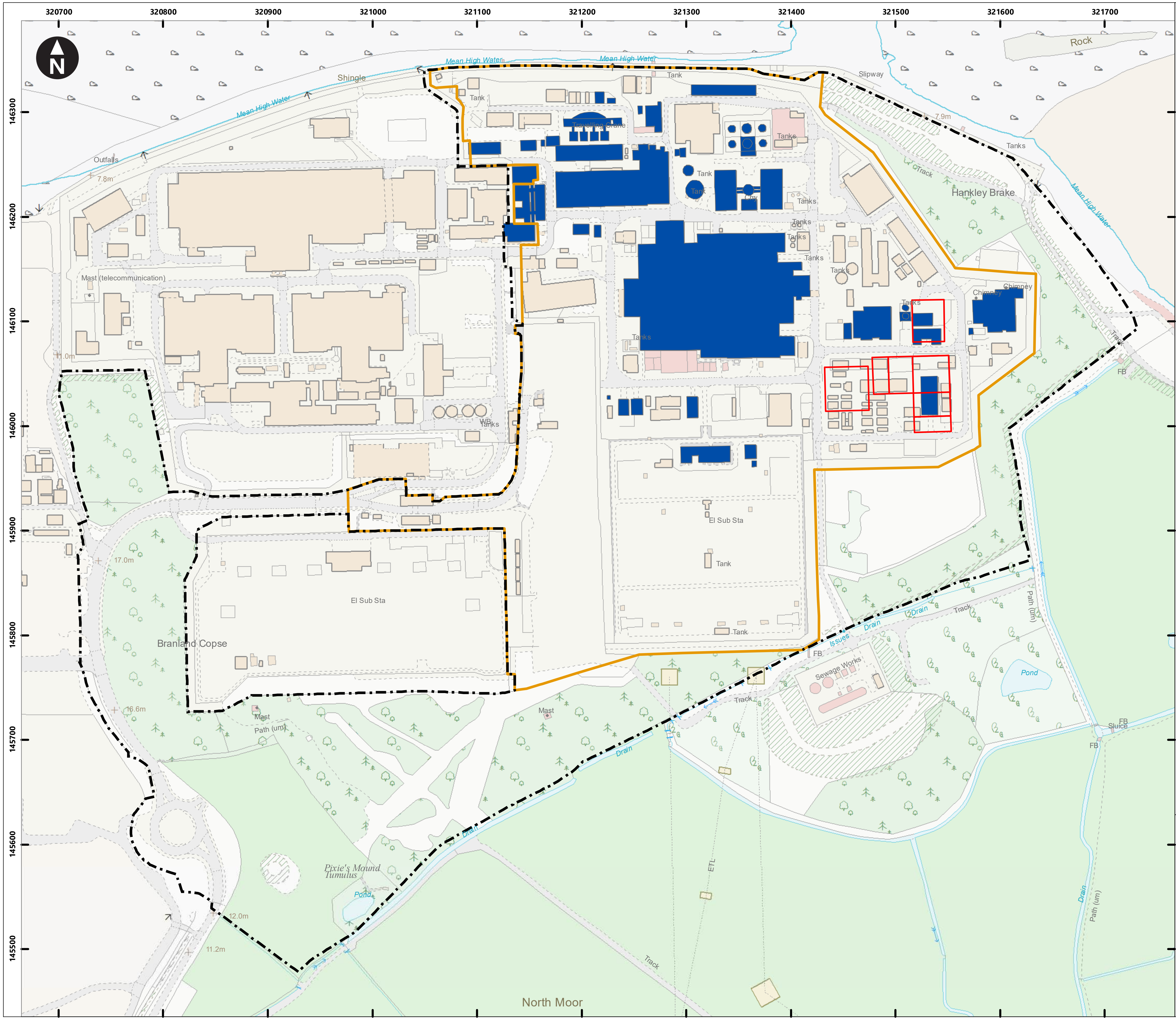
Within the Site, there are no known archaeological sites or structures recorded within the NHLE or within the online Somerset HER, apart from the Hinkley Point B Nuclear Power Station itself. The only record shown within the power vicinity relates to a bone ring recovered from the area now occupied by Hinkley Point A, although there are no details of when this was recovered or what period it may relate to. Works necessary to construct the power stations would have disturbed any remains within developed areas and potentially within the wider area due to construction activities. Given this context, the non-designated assets within a wider study area than the Site and its immediate surroundings, including those from the scheme of archaeological works undertaken for the Hinkley Point C Development Project, will be subject to further consideration when the detailed searches are undertaken to support the EIA as required.

Construction of the Hinkley Point B power station began in 1967, with generation beginning in 1976. It was the first Advanced Gas-cooled Reactor (AGR) to generate electricity to the grid in the UK. The majority of the buildings at Hinkley Point B are the original constructions of the 1960s and 1970s, interspersed with newer additions, replacements and cabins across the Site. Hinkley Point B holds a limited degree of heritage significance for archaeological, architectural and historical interest.

There are no designated heritage assets within the Site boundary. Scheduled monument, Pixie's Mound (NHLE 1006226) is located 280 m south-west of the Site. Within the wider 5 km study area there are three other scheduled monuments at distances of 3 km and over from the Site.

The closest listed buildings to the Site are over 1.5 km in distance and as such any risks to these assets would be a result of primarily visual change in their settings. Audible change in setting may arise, but at this separation it is considered unlikely that noise levels would be sufficiently high or sustained to give rise to any discernible loss of significance. Six listed buildings in the study area of the Proposed Scheme were found to have direct or partially obscured views to Hinkley Point B, two of which were within 2 km from the Site.

Figures



Decommissioning of Hinkley Point B Nuclear Power Station: Historic Environment Survey Report

Figure 3.1
Detailed site plan

October 2021

wood.

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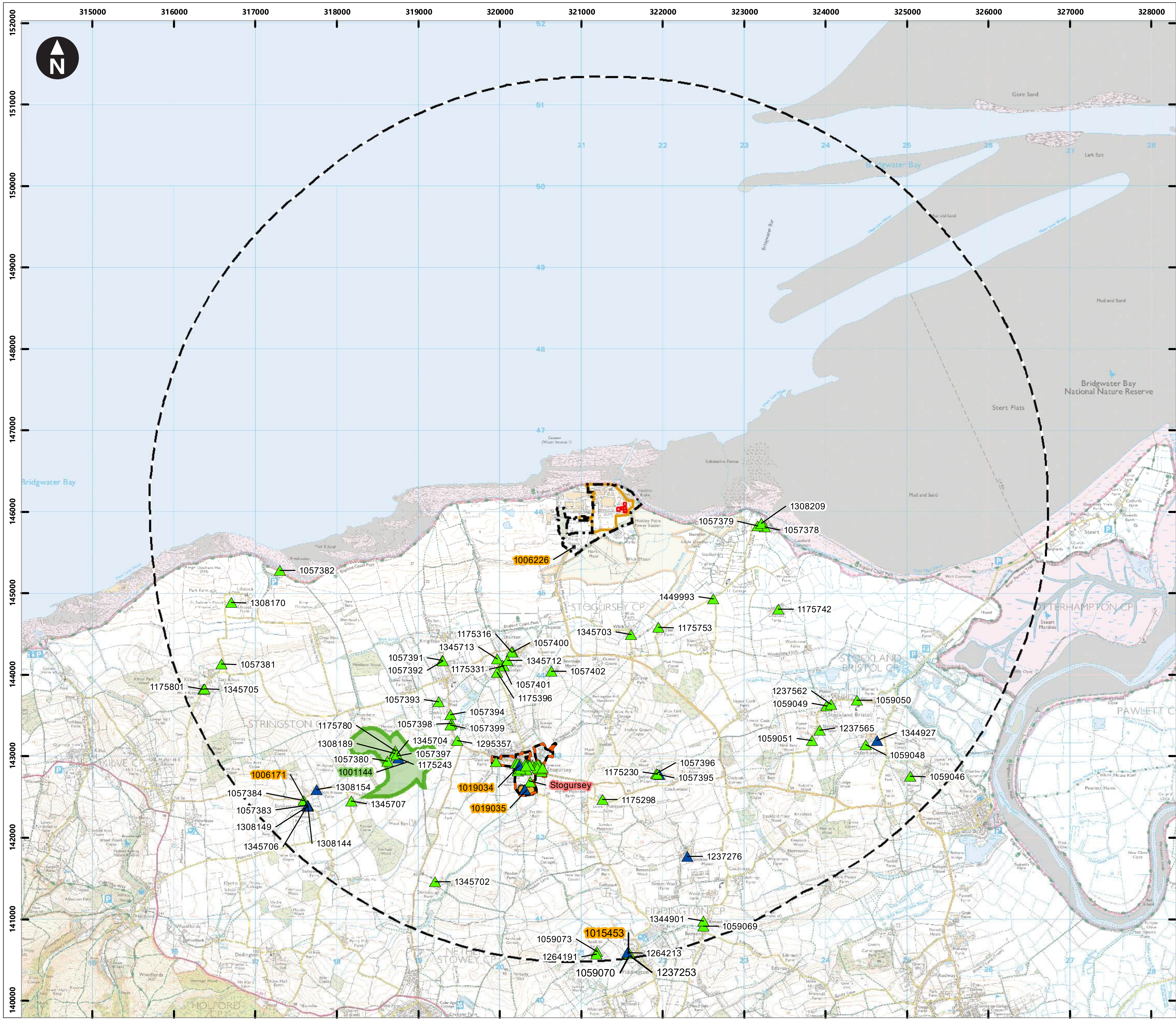

Key

- Hinkley Point B nuclear site licensed boundary
- Study area (5km buffer)
- Proposed waste facilities
- Double security fence boundary
- Scheduled monument
- Historic Parks and Garden
- Conservation area

Grade

- Grade I
- Grade II*
- Grade II

0 500 1,000 1,500 2,000 2,500 m

Scale at A3: 1:45,000

Decommissioning of Hinkley Point B Nuclear Power Station: Historic Environment Survey Report

Figure 3.2
Designated Historic Assets within a 5km study area

October 2021

wood.

807184-WOOD-XX-XX-FG-OH-00002_S0_P01.2

Appendix A
Hinkley Point B Historic Site Plans

Supplied as a separate confidential document.

Appendix B Designated Heritage Assets

A list of designated heritages assets located within 5 km of the Site boundary is provided in **Table B.1**.

Table B.1 Designated Heritage Assets

List Entry	Grade	Name	Location relative to site boundary (approx. metres)
Scheduled Monuments			
1006226	-	Round cairn known as Pixie's Mound	280 south-west
1019034	-	Village cross 75m north of St Andrew's Well	3000
1019035	-	Stogursey Castle	3150
1006171	-	Stringston churchyard cross	4850
Listed Buildings			
1057404	I	CHURCH OF ST ANDREW	2950
1057395	II*	STEYNING MANOR	3050
1057403	II*	STOGURSEY CASTLE	3250
1175243	II*	FAIRFIELD HOUSE	3650
1237276	II*	FARM ESTATE FARMHOUSE	4100
1295315	II*	CAUSEWAY BRIDGE AT EAST ENTRANCE TO STOGURSEY CASTLE	3250
1308144	II*	CHURCHYARD CROSS, 5 METRES SOUTH OF PORCH, CHURCH OF ST MARY	4850
1308149	II*	PRIOR FAMILY CHEST TOMB AND ENCIRCLING WROUGHT IRON RAILINGS, IN CHURCHYARD, 10 METRES SOUTH OF SOUTH CHAPEL, CHURCH OF ST MARY	4850
1308154	II*	PRIORS FARMHOUSE INCLUDING FARM BUILDINGS ADJOINING EAST	4600
1344927	II*	CHURCH OF ALL SAINTS	4150
1345701	II*	REMAINS OF VILLAGE CROSS	3000
1345706	II*	GOVETT FAMILY CHEST TOMB, IN CHURCHYARD ONE METRE WEST OF PORCH, CHURCH OF ST MARY	4850
1057368	II	GATES AND GATEPIERS TO IVY HOUSE	3000
1057369	II	DOVECOTE, ABOUT 28 METRES NORTH WEST OF PRIORY FARMHOUSE	3000

List Entry	Grade	Name	Location relative to site boundary (approx. metres)
1057370	II	CORNER COTTAGE	3000
1057371	II	CROSS COTTAGES	3000
1057372	II	OLD CROSS HOUSE	3000
1057373	II	RAILINGS, GATE AND DWARF WALL FRONTING OLD CROSS HOUSE ONTO HIGH STREET	3000
1057374	II	GATEPIERS AND ENTRANCE TO CHIPPINGS, ABUTTING WEST SIDE OF ST ANDREWS WELL, AND ADJOINING WALL RUNNING NORTH TO ST ANDREWS ROAD	3050
1057375	II	ST ANDREWS WELL	3050
1057376	II	6, ST ANDREWS ROAD	3050
1057377	II	DARCH HOUSE, RAILINGS, GATES AND DWARF WALL FRONTING ROAD	3050
1057378	II	STOLFORD FARMHOUSE	1650
1057379	II	SEA VIEW	1550
1057380	II	WALLS ENCLOSING GARDENS, ABOUT 20 METRES WEST OF FAIRFIELD HOUSE	3750
1057381	II	CHURCH OF ST NICHOLAS	4750
1057382	II	LIMEKILN COMPLEX AT NGR ST 1730 4530	3700
1057383	II	CHURCH OF ST MARY	4850
1057384	II	WALL ENCLOSING ORCHARD IMMEDIATELY NORTH-WEST OF STRINGSTON FARMHOUSE	4800
1057391	II	THE MANSE	2400
1057392	II	BAPTIST CHAPEL	2400
1057393	II	COLEPOOL COTTAGE	2800
1057394	II	GRISLEY'S FARMHOUSE	2850
1057396	II	STABLE, ABOUT 20 METRES NORTH WEST OF STEYNING MANOR	3050
1057397	II	STABLE AND DOVECOT, ABOUT 20 METRES NORTH WEST OF FAIRFIELD HOUSE	3650
1057398	II	LITTLE WATER FARMHOUSE	2900
1057399	II	MALTHOUSE AND MALT DRYING KILN, 10 METRES SOUTH OF LITTLE WATER FARMHOUSE	2950

List Entry	Grade	Name	Location relative to site boundary (approx. metres)
1057400	II	THATCH END WITH BRIDGE OVER STREAM AT ENTRANCE TO SOUTH EAST WING	1750
1057401	II	COTTAGE, 15 METRES NORTH OF SHURTON LODGE	1950
1057402	II	SHURTON MILLS	1800
1057405	II	UNIDENTIFIED CHEST TOMB IN CHURCHYARD, 7 METRES NORTH OF NORTH TRANSEPT-CHOIR, CHURCH OF ST ANDREW	2950
1057406	II	SOUTH BOUNDARY WALL CHURCHYARD RUNNING WEST FROM EAST ENTRANCE, CHURCH OF ST ANDREW	3000
1057407	II	STOKE HOUSE	3000
1057408	II	BAKEHOUSE, 5 METRES NORTH OF NO 8	3000
1059046	II	HILL HOUSE	4750
1059048	II	THE OLD RECTORY	4050
1059049	II	CHURCH OF ST MARY MAGDALENE	3400
1059050	II	ROGERS FARMHOUSE	3650
1059051	II	GATE AND GATE PIERS AT DRIVEWAY ENTRANCE TO STOCKLAND MANOR	3550
1059069	II	ROADBRIDGE OVER RIVER	5000
1175230	II	GATE AND PIERS, ABOUT 20 METRES WEST OF STEYNING MANOR	3050
1175298	II	MONKTON MANOR	3300
1175316	II	Footbridge, 5 metres south west of Thatch End	1800
1175331	II	SHURTON LODGE AND OUTBUILDING ATTACHED AT SOUTH EAST CORNER	2000
1175396	II	ASH COTTAGE AND LITTLE ASH	2100
1175415	II	MILL HOUSE AND WATERWHEEL THE OLD MILL	3150
1175464	II	THE OLD VICARAGE	2950
1175508	II	BUFFET CHEST TOMB, IN CHURCHYARD 3 METRES NORTH OF NORTH TRANSEPT-CHOIR, CHURCH OF ST ANDREW	2950
1175525	II	2 PIERS, RAILINGS, DWARF WALL, GATEPIERS, GATES AND LAMP CARRIER FRONTING CHURCH OF ST ANDREW	2950

List Entry	Grade	Name	Location relative to site boundary (approx. metres)
1175549	II	30, HIGH STREET	3000
1175557	II	8 AND 10, HIGH STREET (See details for further address information)	3000
1175574	II	6, HIGH STREET	2950
1175664	II	NO 5 AND BOUNDARY WALL ON WEST SIDE ABUTTING ST ANDREWS WELL	3050
1175681	II	PEAR TREE	3050
1175713	II	STOGURSEY SCHOOL AND ATTACHED SCHOOLMASTER'S HOUSE	3050
1175742	II	CHALCOT FARMHOUSE	2200
1175753	II	ZINE FARMHOUSE	1300
1175780	II	BARN, ABOUT 60 METRES NORTH OF FAIRFIELD HOUSE	3600
1237562	II	THE POPLARS	3400
1237565	II	CHANNEL VIEW	3550
		STOCKLAND MANOR	
1295357	II	WATER FARMHOUSE	3050
1308170	II	CHURCH OF ST ANDREW	4400
1308189	II	GRANARY, ABOUT 50 METRES NORTH OF FAIRFIELD HOUSE	3650
1308209	II	D`ARCHES	1600
1308312	II	PAIR OF CHEST TOMB TO JOHN AND MARY RAWLINS IN CHURCHYARD, 23 METRES NORTH OF NAVE, CHURCH OF ST ANDREW	2900
1344901	II	BONSONS MILL HOUSE WITH ATTACHED MILL	4950
1345675	II	ROWE FAMILY CHEST TOMB, IN CHURCHYARD 15 METRES SOUTH OF NAVE, CHURCH OF ST ANDREW	2950
1345676	II	GATE AND GATE PIERS AT EAST ENTRANCE TO CHURCHYARD, CHURCH OF ST ANDREW	2950
1345677	II	12 AND 14, HIGH STREET	2950
1345700	II	2, HIGH STREET	2950
1345702	II	DURBOROUGH FARMHOUSE	4700
1345703	II	WICK POUND HOUSE	1300
1345704	II	MOUNTING BLOCK ABOUT 40 METRES NORTH OF FAIRFIELD HOUSE	3650

List Entry	Grade	Name	Location relative to site boundary (approx. metres)
1345707	II	PLUD FARMHOUSE	4400
1345712	II	BROOKSIDE FISHERS	1900
1345713	II	SHURTON COURT AND NO 2 SHURTON COURT	1950
1345714	II	HARFORD HOUSE	2959
1431083	II	Stogursey war memorial	3000
1449993	II	Church of St Peter	1500
Registered Parks and Gardens			
1001144	II	Fairfield	3300
-	-	Stogursy Conservation Area	2700

13B

Designated Heritage Assets

PUBLIC

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13B Designated Heritage Assets

Table 13B-1 - Designated Heritage Assets within 5 km Study Area

Listing Ref	Grade	Name	Easting	Northing
Scheduled Monuments				
1006226	-	Round cairn known as Pixie's Mound	317646.4955	142387.8297
1019034	-	Village cross 75 m north of St Andrew's Well	320907.6839	145575.3454
1019035	-	Stogursey Castle	320241.086	142891.03
1006171	-	Stringston churchyard cross	320326.8188	142586.2372
Listed Buildings				
1057404	I	Church Of St Andrew	320474.01	142876.4988
1057395	II*	Steyning Manor	321960	142772.3608
1057403	II*	Stogursey Castle	320303	142589.3608
1175243	II*	Fairfield House	318755	142980.3608
1237276	II*	Farm Estate Farmhouse	322306	141774.3608
1295315	II*	Causeway Bridge At East Entrance To Stogursey Castle	320313	142589.3608

Listing Ref	Grade	Name	Easting	Northing
1308144	II*	Churchyard Cross, 5 Metres South Of Porch, Church Of St Mary	317645	142390.3608
1308149	II*	Prior Family Chest Tomb And Encircling Wrought Iron Railings, In Churchyard, 10 Metres South Of South Chapel, Church Of St Mary	317644	142387.3608
1308154	II*	Priors Farmhouse Including Farm Buildings Adjoining East	317751	142594.3608
1344927	II*	Church Of All Saints	324635	143197.3608
1345701	II*	Remains Of Village Cross	320244	142891.3608
1345706	II*	Govett Family Chest Tomb, In Churchyard One Metre West Of Porch, Church Of St Mary	317639	142396.3608
1057368	II	Gates And Gatepiers To Ivy House	320194.25	142914.6708
1057369	II	Dovecote, About 28 Metres North West Of Priory Farmhouse	320514.329	142813.7938
1057370	II	Corner Cottage	320230.4	142891.1308
1057371	II	Cross Cottages	320226.605	142880.2448
1057372	II	Old Cross House	320253.583	142881.7038
1057373	II	Railings, Gate And Dwarf Wall Fronting Old Cross House Onto High Street	320247.184	142888.9318
1057374	II	Gatepiers And Entrance To Chippings, Abutting West Side Of St Andrews Well, And Adjoining Wall Running North To St Andrews Road	320228	142841.3608
1057375	II	St Andrews Well	320224.403	142818.1968

Listing Ref	Grade	Name	Easting	Northing
1057376	II	6, St Andrews Road	320244.074	142846.6588
1057377	II	Darch House, Railings, Gates And Dwarf Wall Fronting Road	320328	142830.3608
1057378	II	Stolford Farmhouse	323258	145815.3608
1057379	II	Sea View	323169	145830.3608
1057380	II	Walls Enclosing Gardens, About 20 Metres West Of Fairfield House	318622	142941.3608
1057381	II	Church Of St Nicholas	316582	144133.3608
1057382	II	Limekiln Complex At Ngr St 1730 4530	317304.109	145284.3148
1057383	II	Church Of St Mary	317646	142402.3608
1057384	II	Wall Enclosing Orchard Immediately North-West Of Stringston Farmhouse	317594	142457.3608
1057391	II	The Manse	319294.2693	144180.7298
1057392	II	Baptist Chapel	319299.6927	144170.6994
1057393	II	Colepool Cottage	319253.8713	143668.2767
1057394	II	Grisley's Farmhouse	319394	143513.3608
1057396	II	Stable, About 20 Metres North West Of Steyning Manor	321924	142785.3608
1057397	II	Stable And Dovecot, About 20 Metres North West Of Fairfield House	318736	143004.3608
1057398	II	Little Water Farmhouse	319407	143401.3608

Listing Ref	Grade	Name	Easting	Northing
1057399	II	Malthouse And Malt Drying Kiln, 10 Metres South Of Little Water Farmhouse	319394.543	143384.1799
1057400	II	Thatch End With Bridge Over Stream At Entrance To South East Wing	320160	144279.3608
1057401	II	Cottage, 15 Metres North Of Shurton Lodge	320032.6927	144122.9989
1057402	II	Shurton Mills	320631.8581	144047.7463
1057405	II	Unidentified Chest Tomb In Churchyard, 7 Metres North Of North Transept-Choir, Church Of St Andrew	320493	142892.3608
1057406	II	South Boundary Wall Churchyard Running West From East Entrance, Church Of St Andrew	320482.054	142842.2838
1057407	II	Stoke House	320245.702	142909.1238
1057408	II	Bakehouse, 5 Metres North Of No 8	320343.881	142910.0768
1059046	II	Hill House	325043	142755.3608
1059048	II	The Old Rectory	324494	143145.3608
1059049	II	Church Of St Mary Magdalene	324013	143620.3608
1059050	II	Rogers Farmhouse	324387	143691.3608
1059051	II	Gate And Gate Piers At Driveway Entrance To Stockland Manor	323832	143192.3608
1059069	II	Roadbridge Over River	322502	140917.3608
1175230	II	Gate And Piers, About 20 Metres West Of Steyning Manor	321938	142779.3608

Listing Ref	Grade	Name	Easting	Northing
1175298	II	Monkton Manor	321261	142471.3608
1175316	II	Footbridge, 5 Metres South West Of Thatch End	320144.062	144276.9042
1175331	II	Shurton Lodge And Outbuilding Attached At South East Corner	320053.2575	144108.3897
1175396	II	Ash Cottage And Little Ash	319968.097	144029.3817
1175415	II	Mill House And Waterwheel The Old Mill	320376	142689.3608
1175464	II	The Old Vicarage	320397.059	142891.9008
1175508	II	Buffet Chest Tomb, In Churchyard 3 Metres North Of North Transept-Choir, Church Of St Andrew	320488	142888.3608
1175525	II	2 Piers, Railings, Dwarf Wall, Gatepiers, Gates And Lamp Carrier Fronting Church Of St Andrew	320447.532	142886.5618
1175549	II	30, High Street	320223.642	142914.6598
1175557	II	8 AND 10, HIGH STREET (See Details For Further Address Information)	320339.255	142898.4558
1175574	II	6, High Street	320351.657	142896.6898
1175664	II	No 5 And Boundary Wall On West Side Abutting St Andrews Well	320238	142848.3608
1175681	II	Pear Tree	320251.508	142846.2788

Listing Ref	Grade	Name	Easting	Northing
1175713	II	Stogursey School And Attached Schoolmaster's House	319953	142936.3608
1175742	II	Chalcot Farmhouse	323423	144808.3608
1175753	II	Zine Farmhouse	321951	144584.3608
1175780	II	Barn, About 60 Metres North Of Fairfield House	318719	143065.3608
1237562	II	The Poplars	324071	143637.3608
1237565	II	Channel View Stockland Manor	323932	143320.3608
1295357	II	Water Farmhouse	319478	143195.3608
1308170	II	Church Of St Andrew	316702	144888.3608
1308189	II	Granary, About 50 Metres North Of Fairfield House	318713	143034.3608
1308209	II	D`Arches	323214	145859.3608
1308312	II	Pair Of Chest Tomb To John And Mary Rawlins In Churchyard, 23 Metres North Of Nave, Church Of St Andrew	320468	142902.3608
1344901	II	Bonsons Mill House With Attached Mill	322501	140979.3608
1345675	II	Rowe Family Chest Tomb, In Churchyard 15 Metres South Of Nave, Church Of St Andrew	320465.031	142856.1218
1345676	II	Gate And Gate Piers At East Entrance To Churchyard, Church Of St Andrew	320529.49	142854.9908

Listing Ref	Grade	Name	Easting	Northing
1345677	II	12 And 14, High Street	320309.63	142902.6898
1345700	II	2, High Street	320364.17	142893.6608
1345702	II	Durborough Farmhouse	319209	141463.3608
1345703	II	Wick Pound House	321611	144498.3608
1345704	II	Mounting Block About 40 Metres North Of Fairfield House	318734	143024.3608
1345707	II	Plud Farmhouse	318181	142452.3608
1345712	II	Brookside Fishers	320094	144179.3608
1345713	II	Shurton Court And No 2 Shurton Court	319969.8965	144199.9011
1345714	II	Harford House	320371.388	142889.6028
1431083	II	Stogursey War Memorial	320324.8062	142881.9075
1449993	II	Church Of St Peter	322624.02	144932.3337
Registered Parks and Gardens				
1001144	II	Fairfield	318716.3934	142959.1442

Listing Ref	Grade	Name	Easting	Northing
Conservation Area				
-	-	Stogursy Conservation Area	320474.01	142876.4988

13C

Non-Designated Heritage Records and previous investigations ('EVENTS')

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13C Non-Designated Heritage Records and previous investigations (‘EVENTS’)

Table 13C-1 - Somerset HER monument records within 1 km Study Area

HER ref	Name	Easting	Northing	Monument type
32286	Sunken-floored building (grubenhaus), Hinkley Point, Stogursey	320441	145268	Grubenhaus
32270	Later Bronze Age midden, W of Hinkley Point, Sotugursey	320240	145733	Midden
30188	Bone rings find, Hinkley Point, Stogursey	321000	146008	Ring
28447	Possible settlement, SW of Hinkley Point, Stogursey	320734	145605	Enclosure; Settlement
28446	Iron Age and Roman settlement, SW of Hinkley Point, Stogursey.	320523	145328	Ditch; Enclosure; Kiln; Oven
22547	Langborough Barns site, W of Hinkley Point	320152	145594	Cattle shelter; Field barn
22546	Sidwell Barn site, W of Pixie's mound, Hinkley Point	320810	145540	Cattle shelter; Field barn
27718	Fish weirs, Stert Flats	322547	146493	Coastal fish weir
27717	Fish weir, Stert Flats	322536	146649	Coastal fish weir
27741	Medieval ridge and furrow cultivation, Wick Moor, Stolford	321984	145836	Ridge and furrow

HER ref	Name	Easting	Northing	Monument type
27737	Groynes, E of Hinkley Point	322159	145954	Groyne
27716	Fish weir, Stert Flats	322261	146632	Coastal fish weir
27715	Fish weir, Stert Flats	322070	146622	Coastal fish weir
27714	Fish weir, Stert Flats	321936	146525	Coastal fish weir
45100	Hinkley Point nuclear power station, Stogursey	321145	146062	Nuclear power station
35283	Roman settlement, south-west of Hinkley Point	319919	145638	Industrial site; Kiln; Oven; Settlement
28448	Possible prehistoric enclosures and field boundaries, SW of Hinkley Point, Stogursey	320013	145221	Ditch; Enclosure; Field boundary
34065	Fourth-century Roman rubbish pit, south-west of Pixies Mound, Hinkley Point, Stogursey	320825	145494	Sherd
34064	St Sidwell's Well, west of Pixies Mound, North Moor, Stogursey	320844	145559	Holy well
34063	Wick Barrow (Pixies Mound), North Moor, Stogursey	320910	145574	Round barrow

HER ref	Name	Easting	Northing	Monument type
34892	Sedtammtone, Domesday settlement, Hinkley Point	319981	145533	Settlement
35434	Roman settlement, Hinkley Point, Stogursey	320881	145495	Corn drying oven; Inhumation; Settlement
22752	Water meadows and drainage features, SW of Hinkley Point	319698	145725	Drainage ditch; Water meadow
34654	Enclosure, Wick Moor, Stogursey	321773	145938	Enclosure
34078	Submarine forest and peat deposits, Stolford shore, Stogursey	322643	146317	Palaeoenvironmental site; Submarine forest

Table 13C-2 - Somerset HER event records within 1 km Study Area

Event ref	Name	Easting	Northing
32713	Watching brief (2013), Hinkley Point B power station, Stogursey	321007	145623
32306	Excavation (2012), SPE5b, Hinkley Point, Stogursey	320679	145380
32305	Excavation (2012), SPE5a, Hinkley Point, Stogursey	320552	145341

Event ref	Name	Easting	Northing
32304	Excavation (2012), SPE4, Hinkley Point, Stogursey	320418	145293
32303	Excavation (2012), SPE3, Hinkley Point, Stogursey	320256	145725
30402	Geophysical survey (2011), S of Pixie's Mound, Stogursey	320896	145554
30237	Excavation (1907), Wick Barrow ("Pixie's Mound"), North Moor, Stogursey	320907	145572
28652	Geophysical survey (1996), Hinkley Point, Stogursey	320893	145548
48051	Borehole survey (2021), S of Hinkley Point	321095	145267
42566	Watching brief (2020), S of Hinkley Point, Stogursey	332345	139609
32307	Excavation (2012), Hinkley Point, Stogursey	320106	145438
28332	Evaluation (2009, 2010), Hinkley Point, Stogursey	320185	145355
30400	Geotechnical pit monitoring (2009-10), SW of Hinkley Point, Stogursey	320157	145547
28444	Geophysical survey (2008), Hinkley Point	320093	145650

Event ref	Name	Easting	Northing
28195	Watching brief (2008), W of Hinkley Point	320020	145756
14663	Geophysical Survey (2004), west of Hinkley Point, Stogursey	320032	145470
15722	Fieldwalking (1992), W of Hinkley Point	320038	145792
44937	Geophysical survey (1992), W of Hinkley Point	319988	145812
28449	Geophysical survey (2009), south-west of Hinkley Point	320240	144900
32235	Foreshore survey (2010), Hinkley Point, Stogursey	319961	146300

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14

Landscape and Visual Impact Assessment (LVIA)

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14A

Landscape and Visual Impact Assessment Methodology

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14A Landscape and Visual Impact Assessment Methodology

14A.1 Introduction

14A.1.1. This appendix describes the methodology used for the landscape and visual impact assessment (LVIA) for the Proposed Works. This appendix has been structured as follows:

- overview of LVIA methodology;
- assessing landscape effects;
- assessing visual effects;
- assessing cumulative landscape and visual effects;
- evaluation of significance; and
- production of ZTVs and visualisations.

14A.2 Overview of LVIA methodology

14A.2.1. The LVIA assesses the likely effects of the Proposed Works on the landscape and visual resource, encompassing effects on landscape elements, characteristics and landscape character, designated landscapes, visual effects and cumulative effects.

14A.2.2. Essentially, the landscape and visual effects (and whether they are significant) is determined by an assessment of the nature or 'sensitivity' of each receptor or group of receptors and the nature of the effect or 'magnitude of change' that would result from the Proposed Works. The evaluation of sensitivity takes account of the value and susceptibility of the receptor to the Proposed Works. This is combined with an assessment of the magnitude of change which takes account of the size and scale of the proposed change, the geographical extent and the duration of that change. By combining assessments of sensitivity and magnitude of change, a level of landscape or visual effect can be evaluated and determined.

14A.2.3. The resulting level of effect is described in terms of whether it is significant or not significant and the type of effect is described as either direct or indirect; temporary or permanent (reversible); cumulative; and beneficial, neutral or adverse.

14A.2.4. The time period for the assessment covers phases of development related to the phases of the Proposed Works:

- Preparations for Quiescence phase (13 years);
- Quiescence phase (70 years); and
- Final Site Clearance (12 years).

14A.2.5. LVIA unavoidably involves a combination of both quantitative and subjective assessment and wherever possible a consensus of professional opinion has been sought through consultation, internal peer review, and the adoption of a systematic, impartial, and professional approach.

Defining the LVIA Study Area

14A.2.6. The selection of the LVIA Study Area has been undertaken in accordance with guidance set out in Sections 5.2 and 6.2 in *Guidelines for Landscape and Visual Impact Assessment, 3rd Edition*

(GLVIA 3)[1] which places an emphasis on a "*reasonable approach which is proportional to the scale and nature of the proposed development*" and the findings of the field survey. The definition of the Study Area has been informed by the extent of the preliminary Zone of Theoretical Visibility (ZTV) map generated for the tallest, long-term component of the Proposed Works.

14A.3 Assessing landscape effects

14A.3.1. Landscape effects are defined by the Landscape Institute in GLVIA 3[1], paragraphs 5.1 and 5.2 as follows:

> *"An assessment of landscape effects deals with the effects of change and development on landscape as a resource. The concern ... is with how the proposal will affect the elements that make up the landscape, the aesthetic and perceptual aspects of the landscape and its distinctive character. ... The area of landscape that should be covered in assessing landscape effects should include the site itself and the full extent of the wider landscape around it which the development may influence in a significant manner."*

Landscape character

14A.3.2. GLVIA 3[1], paragraph 5.4, advises that Landscape Character Assessment should be regarded as the main source for baseline studies and identifies the following factors which combine to create areas of distinct landscape character:

- "the elements that make up the landscape in the Study Area including:
  - physical influences – geology, soils, landform, drainage and water bodies;
  - landcover, including different types of vegetation and patterns and types of tree cover; and
  - the influence of human activity, including land use and management, the character of settlements and buildings, and pattern and type of fields and enclosure.
  - The aesthetic and perceptual aspects of the landscape – such as, for example, its scale, complexity, openness, tranquillity or wildness;
  - The overall character of the landscape in the Study Area, including any distinctive Landscape Character Types or Areas that can be identified, and the particular combinations of elements and aesthetic and perceptual aspects that make each distinctive, usually by identification as key characteristics of the landscape."

Landscape effects

14A.3.3. The potential landscape effects occurring during the phases of the Proposed Works may therefore include, but are not restricted to, the following:

- **changes to landscape elements:** The addition of new elements (large buildings for example) or the removal of existing elements such as trees, vegetation, buildings and other characteristic elements or valued features of the landscape character;
- **changes to landscape qualities:** Degradation or erosion of landscape elements and patterns and perceptual characteristics, particularly those that form key characteristic elements of the landscape character or contribute to the landscape value;

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[1] Landscape Institute and IEMA (2013) *Guidelines for Landscape and Visual Impact Assessment, 3rd Edition.* Routledge; London.

- **changes to landscape character:** Landscape character may be affected through the incremental effect on characteristic elements, landscape patterns and qualities (including perceptual characteristics) and the addition of new features, the magnitude of which is sufficient to alter the overall landscape character within a particular area;
- **changes to designated landscapes:** Including nationally and locally designated landscapes that would affect the special landscape qualities underpinning these areas and their integrity; and
- **cumulative landscape effects:** Where more than one development of a similar type may lead to a cumulative landscape effect.

14A.3.4. The Proposed Works may have a direct effect on the landscape as well as an indirect effect which would be perceived from the wider landscape outside the immediate site area and its associated landscape character. Landscape effects also have to be recognised in terms of change over time where natural and manmade processes can alter the landscape.

Evaluating landscape sensitivity to change

14A.3.5. The assessment of sensitivity takes account of the landscape value and the susceptibility of the receptor to the Proposed Works.

14A.3.6. Landscape sensitivity often varies in response to both the type and phase of the development proposed and its location, such that landscape sensitivity needs to be considered on a case-by-case basis. It should not be confused with 'inherent sensitivity' where areas of the landscape may be referred to as inherently of 'high' or 'low' sensitivity. For example, a National Park may be described as inherently of high sensitivity on account of its designation and value, although it may prove to be less sensitive or susceptible to particular development, and of variable sensitivity across its geographical area. Alternatively, an undesignated landscape may be of high sensitivity to a particular development regardless of the lack of local or national designation.

Value of the Landscape Receptor

14A.3.7. The value of a landscape receptor is a reflection of the value that society attaches to that landscape. The assessment of the landscape value is classified as high, medium or low and the basis for this assessment is made clear using evidence and professional judgement, based on the following range of factors:

- **Landscape designations:** A receptor that lies within the boundary of a recognised landscape related planning designation will be of increased value (depending on the proportion of the receptor that is affected) and the level of importance of the designation which may be international, national, regional or local. The absence of designation does not, however, preclude value since an undesignated landscape receptor may be valued as a resource in the local or immediate environment.
- **Landscape quality:** The quality of a landscape receptor is a reflection of its attributes, such as scenic quality, sense of place, rarity and representativeness and the extent to which its valued attributes have remained intact. A landscape with consistent, intact, well-defined and distinctive attributes is considered to be of higher quality and, in turn, higher value than a landscape where the introduction of elements has detracted from its character.
- **Landscape experience:** The experiential qualities that can be evoked by a landscape receptor can add to its value. These responses relate to a number of factors including cultural associations that may exist in art, literature or history; the recreational value of the landscape or the iconic

status of the landscape in its own right; and its contribution of other values such as nature conservation or archaeology.

Landscape Susceptibility to Change

14A.3.8. The susceptibility of a landscape receptor to change is a reflection of its ability to accommodate the changes that will occur as a result of the Proposed Works without undue consequences for the maintenance of the baseline situation and / or the achievement of landscape planning policies and strategies. Some landscape receptors are better able to accommodate development than others due to certain characteristics that are indicative of capacity to accommodate change. These characteristics may or may not also be special landscape qualities that underpin designated landscapes.

14A.3.9. The assessment of the susceptibility of the landscape receptor to change is classified as high, medium or low, and the basis for this assessment is made clear using evidence and professional judgement. Indicators of landscape susceptibility to the type of development proposed (decommissioning) are based on the following criteria:

- **Overall Strength and Robustness:** Collectively, the overall characteristics and qualities of a particular landscape result in a strong and robust landscape that is capable of reasonably accommodating the Proposed Works without undue adverse effects on the special landscape qualities (in the case of a designated landscape) or the key characteristics for which an area of landscape character or a particular element is valued.
- **Landscape Scale and Topography:** The scale and topography are large enough to physically accommodate the development footprint without the requirement of invasive earthworks or drainage. Topographical features such as narrow valleys or more complex and small-scale landforms such as drumlins, incised river valleys / gorges, cliffs or rock outcrops are likely to be more susceptible to this type of development than broad, homogenous topography.
- **Openness** in the landscape may increase susceptibility to change because it can result in wider visibility of the Proposed Works; however, open landscape may also be larger in scale and simple, which would decrease susceptibility. Conversely, enclosed landscapes can offer more screening potential, limiting visibility to a smaller area. However, they may also be smaller in scale and more complex which would increase susceptibility.
- **Land Cover Pattern:** Ancient and mature or long-established vegetation such as mature trees, woodland and protected hedgerows are likely to be more susceptible to the Proposed Works, particularly where these elements form part of a valued characteristic landscape pattern or feature. Conversely, grassland and / or forestry are likely to be less susceptible to development.
- **Skyline:** Prominent and distinctive skylines and horizons with important landmark features that are identified in the landscape character assessment are generally considered to be more susceptible to development in comparison to broad, simple skylines which lack landmark features or contain other infrastructure features.

- **Relationship with other Development and Landmarks:** Contemporary landscapes where there are existing forms of development (industry, mineral extraction or electrical grid connections) that already have a characterising influence result in a lower susceptibility to development in comparison to areas characterised by smaller scale, historic development and landmarks (historic villages with dense settlement patterns and associated buildings, such as church towers). It should be noted that some existing development, for example wind energy development, is time limited and subject to decommissioning.
- **Rationale:** Some site locations have an obvious visual rationale for the Proposed Works in terms of the available space, access, simplicity and relationship to other similar forms of development. Conversely, a site may appear overly constrained and require greater engineering or additional construction activity to accommodate the Proposed Works with lower design quality and few embedded environmental measures.
- **Remoteness, Naturalness, Wildness / Tranquillity:** Notably landscapes that are acknowledged to be particularly scenic, wild or tranquil are generally considered to be more susceptible to development in comparison to ordinary, cultivated or forested / developed landscapes where perceptions of 'wildness' are less tangible. Landscapes which are either remote or appear natural may vary in their susceptibility to development.
- **Landscape Context and Adjacent Landscapes:** The extent to which the Proposed Works will influence landscape receptors across the Study Area relates to the associations that exist between the landscape receptor within which the Proposed Works is located and the landscape receptor from which the Proposed Works is experienced. In some situations, this association will be strong, where the landscapes are directly related. For example, adjacent areas of landscape character may share or 'borrow' a high number of common characteristics. Landscape elements may be linked to, or associated with, wider landscape patterns such as individual trees forming part of an avenue or pattern of woodland corpses, for example. In other situations, the association between adjacent landscapes will be weak. The context and visual connection to areas of adjacent landscape character or designations has a bearing on the susceptibility to development.

Landscape Sensitivity Rating

14A.3.10. An overall sensitivity assessment of the landscape receptor is made by combining the assessment of the value of the landscape character receptor and its susceptibility to change. The evaluation of landscape sensitivity is described as 'High', 'Medium' or 'Low' and is drawn from the consideration of a range of criteria that indicate landscape value and susceptibility. The basis for the assessment is made clear using evidence and professional judgement in the evaluation of sensitivity for each receptor.

14A.3.11. Criteria that tend towards higher or lower sensitivity are set out in **Table 14A-1**.

Table 14A-1 - Landscape sensitivity to Change

Value / Susceptibility criteria	Level of value/susceptibility ranging from ‘High’ to ‘Medium’ to ‘Low’ High Medium Low	
Landscape Value		
Designation	Designated landscapes / elements with national policy level protection or defined for their natural beauty. Evidence that the landscape / element is valued or used substantially for recreational activity.	Landscapes without formal designation. Despoiled or degraded landscape with little or no evidence of being valued by the community. Elements that are uncharacteristic such as non-natives or self-seeded vegetation that may need to be cleared.
Natural heritage	Landscapes with clear evidence of ecological, geological, geomorphological or physiographic interest which contribute positively to the landscape.	Landscapes with minimal evidence of ecological, geological, geomorphological or physiographic interest or which provide limited contribution to the landscape.
Cultural heritage	Landscapes with clear evidence of archaeological, historical or cultural interest which contribute positively to the landscape.	Landscapes with minimal evidence of archaeological, historical or cultural interest or which provide limited contribution to the landscape.
Condition	Higher quality landscapes / elements with consistent, intact and well-defined, distinctive attributes.	Lower quality and indistinct landscapes / elements or features that detract from its inherent attributes.
Associations	Landscapes which are connected with notable people, events and the arts.	Landscapes with few associations.
Distinctiveness	Landscapes that have a strong sense of identity. May also include rare or unique landscape character types, features or elements.	Landscapes that have a weak sense of identity. May also include widespread or ‘common’ landscape character types, features or elements.
Recreational	Landscape offering recreational opportunities where experience of landscape is important.	Landscape with limited recreational opportunities.
Perceptual (scenic)	Landscapes that appeal to the senses, primarily the visual sense.	Landscapes within limited appeal to the visual sense.
Perceptual (wildness and tranquillity)	Landscapes with a strong perceptual value notably wildness, remoteness, tranquillity and/or dark skies	Landscapes with a limited perceptual value linked to wildness, remoteness, tranquillity and/or dark skies

Value / Susceptibility criteria	Level of value/susceptibility ranging from 'High' to 'Medium' to 'Low' High ⟷ Medium ⟷ Low	
Susceptibility to landscape change		
Strength and robustness	Fragile landscape vulnerable and lacking the ability to accommodate change.	Robust landscape, able to accommodate change or loss of features without undue adverse effects.
Landscape Scale	A landscape of a suitably large enough scale to accommodate the development.	A smaller scale landscape that may require further engineering to accommodate the development.
Openness / Enclosure	An open landscape with limited screening or potential may be of higher susceptibility to the Proposed Works.	An enclosed landscape with screening or potential for mitigation may be of lower susceptibility to the Proposed Works.
Reinstatement	Lower value, non-characteristic landcover and elements capable of rapid reinstatement.	Higher value, characteristic landcover and elements that cannot be easily reinstated or replaced.
Skyline	Distinctive undeveloped skylines with landmark features.	Developed, nondistinctive skylines.
Association	Weak and indirect association. Other development may be of a smaller scale or historic.	Strong or direct association other similar contemporary developments / landscape character.
Rationale	Strong landscape rationale and opportunity with high degree of design quality and / or embedded environmental measures.	Landscape with numerous environmental and technical constraints with lower design quality and / or embedded environmental measures.
Perceptual Qualities	Perceptual qualities associated with particular scenic qualities, wildness or tranquillity.	Contemporary, cultivated / settled or developed landscapes are likely to have a lower susceptibility.
Landscape Context	Adjacent landscape character context connected by borrowed character and views.	Host landscape character is separate from surrounding / adjacent landscape character.
Sensitivity to change	**Sensitivity drawn from consideration of the Value and Susceptibility criteria with the final conclusion on the level of Sensitivity ranging from 'High' to 'Medium' to 'Low'.**	

Landscape magnitude of change

14A.3.12. The magnitude of change affecting landscape receptors is an expression of the scale of change that would result from the Proposed Works. In assessing the magnitude of change the assessment has focused on the size or scale of change and its geographical extent. The duration and reversibility are stated separately in relation to the assessed effects (i.e. as short / medium / long-term and temporary or permanent).

Size or scale of change

14A.3.13. This criterion relates to the size or scale of change to the landscape that would arise as a result of the Proposed Works, based on the following factors:

- **Landscape Elements:** The degree to which the landscape elements or pattern of elements that makes up the landscape character would be altered by the Proposed Works through the loss, alteration or addition of elements in the landscape. The magnitude of change would generally be higher if the features that make up the landscape character are extensively removed or altered, and / or if many new components are added to the landscape.
- **Landscape Characteristics:** The extent to which the effect of the Proposed Works change (physically or perceptually) the key characteristics of the landscape which may be important to its distinctive character. This may include, for example, the scale of the landform, its relative simplicity, complexity or irregularity, the nature of the landscape context, the grain or orientation of the landscape, the degree to which the receptor is influenced by external features and the juxtaposition of the Proposed Works in relation to these key characteristics.
- **Landscape Character / Designation:** The degree to which landscape character receptors would be changed by the Proposed Works. If the Proposed Works is located in a landscape receptor that is already affected by development with similar characteristics, this may reduce the magnitude of change if there is a high level of integration and the developments form a unified and cohesive feature in the landscape. In the case of designated landscapes, the degree of change is considered in light of the effects on the special landscape qualities which underpin the designation and the effect on the integrity of the designation.
- All landscapes change over time and much of that change is managed or planned. Often landscapes will have management objectives for 'protection' or 'accommodation' of development. The scale of change may be localised, or occurring over parts of an area, or more widespread affecting whole landscape character areas and their overall integrity. Developmental change may be time limited or permanent.
- **Distance:** The size and scale of change is also strongly influenced by the proximity of the Proposed Works to the receptor and the extent to which the Proposed Works can be seen as a characterising influence on the landscape. Consequently, the scale or magnitude of change is likely to be lower in respect of landscape receptors that are distant from the Proposed Works and / or screened by intervening landform, vegetation and built form to the extent that the scale of their influence on landscape receptors is small or limited. Conversely, landscapes closest to the Proposed Works are likely to be most affected. Host landscapes (where the Proposed Works is located within a 'host' landscape character unit) would be directly affected whilst adjacent areas of landscape character would be indirectly affected.

Geographical extent

14A.3.14. Landscape effects are described in terms of the geographical extent or physical area that would be affected (described as a linear or area measurement). This should not be confused with the scale of the development or its physical footprint. The manner in which the geographical extent of the landscape effect is described for different landscape receptors is explained as follows:

- **Landscape Elements:** The geographical extent of landscape elements may be objectively measured in terms of numbers, area or linear measurement. For example, the number of trees, area of woodland and / or length of hedgerow affected may be recorded.
- **Landscape Character / Characteristics:** The extent of the effects on landscape character will vary depending on the specific nature of the Proposed Works. This is not simply an expression of visibility or the extent of the ZTV. It is a specific assessment of the extent of landscape character that would be changed by the Proposed Works in terms of its character, key characteristics and elements.
- **Landscape Designations:** In the case of a designated landscape, this refers to the extent that the special landscape qualities of the designation are affected and whether this can be defined in terms of area or linear measurements, or subjectively (with the support of panel and / or peer review) and whether the integrity of the designation is affected.

Duration and reversibility

14A.3.15. The duration and reversibility of landscape effects is based on the period over which the Proposed Works would occur. Long-term, medium-term and short-term landscape effects are defined as follows:

- Temporary / Reversible Development: This includes time limited elements and activities:
  - long-term – more than 10 years;
  - medium-term – 6 to 10 years; and
  - short-term – 1 to 5 years.

Landscape magnitude of change rating

14A.3.16. The ‘magnitude’ or ‘degree of change’ resulting from the Proposed Works is described as ‘High’, ‘Medium’, ‘Low’, ‘Very Low’ or ‘Zero’. In assessing the magnitude of change, the assessment has focused on the size or scale of change and its geographical extent. The duration and reversibility are stated separately in relation to the assessed effects (i.e. as short / medium / long-term and temporary or permanent). The basis for the assessment of magnitude for each receptor is made clear using evidence and professional judgement.

14A.3.17. The levels of magnitude of change that can occur are defined in **Table 14A-2**.

Table 14A-2 - Landscape magnitude of change ratings

Magnitude of landscape change	Examples of Landscape Magnitude
High	Size / Scale: A large-scale change and major loss of key landscape elements / characteristics or the addition of large scale or numerous new and uncharacteristic features or elements that would affect the landscape character and the special landscape qualities / integrity of a landscape designation. Directly affecting a host landscape receptor or indirectly affecting a nearby receptor. Geographical extent: The size or scale of change would typically, but not always affect a large geographical extent or area and may be close to the Proposed Works.
High/Medium	Intermediate rating with combination of criteria from High or Medium magnitude.
Medium	Size / Scale: A medium scale change and moderate loss of some key landscape elements / characteristics or the addition of some new medium scale uncharacteristic features or elements that could partially affect the landscape character and the special landscape qualities / integrity of a landscape designation. Directly affecting a host landscape receptor or indirectly affecting a nearby receptor. Geographical extent: The size or scale of landscape change would typically, but not always affect a more localised geographical extent at an intermediate distance from the Proposed Works.
Medium/Low	Intermediate rating with combination of criteria from Medium or Low magnitude.
Low	Size / Scale: A small-scale change and minor loss of a few landscape elements / non key characteristics, or the addition of some new small-scale features or elements of limited characterising influence on landscape character / designations. Geographical extent: There may be a small partial change in landscape character, typically, but not always affecting a localised geographical extent at some distance from the Proposed Works.
Low/Very Low	Intermediate rating with combination of criteria from Low or Very Low magnitude.
Very Low	Size / Scale: A very small-scale change that may include the loss or addition of some landscape elements of limited characterising influence. The landscape characteristics and character would be unaffected. Geographical extent: Typically affecting a very small geographical extent at greater distance from the Proposed Works.

Evaluating landscape effects and significance

14A.3.18. The level of landscape effect is evaluated through the combination of landscape sensitivity and magnitude of change. Once the level of effect has been assessed, a judgement is then made as to whether the level of effect is 'significant' or 'not significant'. This process is assisted by the matrix illustrated in **Table 14A-5** which is used to guide the assessment.

14A.3.19. Further information is also provided about the nature of the effects (whether these would be direct / indirect; temporary / permanent / reversible; beneficial / neutral / adverse or cumulative).

Significant Landscape Effects

14A.3.20. A significant effect would occur where the combination of the variables results in a defining effect on the landscape receptor due to the Proposed Works, or where changes of a lower magnitude affect a landscape receptor that is of particularly high sensitivity. A major loss or irreversible effect over an extensive area or landscape character, affecting landscape elements, characteristics and / or perceptual aspects that are key to a nationally valued landscape are likely to be significant.

Non-Significant Landscape Effects

14A.3.21. A non-significant effect would occur where the effect of the Proposed Works is not defining, and the landscape character of the receptor continues to be characterised principally by its baseline characteristics. Equally, a small-scale change experienced by a receptor of high sensitivity may not significantly affect the special landscape quality or integrity of a designation. Reversible effects on elements, characteristics and character that are of small-scale or affecting lower value receptors are unlikely to be significant.

14A.4 Assessing visual effects

14A.4.1. Visual Effects are concerned wholly with the effect of the Proposed Works on views and the general visual amenity and are defined by the Landscape Institute in GLVIA 3[1], paragraphs 6.1 as follows:

> *"An assessment of visual effects deals with the effects of change and development on views available to people and their visual amenity. The concern ... is with assessing how the surroundings of individuals or groups of people may be specifically affected by changes in the context and character of views."*

14A.4.2. Visual effects are identified for different receptors (people) who would experience the view at their place of residence, within their community, during recreational activities, at work, or when travelling through the area. The visual effects include:

- a change to an existing static view, sequential views, or wider visual amenity as a result of development or the loss of particular landscape elements or features already present in the view.

14A.4.3. The level of visual effect (and whether this is significant) is determined through consideration of the sensitivity of each visual receptor (or range of sensitivities for receptor groups) and the magnitude of change that would be brought about under the different phases of the Proposed Works.

Zone of Theoretical Visibility (ZTV)

14A.4.4. Plans mapping the Zone of Theoretical Visibility (ZTV) are used to analyse the extent of theoretical visibility of all or part of the Proposed Works across the Study Area and to assist with viewpoint selection. The ZTV does not, however, take account of the screening effects of buildings, localised landform and vegetation unless specifically noted (see individual figures). As a result, there may be roads, tracks and footpaths within the Study Area which, although shown as falling within the ZTV, are screened or filtered by built form and vegetation which would otherwise preclude visibility.

14A.4.5. The ZTVs provide a starting point in the assessment process and accordingly tend towards giving a ‘worst-case’ or greatest calculation of the theoretical visibility.

Viewpoint analysis

14A.4.6. Viewpoint analysis is used to assist the assessment and is conducted from selected viewpoints within the Study Area. The purpose of this is to assess both the level of visual effect for particular receptors and to help guide the design process and focus the assessment. A range of viewpoints are examined in detail and analysed to determine whether a significant visual effect would occur. By arranging the viewpoints in order of distance it is possible to define a threshold or outer geographical limit, beyond which significant effects would be unlikely.

14A.4.7. The assessment involves visiting the viewpoint location and viewing photographs prepared for each viewpoint location. The fieldwork is conducted in periods of fine weather with good visibility and considers seasonal changes such as reduced leaf cover or hedgerow maintenance.

14A.4.8. The LVIA therefore includes viewpoint analysis prepared for each viewpoint and presented as supporting evidence in **Chapter 14: LVIA, Section 14.10.** A summary table of the findings is also provided in order of distance from the Proposed Works. This summary table assists in defining the direction, elevation, geographical spread and nature of the potential visual effects and identify areas where significant effects are likely to occur. This approach seeks to provide clarity and confidence to consultees and decision makers by allowing the detailed judgements on the magnitude of visual change to be more readily scrutinised and understood.

Evaluating visual sensitivity to change

14A.4.9. In accordance with paragraphs 6.31-6.37 of GLVIA 3[1], the sensitivity of visual receptors is determined by a combination of the value of the view and the susceptibility of the visual receptors to the change likely to result from the Proposed Works on the view and visual amenity.

View / Visual amenity value

14A.4.10. The value of a view or series of views reflects the recognition and importance attached either formally through identification on mapping or being subject to planning designations, or informally through the value which society attaches to the view(s). The value of a view is classified as high, medium or low and the basis for this assessment is made clear using evidence and professional judgement, based on the following criteria:

- **Formal recognition:** The value of views can be formally recognised through their identification on Ordnance Survey (OS) or tourist maps as formal viewpoints, sign-posted and with facilities provided to add to the enjoyment of the viewpoint such as parking, seating and interpretation boards. Specific views may be afforded protection in local planning policy and recognised as valued views. Specific views can also be cited as being of importance in relation to landscape or heritage planning designations, for example the value of a view would be increased if it presents an important vista from a designed landscape or lies within / overlooks a designated area which implies a greater value to the visible landscape.
- **Informal recognition**: Views that are well-known at a local level and / or have particular scenic qualities can have an increased value, even if there is no formal recognition or designation. Views or viewpoints are sometimes informally recognised through references in art or literature and this can also add to their value. A viewpoint that is visited and appreciated by a large number of people would generally have greater importance than one gained by very few people.

Susceptibility to change

14A.4.11. Susceptibility relates to the nature of the viewer experiencing the view and how susceptible they are to the potential effects of the Proposed Works. A judgement to determine the level of susceptibility therefore relates to the nature of the viewer and their experience from that particular viewpoint or series of viewpoints, classified as high, medium or low and based on the following criteria:

- **Nature of the viewer:** The nature of the viewer is defined by the occupation or activity of the viewer at the viewpoint or series of viewpoints. The most common groups of viewers considered in the visual assessment include residents, motorists, and people taking part in recreational activity or working. Viewers—whose attention is focused on the landscape or with static long-term views—are likely to have a higher sensitivity. Viewers travelling in cars or on trains would tend to have a lower sensitivity as their view is transient and moving. The least sensitive viewers are usually people at their place of work as they are generally less sensitive to changes in views.
- **Experience of the viewer:** The experience of the visual receptor relates to the extent to which the viewer's attention or interest may be focused on the view and the visual amenity they experience at a particular location. The susceptibility of the viewer to change that arises from the Proposed Works may be influenced by the viewer's attention or interest in the view, which may be focused in a particular direction, from a static or transitory position, over a long or short duration, and with high or low clarity. For example, if the principal outlook from a settlement is aligned directly towards the Proposed Works, the experience of the visual receptor would be altered more notably than if the experience relates to a glimpsed view seen at an oblique angle from a car travelling at high speed. The visual amenity experienced by the viewer varies depending on the presence and relationship of visible elements, features or patterns experienced in the view and the degree to which the landscape in the view may accommodate the influence of the Proposed Works.

Visual sensitivity rating

14A.4.12. An overall level of sensitivity is applied for each visual receptor or view, classified as 'High', 'Medium' or 'Low' by combining individual assessments of the value of the view and the susceptibility of the visual receptor to change. Each visual receptor, meaning the particular person or group of people likely to be affected at a specific viewpoint, is assessed in terms of their sensitivity. The basis for the assessments is made clear using evidence and professional judgement in the evaluation of each receptor. Criteria that tend towards higher or lower sensitivity are set out in **Table 14A-3.**

Table 14A-3 - Visual sensitivity to change

Value / Susceptibility criteria	Level of value / susceptibility ranging from 'High' to 'Medium' to 'Low' High ⟷ Medium ⟷ Low	
Value – Landscape Value is determined by a range of indicators/criteria with examples as follows:		
Map/tourist information	Specific viewpoint identified in OS maps and / or tourist information and signage.	Viewpoint not identified in OS maps or tourist information and signage.
Facilities	Facilities provided at viewpoint to aid the enjoyment of the view.	No facilities provided at viewpoint to aid enjoyment of the view.
Planning recognition	View afforded protection in planning policy.	View is not afforded protection in planning policy.
Landscape value	View is within or overlooks a designated landscape, which implies a higher value to the visible landscape.	View is not within, nor does it overlook, a designated landscape.
Recognition	View has informal recognition and well-known at a local level, as having particular scenic qualities.	View has no informal recognition and is not known as having particular scenic qualities.
Art/Literature	View or viewpoint is recognised through references in art or literature.	View or viewpoint is not recognised in references in art or literature.
Scenic Quality	View has high scenic qualities relating to the content and composition of the visible landscape.	View has low scenic qualities relating to the content and composition of the visible landscape.
Susceptibility – determined by a range of indicators / criteria with examples as follows:		
Activity of the viewer	Viewer who is likely or liable to be influenced by the Proposed Works such as residents, walkers, or tourists, whose main attention and interest may be on their surroundings.	Viewer who is un or less likely to be influenced by the Proposed Works such as viewers whose attention is not focused on their surroundings (e.g. people at work, or team sports).

Value / Susceptibility criteria	Level of value / susceptibility ranging from 'High' to 'Medium' to 'Low' High ⟵⟶ Medium ⟵⟶ Low	
Nature of the View	Residents that gain static, long-term views of the development in their principal outlook.	Mobile viewers whose views are transient and dynamic (e.g. travelling in cars or on trains with glimpsed views).
Direction/ Field of View	A view that is focused in a specific directional vista, with notable features of interest in a particular part of the view.	Open views with no specific point of interest.
Visual amenity	Viewers are focused on the experience of a high level of visual amenity at the location due to its overall pleasantness as an attractive visual setting or backdrop to activities.	The visual amenity experienced at the location by viewers is less pleasant or attractive than might otherwise be the case.
Sensitivity to change	**Sensitivity drawn from consideration of the Value and Susceptibility criteria to level of Sensitivity ranging from 'High' to 'Medium' to 'Low'.**	

Visual magnitude of change

14A.4.13. The visual magnitude of change is an expression of the scale of change that would result from the visibility of the Proposed Works. In assessing the magnitude of change, the assessment has focused on the size or scale of change and its geographical extent. The duration and reversibility are stated separately in relation to the assessed effects (i.e. as short / medium / long-term and temporary / permanent).

Size or scale of change

14A.4.14. An assessment is made of the size or scale of change in the view that is likely to be experienced as a result of the Proposed Works, based on the following criteria:

- **Distance:** the distance between the visual receptor / viewpoint and the Proposed Works. Generally, the greater the distance, the lower the magnitude of change as the Proposed Works would constitute a smaller-scale component of the view.
- **Size:** the amount and size of the Proposed Works that would be seen. Visibility may range from a small / partial to whole visibility of the Proposed Works
- This is also related to the degree to which development may be wholly or partly screened by landform, vegetation (seasonal) and / or built form. Conversely, open views are likely to reveal more of a development, particularly where this is a key characteristic of the landscape.
- **Scale:** the scale of the change in the view with respect to the loss or addition of features in the view and changes in its composition. The scale of the Proposed Works may appear larger or smaller relative to the scale of the receiving landscape.

- **Field of View:** the vertical / horizontal field of view (FoV) and the proportion of view that is affected by the Proposed Works. Generally, the more of the proportion of a view that is affected, the higher the magnitude of change would be. If the Proposed Works extends across the whole of an open outlook, the magnitude of change would generally be higher as the full view would be affected. Conversely, if the Proposed Works extends over a narrow part of an open view, the magnitude of change is likely to be reduced as the Proposed Works would not affect the whole view or outlook. This can in part be described objectively by reference to the horizontal / vertical FoV affected relative to the extent and proportion of the available view.
- **Contrast:** the character and context within which the Proposed Works would be seen and the degree of contrast or integration of any new features with existing landscape elements, in terms of scale, form, mass, line, height, colour, luminance and motion. Developments which contrast or appear incongruous in terms of colour, scale and form are likely to be more visible and have a higher magnitude of change.
- **Consistency of image:** the consistency of image of the Proposed Works in relation to other developments. The magnitude of change for the Proposed Works is likely to be lower if it appears broadly similar to other developments in the landscape in terms of its scale, form and general appearance. New development is more likely to appear as logical components of the landscape with a strong rationale for their location.
- **Skyline / Background:** whether the Proposed Works would be viewed against the skyline or a background landscape may affect the level of contrast and magnitude. For example, skyline developments may appear more noticeable, particularly where they affect open and uninterrupted or undeveloped horizons. Conversely, development may also appear more noticeable when viewed against a darker background landscape, such as forestry. In these cases, the magnitude of change would tend to be higher. If the Proposed Works adds to an already developed skyline the magnitude of change would tend to be lower.
- **Number:** Generally, the greater the number of separate development components seen simultaneously or sequentially, the higher the magnitude of change and this may lead to whole project effects. Further cumulative effects would occur in the case of separate, existing developments, and their spatial relationship to each other would affect the magnitude of change.
- **Nature of Visibility:** The Proposed Works may be subject to various phases of development change and the manner in which the development may be viewed could be intermittent or continuous and / or seasonal due to periodic management or leaf fall, for example.

Geographical Extent

14A.4.15. The geographic extent over which the visual effects would be experienced is also assessed. This is distinct from the size or scale of effect and is described in terms of the physical area or location over which it would be experienced (described as a linear or area measurement). The extent of the effects would vary according to the specific nature of the Proposed Works and is principally assessed through ZTV, field survey and viewpoint analysis of the extent of visibility likely to be experienced by visual receptors. The geographical extent of visual effects is described as in the following examples:

- The geographical extent can be described as an area measurement or proportion of the total receptor affected. For example, effects on people within a particular area such as a golf course or area of common land can be illustrated via a 'representative viewpoint' that represents a similar visual effect, likely to be experienced by larger numbers of people within that area. The geographical extent of that visual effect can be expressed as approximately '5 hectares' or '10%' of the common land or a golf course area.
- The geographical extent can be described as a linear measurement (m or km) according to the length of route affected. For example, effects on people travelling on a route through the landscape such as a road or footpath can be illustrated via a 'representative viewpoint' that represents a similar visual effect likely to be experienced by larger numbers of people along that route. The geographical extent of that visual effect can be expressed as approximately '2 km' or '10%' of the total length of the route.
- The geographical extent of a visual effect experienced from a specific viewpoint may be limited to that location alone. (An example of a 'specific viewpoint' is a public viewpoint recommended in tourist literature such as a well visited hill summit. An example of an 'illustrative viewpoint' is a particular location within a built up or well vegetated area where an uncharacteristically open view exists).

Duration and reversibility

14A.4.16. The duration and reversibility of visual effects is based on the period over which the Proposed Works would occur (during decommissioning) and the effects reversed at the end of that period. Long-term, medium-term and short-term landscape effects are defined as follows:

- Temporary / Reversible Development: This includes time limited elements and activities:
  - long-term – more than 10 years;
  - medium-term – 6 to 10 years; and
  - short-term – 1 to 5 years.

Visual magnitude of change rating

14A.4.17. The 'magnitude' or 'degree of change' resulting from the Proposed Works is described as 'High', 'Medium', 'Low', 'Very Low' or 'Zero'. In assessing the magnitude of change the assessment has focused on the size or scale of change and its geographical extent. The duration and reversibility are stated separately in relation to the assessed effects (i.e. as short / medium / long-term and temporary / permanent). The basis for the assessment of magnitude for each receptor is made clear using evidence and professional judgement and some examples of the levels of magnitude of change that can occur on views are defined in **Table** 14A-4**.**

Table 14A-4 - Visual magnitude of change

Magnitude of change	Examples of visual magnitude considerations	
High	Size and Scale:	A very large - large and dominant change to the view.
	Number:	Involving the loss/addition of a large number of features / elements.
	Distance:	Typically appearing closer to the viewer in the fore to mid-ground.
	FoV:	Affecting a large vertical and wide horizontal FoV.
	Nature of Visibility:	Multiple phase development, continuously and sequentially visible.
	Contrast:	Strong degree of contrast with surroundings, little / no screening.
	Skyline:	Visible on the skyline as a new feature.
	Consistency of Image	Contrasting with other existing developments, lacking in visual rationale.
	Typically experienced from representative viewpoints illustrating a visual effect likely to be experienced by larger numbers of people, relative to the activity, affecting a large area or length / proportion of route. May also be experienced from a specific viewpoint.	
High/ Medium	Intermediate rating with combination of criteria from high or medium magnitude of change category.	
Medium	Size and Scale:	A medium and prominent change to the view.
	Number:	Involving the loss/addition of a number of features / elements.
	Distance:	Typically appearing in the middle ground.
	FoV:	Affecting a medium vertical and a medium horizontal FoV.
	Nature of Visibility:	Multiple phase development, intermittently and sequentially visible.
	Contrast:	Contrast with surroundings and may benefit from some screening.
	Skyline:	Visible on the skyline along with other features.
	Consistency of Image:	Different from other existing developments, some visual rationale.
	Typically experienced from representative viewpoints illustrating a visual effect likely to be experienced by a medium number of people, relative to the activity, affecting a medium area or length / proportion of route. May also be experienced from a specific viewpoint.	

Magnitude of change	Examples of visual magnitude considerations	
Medium/ Low	Intermediate rating with combination of criteria from medium or low magnitude of change category.	
Low	Size and Scale:	A small / noticeable change, easily missed by the casual observer.
	Number:	Involving the loss/addition of a small number of features / elements.
	Distance:	Typically appearing in the background.
	FoV:	Affecting a small vertical and a narrow horizontal FoV.
	Nature of Visibility:	Simple, single development, intermittently and infrequently visible.
	Contrast:	Some parity / 'fits' with surroundings and some screening.
	Skyline:	Partly visible on a developed skyline or not visible on the skyline.
	Consistency of Image:	Similar from other existing developments with visual rationale, appearing reasonably well accommodated within its surroundings.
	Typically experienced from illustrative viewpoints likely to be experienced by low numbers of people, relative to the activity, affecting a smaller area or length / proportion of route. May also be experienced from a specific viewpoint.	
Low/Very Low	Intermediate rating with combination of criteria from low or very low magnitude of change category.	
Very Low to Zero	Size and Scale:	A small or negligible change, need to 'look for it'.
	Number:	Involving the loss/addition of a small number of features / elements.
	Distance:	Typically appearing in the far distance.
	FoV:	Affecting a small vertical and a very narrow horizontal FoV.
	Nature of Visibility:	Simple, single development, intermittently and infrequently visible.
	Contrast:	Blends with surroundings and / or is well screened.
	Skyline:	Partly visible on a developed skyline or not visible on the skyline.
	Consistency of Image:	Similar from other existing developments with strong visual rationale, appearing well accommodated within its surroundings.
	Typically experienced from illustrative viewpoints likely to be experienced by low numbers of people, relative to the activity, affecting a smaller area or length / proportion of route. May also be experienced from a specific viewpoint.	

Evaluating visual effects and significance

14A.4.19. The level of visual effect is evaluated through the combination of visual sensitivity and magnitude of change. Once the level of effect has been assessed, a judgement is then made as to whether the level of effect is 'significant' or 'not significant'. This process is assisted by the matrix illustrated in **Table 14A-5** which is used to guide the assessment.

14A.4.20. Further information is also provided about the nature of the effects (whether these would be direct / indirect; temporary / permanent / reversible; beneficial / neutral / adverse or cumulative).

Significant Visual Effects

14A.4.21. A significant effect is more likely to occur where a combination of the variables results in the Proposed Works having a defining effect on the view or visual amenity or where changes affect a visual receptor that is of high sensitivity.

Non-Significant Visual Effects

14A.4.22. A non-significant effect is more likely to occur where a combination of the variables results in the Proposed Works having a non-defining effect on the view or visual amenity or where changes affect a visual receptor that is of low sensitivity.

Weather conditions

14A.4.23. The assessment of visual effects is undertaken in clear weather with good to excellent visibility. This means that the viewpoint assessment represents a maximum or fair assessment of the likely visual effects. The same viewpoint may be experienced under less optimal viewing conditions resulting in a significant effect appearing as non-significant, due to the change in the variable weather conditions. Due to the conditions of the assessment, the reverse (a non-significant effect appearing as significant) is unlikely to occur.

14A.5 Assessing cumulative landscape and visual effects

14A.5.1. The assessment of cumulative effects is essentially the same as for the main assessment of the 'solus' or primary landscape and visual effects, in that the level of landscape and visual effect is determined by assessing the sensitivity of the landscape or visual receptor and the magnitude of change. Cumulative assessment, however, considers the magnitude of change posed by multiple development.

14A.5.2. A cumulative landscape or visual effect simply means that more than one type of development is present or visible within the landscape. Other forms of existing development and land use such as woodland and forestry, patterns of agriculture, built form, and settlements already have a cumulative effect on the existing landscape that is already accepted or taken for granted. These features often contribute strongly to the existing character, forming a positive or adverse component of the local landscape. Landscapes, however, will have a finite capacity for cumulative development, beyond which further new development would result in landscape character change.

14A.5.3. This assessment has adopted detailed guidance on the cumulative assessment of wind farm development is provided in the Scottish Natural Heritage document *'Guidance: Assessing the*

Cumulative Landscape and Visual Impact of Onshore Wind Energy Developments' (2021)[2]. This distinguishes between 'additional' cumulative effects that would result from adding the Proposed Works to other cumulative development and 'combined' cumulative effects that assess the total cumulative effect of the Proposed Works and other cumulative development. In the latter case a significant cumulative effect may result from the Proposed Works or one of more other existing, under-construction or consented developments, or other development applications. In those cases, the main contributing development(s) is identified in the assessment.

14A.5.4. Types of cumulative effect are defined as follows:

- Cumulative Landscape Effects: Where more than development may have an effect on a landscape designation or particular area of landscape character;
- Cumulative Visual Effects: the cumulative or incremental visibility of similar types of development that may combine to have a cumulative visual effect. These can be further defined as follows:
  - Simultaneous or combined: where two or more developments may be viewed from a single fixed viewpoint simultaneously, within the viewer's field of view and without requiring them to turn their head[3];
  - Successive or repetitive: where two or more developments may be viewed from a single viewpoint successively as the viewer turns their head or swivels through 360°; and
  - Sequential: where a number of developments may be viewed sequentially or repeatedly at increased frequency, from a range of locations when travelling along a route within the LVIA Study Area.

14A.5.5. Whilst the CLVIA considers other development, it should not be considered as a substitute for individual LVIA assessment in respect of each of the other cumulative developments included in the CLVIA.

Defining the cumulative Study Area

14A.5.6. The cumulative Study Area is the same as the initial 5 km LVIA Study Area as illustrated in **Figure 14.1**. The cumulative assessment considers the effects of other existing, under-construction, consented and application developments within a wider search area (up to 5km radius from the Works Area) and assesses the effects of these on the landscape and visual receptors within the LVIA Study Area.

14A.5.7. Those developments at pre-planning or scoping stage are excluded in accordance with Scottish Natural Heritage guidance unless there is a justified / exceptional circumstance for their inclusion in the assessment.

14A.5.8. Assessment of cumulative effects during the Final Site Clearance phase have not been assessed since this phase would occur in approximately 80 years' time. It is not possible to predict potential cumulative development or changes to existing / proposed developments across this time period.

2 Paragraph 7.3 of GLVIA 3 states, in relation to an earlier version of this Guidance, that "*In Scotland considerable effort has been devoted to addressing definitions and interpretations of cumulative landscape and visual effects specifically in relation to wind farms and the resulting guidance has been used widely, and not only in Scotland*".

3 Note: A person's field of view is variable but is approximately 90° when facing in one direction.

Predicting cumulative landscape effects

14A.5.9. The assessment considers the extent to which the Proposed Works, in combination with others, may change landscape character through either an 'additional' or 'in combination' effect on characteristic elements, landscape characteristics and quality of the baseline landscape character. Identified cumulative landscape or seascape effects are described in relation to each individual Landscape Character Type/Coastal Character Area and for any designated landscape areas assessed within the LVIA Study Area.

Predicting cumulative visual effects

14A.5.10. The cumulative visibility of other existing and consented developments and applications is established using the computer programme (Resoft Wind Farm© software) to identify areas where developments are theoretically visible. In addition, publicly accessible LVIA analysis from consented or application developments is also interrogated to inform the assessment where this information is available.

14A.5.11. With potential receptor locations identified, cumulative effects on individual receptor groups are then explored through viewpoint analysis, which involves site visits informed by wireline illustrations that include other developments. The computer programme itself can also be used to 'drive' particular routes to assess the visibility of different developments and inform the assessment of sequential cumulative effects that may occur along a route or journey and compared to actual visibility experienced along a route on Site.

Evaluation of cumulative landscape and visual effects

14A.5.12. The evaluation of cumulative effects is assisted by the matrix illustrated in **Table 14A-5**, which is used to guide the assessment.

14A.5.13. The cumulative assessment has been prepared to ensure that, as well as the 'solus' or primary effect of the Proposed Works (LVIA) the 'additional' cumulative effects and the 'combined' cumulative effect (CLVIA) is also reported to account for two cumulative Scenarios as follows:

- **Proposed Works:** Assessed on an individual basis (the LVIA). This part of the assessment may take account of other existing forms of development that may be present in the landscape, whilst recognising that their influence on landscape character is likely to be time limited. It does not consider the additional or combined cumulative effects and only reports of the effect of the Proposed Works alone.
- **Scenario 1: Existing + Consented + the Proposed Works:** The additional and combined cumulative effects of the existing and consented developments with the Proposed Works are assessed.
- **Scenario 2: Existing + Consented + Applications + the Proposed Works**: The additional and combined cumulative effects of the existing and consented developments and applications, with the Proposed Works are assessed.

14A.5.14. In addition, the cumulative assessment takes account of the timescales, as far as practicable, for the operation of the existing and consented developments within 5 km of the Proposed Works.

14A.5.15. Due to the numbers of other development involved, the overall cumulative effects may be greater than for the primary effect or additional effect for the Proposed Works assessed in the main LVIA. The resulting level of cumulative effect may remain at the same level of effect or increase to a higher level of effect. The point at which these effects become significant or not significant in landscape and visual terms is still a matter for professional judgement, although four scenarios or combinations of cumulative effect, taking account of other development can occur as follows:

- A significant effect from the Proposed Works is predicted in addition or combination with another significant effect attributed to other development(s). The effect is still termed significant and cumulative but is a greater level of effect than for either development individually.
- A significant effect from the Proposed Works is predicted in addition or combination with another non-significant effect attributed to other development(s). The effect is still termed significant and cumulative but is attributed to the Proposed Works and is a greater level of effect than for either development individually.
- A non-significant effect from the Proposed Works is predicted in addition or combination with another significant effect attributed to other development(s). The effect is still termed significant and cumulative but is attributed to the other development(s) and is a greater level of effect than for either development individually.
- A non-significant effect from the Proposed Works is predicted in addition or combination with another non-significant effect attributed to other development(s). The effect is still termed cumulative and is a greater level of effect than for either development individually; the combined effect, however, may or may not be significant.

14A.5.16. The nature of a cumulative effect may also be described as direct / indirect, temporary / permanent, or beneficial/ adverse. The probability of a cumulative effect occurring may also be described (certain, likely or uncertain / unknown).

14A.6 Evaluation of significance

14A.6.1. The matrix presented in **Table 14A-5** is used as a guide to illustrate the LVIA process. In line with the emphasis placed in GLVIA3[1] upon the application of professional judgement, an overly mechanistic reliance upon a matrix is avoided through the provision of clear and accessible narrative explanations of the rationale underlying the assessment made for each landscape and visual receptor. Such narrative assessments provide a level of detail over and above the outline assessment provided by use of the matrix alone.

14A.6.2. The landscape and visual assessment unavoidably, involves a combination of quantitative and qualitative assessment and wherever possible cross references will be made to objective evidence, baseline figures and / or to photomontage visualisations to support the assessment conclusions. Often a consensus of professional opinion has been sought through consultation, internal peer review, and the adoption of a systematic, impartial, and professional approach. Importantly each effect results from its own unique set of circumstances and have been assessed on a case by case basis. The matrix should therefore be considered as a guide and any deviation from this guide will be clearly explained in the assessment.

14A.6.3. In accordance with the relevant EIA Regulations it is important to determine whether the effects, assessed as a result of the Proposed Works, are likely to be significant. Significant landscape and visual effects will be highlighted in bold in the text and in most cases, relate to all those effects that result in a '**Major** or a '**Major / Moderate**' effect as indicated in **Table 14A-5**.

14A.6.4. In some circumstances, '**Moderate**' levels of effect also have the potential, subject to the assessor's opinion, to be considered as significant and these exceptions are also highlighted in bold and explained as part of the assessment, where they occur.

14A.6.5. White or un-shaded boxes in **Table 14A-5** indicate a non-significant effect. In those instances where there would be no effect, the magnitude has been recorded as 'Zero' and the level of effect as 'None'.

Table 14A-5 - Evaluation of landscape and visual effects

		Landscape and Visual Sensitivity		
		High	**Medium**	**Low**
Magnitude of Change	**High**	**Major (Significant)**	**Major/Moderate (Significant)**	Moderate (Potentially Significant)
	Medium	**Major/Moderate (Significant)**	Moderate (Potentially Significant)	Moderate/Minor (Not Significant)
	Low	Moderate (Potentially Significant)	Moderate/Minor (Not Significant)	Minor (Not Significant)
	Very Low	Moderate/Minor (Not Significant)	Minor (Not Significant)	Negligible (Not Significant)
	Zero	None		

Type or Nature of Effect

14A.6.6. In accordance with the EIA Regulations the type or nature of effect is also described in terms of whether it is direct or indirect; its duration (temporary / permanent or reversible) cumulative; and whether the effect is positive, neutral or negative. Transboundary effects are not relevant to this assessment.

Direct and indirect effects

14A.6.7. Direct landscape effects relate to the host landscape and concern both physical and perceptual effects on the receptor.

14A.6.8. Indirect landscape effects relate to those landscapes and receptors which are separated by distance or remote from the development and therefore are only affected in terms of perceptual effects. The Landscape Institute also defines indirect effects as those which are not a direct result of the development but are often produced away from it or as a result of a complex pathway.

14A.6.9. Visual effects are generally all considered as direct effects. An indirect visual effect may however be used to define a visual effect on a view that is not in the direction of the main view of the viewer as described by the following examples:

- Road users generally face the road directly ahead in the direction of travel and visual effects affecting those views may be described as direct effects. Where the visual effect is experienced in views oblique to the direction of travel they may be described as indirect.
- Designed landscapes and vistas / viewpoints may be orientated in a particular direction and visual effects affecting those views may be described as direct effects. Where the visual effect is experienced in views oblique to the direction of the designed or main / primary view they may be described as indirect.

14A.6.10. Secondary effects (or effects subsequent to an initial effect) are covered in this assessment by indirect effects.

Beneficial and adverse effects

14A.6.11. Large developments give rise to a wide range of opinions, from strongly adverse to strongly beneficial. However, LVIA is not an assessment of public opinion, although a precautionary approach has been taken, which assumes that the nature of the effects would be adverse or neutral unless otherwise stated.

14A.6.12. Guidance provided by the in GLVIA3[1] on the nature of effect (i.e. beneficial or adverse) states that 'in the LVIA, thought must be given to whether the likely significant landscape and visual effects are judged to be positive (beneficial) or negative (adverse) in their consequences for landscape or for views and visual amenity', but it does not provide guidance as to how that may be established in practice. The nature of effect is therefore one that requires interpretation and, where applied, this involves reasoned professional opinion.

14A.6.13. In this assessment the nature of effects refers to whether the landscape and / or visual effect of the Proposed Works is positive or negative (herein referred to as 'beneficial' / 'neutral' or 'adverse').

14A.6.14. In relation to many forms of development, the LVIA will identify 'beneficial' and 'adverse' effects by assessing these under the term 'Nature of Effect'. The landscape and visual effects of large-scale infrastructure are difficult to categorise in either of these brackets as, unlike other aspects, there are no definitive criteria by which the effects can be measured as being categorically 'beneficial' or 'adverse'. In some respects, such as noise or ecology, it is possible to quantify the effect in numeric terms, by objectively identifying or quantifying the proportion of a receptor that is affected and assessing the nature of that effect in justifiable terms. However, this is not the case in relation to landscape and visual effects where the approach combines quantitative and qualitative assessment.

14A.6.15. Generally, a precautionary approach is adopted, which assumes that significant landscape and visual effects will be weighed on the adverse side of the planning balance. Unless it is stated otherwise, the effects considered in the assessment will be considered to be adverse. Beneficial or neutral effects may, however, arise in certain situations and are stated in the assessment where relevant, based on the following definitions:

- Beneficial effects contribute to the landscape and visual resource through the enhancement of desirable characteristics or the introduction of new, beneficial attributes. The development contributes to the landscape by virtue of good design or the introduction of new landscape planting. The removal of undesirable existing elements or characteristics can also be beneficial, as can their replacement with more appropriate components.

- Neutral effects occur where the development fits with the existing landscape character or visual amenity. The development neither contributes to or detracts from the landscape and visual resource and can be accommodated with neither beneficial or adverse effects, or where the effects are so limited that the change is hardly noticeable. A change to the landscape and visual resource is not considered to be adverse simply because it constitutes an alteration to the existing situation.
- Adverse effects are those that detract from the landscape character or quality of visual attributes experienced, through the introduction of elements that contrast, in a detrimental way, with the existing characteristics of the landscape and visual resource, or through the removal of elements that are key in its characterisation.

Probability of Effect

14A.6.16. The probability of cumulative effects is variable. Those effects related to existing development and those under construction are considered as certain; effects related to development with planning consent are considered as likely. Development sites for which there is a submitted planning application are considered as uncertain with an even greater level of uncertainty attached to pre-planning application sites.

14A.7 Production of ZTVs and visualisations

14A.7.1. Zones of Theoretical Visibility (ZTVs) and visualisations (annotated photographs) are graphical images produced to assist and illustrate the LVIA. The methodology used for viewpoint photography, ZTVs and annotated photographs adopts the methods described in the Scottish Natural Heritage visualisation guidance[4]. Additional guidance is provided by the Landscape Institute[5].

Methodology for production of ZTVs

14A.7.2. The ZTVs are calculated using Resoft Wind Farm© software to generate the zone of theoretical visibility of the Proposed Works. This software creates a 3D computer model of the existing landscape and the Proposed Works using digital terrain data as follows:

- OS Terrain 5: Used to produce a more detailed ZTV plot for limited areas, often used where there are small undulations or crags within the landscape. These tiles provide a digital record of the existing landform of Great Britain based on 5 m grid squares and models representing the specified geometry and position of the Safestore. The computer model includes the central Study Area and takes account of atmospheric refraction and the Earth's curvature.

14A.7.3. The resulting ZTV plots are overlaid on OS mapping at an appropriate scale and presented as figures using desktop publishing/graphic design software.

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[4] Scottish Natural Heritage (2017). *Visual Representation of Wind Farms, Version 2.2*. (Online) Available at: https://www.nature.scot/doc/visual-representation-wind-farms-guidance (Accessed August 2024).

[5] Landscape Institute (2019). *Technical Guidance Note: Visual Representation of Development Proposals*. (Online) Available at: https://landscapewpstorage01.blob.core.windows.net/www-landscapeinstitute-org/2019/09/LI_TGN-06-19_Visual_Representation.pdf (Accessed August 2024) .

Methodology for baseline photography

14A.7.4. Once a view has been selected, the location is visited, confirmed, and assessed in the field. The viewpoint location is micro-sited to avoid as far as reasonable foreground clutter and photographed during fair weather and light conditions. A photographic record is taken to record the view and the details of the viewpoint location and associated data are recorded to assist in the production of visualisations and to validate their accuracy.

14A.7.5. The following photographic information is recorded:

- date, time, weather conditions and visual range;
- GPS recorded 12 figure grid reference accurate to ~5-10 m; and
- GPS recorded Above Ordnance Datum (AOD) height data.

14A.7.6. All photographs included in this assessment were recorded with a digital SLR camera set to produce photographs equivalent to that of a manual 35 mm SLR camera with a fixed 50 mm or 75 mm focal length lens as required.

14A.7.7. Whilst no two-dimensional image can fully represent the real viewing experience, the visualisation aims to provide a realistic representation of the Proposed Works, based on current information and visualisation methodology.

Weather conditions

14A.7.8. GLVIA 3[1] para 8.22 states:

> "*In preparing photomontages, weather conditions shown in the photographs should (with justification provided for the choice) be either:*
>
> - *representative of those generally prevailing in the area; or*
> - *taken in good visibility, seeking to represent a maximum visibility scenario when the development may be highly visible*".

14A.7.9. In preparing visualisations for the LVIA, photographs were taken in favourable weather conditions. Weather conditions shown in the photographs for all viewpoints have, where possible, been taken during periods of 'very good' or 'excellent' visibility conditions, seeking to represent a maximum visibility scenario when the Proposed Works may be highly visible.

Methodology for production of visualisations

14A.7.10. Each view has been illustrated with an annotated baseline photograph indicating the Proposed Works. The photograph is of the existing view recorded in fair weather conditions and usually presented as a panorama that represents a 90° or 53.5° FoV photograph.

Baseline Photograph Production

14A.7.11. Photographs are then taken using a digital SLR camera in combination with a panoramic head equipped tripod. Detailed information is then recorded on site to enable the accurate alignment of the photographs with the wireline model (data such as: GPS grid co-ordinates; ground level information; compass bearings; and any other known references and viewpoint information).

14A.7.12. To create the baseline panorama, the photographs from the viewpoint are then digitally joined using Autopano Giga or PTGui software to form a planar or cylindrical projection image or panorama using computer software to remove 'barrel distortion' caused by the camera lens. There are practical limitations to shooting viewpoint photographs only in very good or excellent visibility and at particular times of day or from location that avoid foreground clutter or other vertical features such as telegraph poles, particularly where this is a true representation of the view from that viewpoint area.

Limitations of Visualisations

14A.7.13. The visualisations used in this LVIA are for illustrative purposes only and, whilst useful tools in the assessment, are not considered to be completely representative of what will be apparent to the human eye. The assessments are carried out from observations in the field and therefore may include elements that are not visible in the photographs.

14A.7.14. The visualisations of the Proposed Works have a number of limitations when using them to form a judgement on visual effect. These include:

- a visualisation can never show exactly what a development will look like in reality due to factors such as: different lighting, weather and seasonal conditions which vary through time and the resolution of the image;
- the images provided give a reasonable impression of the scale and the distance to the Proposed Works but can never be 100% accurate to the as constructed effect;
- a static image cannot convey movement or other features such as the movement of water or the reflection from the sun;
- the viewpoints illustrated are representative of views in the area but cannot represent visibility at all locations;
- to form the best impression of the effects; these images are best viewed at the viewpoint location shown;
- the visualisations must be printed and viewed at the correct size as indicated on the figures;
- images should be held flat at a comfortable arm's length. If viewing these images on a wall or board at an exhibition, stand at arm's length from the image presented to gain the best impression; and
- it is preferable to view printed images rather than view images on screen. Images on screen should be viewed using a normal PC screen with the image enlarged to the full screen height to give a realistic impression.

Printing of maps and visualisations

14A.7.15. All electronic visualisations and maps should be printed out and viewed at the correct scale as noted on the document.

14B

Viewpoint assessment

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14B Appendix 14B – Viewpoint assessment

14B.1 Introduction

14B.1.1. The viewpoint assessment and subsequent analysis are used to assist the design and further define the scope of the assessment process. In particular, the maximum distance from the Proposed Works at which significant effects are likely to be sustained has been identified. This has been used to focus the baseline information and detailed reporting of the Landscape and Visual Impact Assessment (LVIA) in **Chapter 14: Landscape and Visual Impact Assessment**.

14B.2 Viewpoint and cumulative viewpoint analysis

14B.2.1. The viewpoint assessment has been conducted from the 11 viewpoint locations agreed with SCC and illustrated in **Figure 14.2**, with baseline photography presented in **Figures14.4** to **14.14**.

14B.2.2. Cumulative developments within the 3 km study area have also been included in the assessment. These focus on:

- The decommissioning of Hinkley Point A (HPA) to the immediate west of Hinkley Point B (HPB), divided into HPA's Pre-Care and Maintenance, Care and Maintenance and Final Site Clearance phases where relevant; and
- The construction and operational phases of Hinkley Point C (HPC). A number of the viewpoint locations (1, 4, 5, 8 and 10) correspond with locations utilised in the HPC LVIA. As a consequence, the magnitudes of likely visual change associated with HPC can be readily understood and used to inform the cumulative assessment, noting that these magnitudes have been accepted by stakeholders and decision makers through the planning process. For the other five viewpoints, nearby HPC viewpoint locations have been used as a proxy where appropriate.

Geographical Extent of Potentially Significant Visual Effects

14B.2.3. The maximum distance from the Proposed Works at HPB, at which significant effects are likely to be sustained has been identified by the viewpoint analysis in **Section 14B.5** of this Appendix. Furthermore, the cumulative viewpoint analysis has identified a likely threshold for significant cumulative visual effects that would result from the Proposed Works, in addition to, or in combination with other existing and consented developments, and proposed developments where a planning application has been submitted.

Potential for significant effects: Proposed Works

14B.2.4. The viewpoint analysis recorded in **Table 14B-12** indicates that significant visual effects are likely to affect locations along the low-lying coastline to the east within approximately 1.5 km distance from the Proposed Works. This would mostly affect westbound recreational walkers accessing the King Charles III England Coast Path and adjoining open access land to the south and beach to the north from which there would be clear views of the Proposed Works as evidenced at Viewpoint 4 (**Figure 14.7**).

Potential for significant cumulative effects

14B.2.5. Significant visual cumulative effects as a result of the introduction of the Proposed Works would occur at Viewpoint 4, although noting that significant visual effects have also been predicted at that viewpoint as a consequence of the construction and operation of HPC.

14B.2.6. No significant cumulative effects have been concluded as a result of the decommissioning of HPA. Significant cumulative visual effects have however been concluded at the following viewpoints as a consequence of HPC:

- Viewpoint 1: during HPC construction phase only;
- Viewpoint 2: during HPC's construction, operation and decommissioning phases;
- Viewpoint 3: during HPC's construction, operation and decommissioning phases;
- Viewpoint 4: during HPC's construction, operation and decommissioning phases;
- Viewpoint 7: during HPC's construction, operation and decommissioning phases;
- Viewpoint 8: during HPC's construction, operation and decommissioning phases; and
- Viewpoint 10: during HPC's construction, operation and decommissioning phases.

14B.2.7. These significant visual effects as a consequence of the construction and operation of HPC have been accepted by decision makers as being an acceptable change when considered in the planning balance.

14B.2.8. As noted in the methodology in **Appendix 14A** and in paragraph 14.8.1, cumulative effects during the Final Site Clearance phase have not been assessed since this phase would occur approximately 84 to 96 year following End of Generation (EoG). It is therefore not possible to predict potential cumulative development or changes to existing / proposed developments across this time period.

Interpretation of Viewpoint Analysis Summary Tables

14B.2.9. The information set out in **Table 14B-12** provides a summary of the viewpoint analysis of the effects of the Proposed Works on a 'solus' or primary basis, and on a cumulative basis.

14B.2.10. This 'solus' part of the assessment helps to define the contribution the Proposed Works would make to any subsequent cumulative assessments (in addition to, or in combination with, other development). It is divided into the three phases of the Proposed Works; Preparations for Quiescence phase, Quiescence phase, and Final Site Clearance phase.

14B.2.11. The cumulative analysis considers the cumulative effects as follows:

- Additional Level of Effect: Proposed Works only;
- Combined Level of Effect: Baseline + Other Proposed Development + Proposed Works.

14B.3 Sunlight and Weather Conditions

14B.3.1. Changing weather patterns and local climatic conditions would influence the visibility of the Proposed Works which would vary from periods of low visibility (fog, low cloud, and bright sunny conditions that are accompanied by haze generated by temperature inversions) as well as periods of high visibility in clear weather. In some instances, the Proposed Works may appear 'back-lit' (e.g. appearing darker in colour during sunset/sunrise and periods of pale or white blanket cloud) and in other circumstances may appear to be 'up-lit' (e.g. during stormy periods that combine dark clouds and bright sunshine).

14B.3.2. The viewpoint analysis and assessment has been undertaken with an assumption of good weather conditions, clear visibility and under winter conditions where seasonal leaf cover and therefore vegetative screening is at its minimum.

14B.4 Visual assessment tables

Table 14B-1 - Viewpoint 1: King Charles III England Coast Path on the western side of Wick Moor

Figure 14.4	Viewpoint 1: King Charles III England Coast Path on the western side of Wick Moor
Description	This viewpoint is located on local PRoW WL 23/61 which forms part of the inland diversion of the King Charles III England Coast Path, currently in place due to land management operations associated with the construction of HPC. The viewpoint is located approximately 450 m to the south-east of the reactor building within HPB, at an elevation of 5 m AOD. **Figure 14.4** illustrates the baseline view and a foreground which comprises open grazing marsh, drainage ditch and reed planting associated with a small pond located to the west of the viewpoint. The screening role of the perimeter woodland belt which wraps around the eastern and southern edges of the operational land uses within HPB is apparent, with all lower height ancillary buildings screened by the tree cover whilst the reactor building is partially visible through the deciduous trees under winter conditions. This screening would be more comprehensive during the summer months when the trees are in full leaf. The reactor buildings within HPA are also partially visible through the intervening woodland belt in the same field of view as HPB.
Sensitivity	The viewpoint is not located within any nationally or locally designated landscapes but is located on a section of the King Charles III England Coast Path National Trail. The value of the viewpoint is therefore assessed as High. The view would be experienced by recreational walkers whose attention is likely to be on the surrounding landscape features. Therefore, susceptibility to change, and consequently the sensitivity is assessed as *High*.
Magnitude of Change	<u>Preparations for Quiescence phase:</u> There would be no views of ground and low-level decommissioning activities from this viewpoint as the intervening perimeter scrub and tree belt preclude north-westerly views across the Works Area, even during the winter months. The regular deployment of standard mobile cranes would however be partially visible above or through the tree line depending on the precise location of crane operations within the Works Area. The reactor building, partially visible through the deciduous trees, would be retained and repurposed as the Safestore, which would occupy the same footprint and height as the existing building. The panels of the Safestore would be of a comparable colour to the existing façade of the reactor building (light grey) thereby reducing visual contrast with the sky which forms the backdrop from this location. The magnitude of visual change would be *Low* during the deployment of cranes and recladding works reducing to *Very Low* towards the end of the Preparations for Quiescence phase, when crane activity ceases and the Safestore building would be the only building remaining on site. <u>Quiescence phase:</u> The Safestore would remain in situ during this phase and there would be reduced on-site activity. The magnitude of visual change, when assessed against the baseline view, would be *Very Low*.

<table>
<tr><th>Figure 14.4</th><th colspan="4">Viewpoint 1: King Charles III England Coast Path on the western side of Wick Moor</th></tr>
<tr><td></td><td colspan="4"><u>Final Site Clearance phase:</u>
The periodic deployment of cranes, other elevated construction machinery and the gradual dismantling of the upper sections of the Safestore would be partially visible through the intervening perimeter woodland belt. All ground and low-level activities, including the provision of any temporary on-site Waste Management Centre, would be screened by the perimeter vegetation. The resultant removal of the existing large-scale building, although not readily visible component of baseline views, would give rise to a beneficial visual effect during the winter months. The magnitude of change associated with both the dismantling activities and the final removal of built form from within eastbound walkers' views would be Low when assessed against the baseline view.</td></tr>
<tr><td rowspan="5">Assessment of Visual Effects</td><td>Sensitivity</td><td colspan="3">High</td></tr>
<tr><td>Phase of Works</td><td>Preparations for Quiescence</td><td>Quiescence</td><td>Final Site Clearance</td></tr>
<tr><td>Magnitude of visual change</td><td>Low reducing to Very Low</td><td>Very Low</td><td>Low</td></tr>
<tr><td>Level of Effect</td><td>Moderate and Not Significant reducing to Moderate / Minor and Not Significant</td><td>Moderate / Minor and Not Significant</td><td>Moderate and Not Significant</td></tr>
<tr><td>Type of effect</td><td>Medium to Long term, direct and adverse to neutral.</td><td>Long term, direct and neutral.</td><td>Medium to Long term, direct and adverse becoming beneficial.</td></tr>
<tr><td>Cumulative Magnitude <u>excluding the Proposed Works</u></td><td colspan="4"><u>Preparations for Quiescence phase:</u>
The existing HPA reactor buildings are located to the west of the Proposed Works and are similarly screened by tree cover along the southern perimeter to the Site. The comparable decommissioning activities to those described in relation to HPB during HPA's Pre-Care and Maintenance phase and formation of the Safestores, would therefore also be visually comparable and activities would be heavily filtered by the intervening tree cover. The magnitude of change associated with the HPA decommissioning would be Very Low.
With regard to HPC, the LVIA[1] concluded that the magnitude of visual change from this location (Viewpoint 15 in the HPC LVIA) would be Low during the construction phase, giving rise to a Moderate level of effect which was assessed as being Significant. During the operational phase, a Very Low magnitude of change was concluded with glimpsed views of the reactor domes potentially available during the winter months.</td></tr>
</table>

1 EDF Energy (2011). HPC Development Site. Environmental Statement – Volume 2.

Figure 14.4	Viewpoint 1: King Charles III England Coast Path on the western side of Wick Moor			
	<u>Quiescence phase:</u> For a large proportion of the Quiescence phase, the HPA Safestore buildings would be a visual component of glimpsed winter views only giving rise to a *Very Low* magnitude. The Final Site Clearance phases of HPA would occur within the second half of HPBs Quiescence phase, during which HPA's Safestore buildings would be demolished. This would re-introduce elevated construction and dismantling activity within the view which would be principally screened by intervening vegetation. The magnitude of change associated with the HPA decommissioning would therefore be *Very Low.* The continued operation of HPC would give rise to a *Very Low* magnitude. Any subsequent decommissioning at the end of the operational phase and which may occur within the Quiescence phase of HPB would also be *Very Low* due to the presence of the now mature Branland Copse on the eastern edge of HPC. <u>Final Site Clearance phase:</u> Scoped out due to the timescales involved.			
Preparations for Quiescence phase	***Additional Cumulative Level of Effect***	Moderate and Not Significant reducing to Moderate / Minor and Not Significant	***Combined Cumulative Level of Effect***	**Moderate** and Significant (due to HPC construction) reducing to Moderate/Minor and Not Significant (due to both HPA and HPC)
Quiescence phase	***Additional Cumulative Level of Effect***	Moderate / Minor and Not Significant	***Combined Cumulative Level of Effect***	Moderate/Minor and Not Significant (due to both HPA and HPC)

Table 14B-2 - Viewpoint 1a: King Charles III England Coast Path to the north of Hinkley Point B

Figure 14.5a & b	Viewpoint 1a: King Charles III England Coast Path to the north of Hinkley Point B
Description	This viewpoint is located on the King Charles III England Coast Path to the north of HPB. The viewpoint is located approximately 140 m to the north-east of the reactor building within HPB, at an elevation of 8 m AOD. **Figures 14.5a&b** illustrate the baseline view and a foreground which comprises security fencing, which separates HPB from the concrete path which forms this section of the King Charles III England Coast Path and adjoining seawall. The gabion wall which sits on the inside of the perimeter security fence screens the lower elevation of the buildings within HPB, leaving the reactor building, top of the gas turbine houses and associated stack and upper façade and roofs of the ancillary warehouses visible above the wall. The offshore caisson (Cooling Water Intake Structure) can be seen to the north-west, at a distance of approximately 750 m. The reactor buildings within HPA are also partially visible above through the perimeter security fence and above the gabion wall and intervening warehouses.
Sensitivity	The viewpoint is not located within any nationally or locally designated landscapes but is located on a section of the King Charles III England Coast Path National Trail. The value of the viewpoint is therefore assessed as High. The view would be experienced by recreational walkers whose attention is likely to be on the surrounding landscape features. Therefore, susceptibility to change, and consequently the sensitivity is assessed as *High*.
Magnitude of Change	<u>Preparations for Quiescence phase:</u> There would be close distance views of elevated demolition activities above the intervening gabion wall associated with the demolition and clearance of the gas turbine houses and associated stack, tanks and warehouses. This would include the regular deployment of standard mobile cranes depending on the precise location of crane operations within the Works Area. The reactor building, visible above the gabion wall, would be retained and modified into the Safestore, which would occupy the same footprint and height as the existing building. The panels of the Safestore would be of a comparable colour to the existing façade of the reactor building (light grey) thereby reducing visual contrast with the sky which forms the backdrop from this location. Works associated with the decommissioning of marine structures (CW system) would also be clearly visible in the middle distance. The magnitude of visual change would be *Medium* during the deployment of cranes and recladding works reducing to *Low* towards the end of the Preparations for Quiescence phase, when crane activity ceases and the Safestore building would be the only building remaining on site. The removal of buildings to the north of the Safestore (closest to the viewpoint) would give rise to a beneficial visual effect. <u>Quiescence phase:</u> The Safestore would remain in situ during this phase and there would be reduced on-site activity. The magnitude of visual change, when assessed against the baseline view, would be *Low*.

Figure 14.5a & b	Viewpoint 1a: King Charles III England Coast Path to the north of Hinkley Point B			
	Final Site Clearance phase: The periodic deployment of cranes, other elevated construction machinery and the gradual dismantling of the Safestore would be visible above the gabion wall and in close proximity above the gabion wall, whilst all ground and low-level activities would continue to be screened. The resultant removal of the existing large-scale building at the end of the Final Site Clearance phase would give rise to a beneficial visual effect. The magnitude of change associated with the dismantling activities would be Medium whilst the magnitude of change associated with the final removal of built form from within westbound walkers' views would be High when assessed against the baseline view.			
Assessment of Visual Effects	**Sensitivity**	High		
	Phase of Works	Preparations for Quiescence	Quiescence	Final Site Clearance
	Magnitude of visual change	Medium reducing to Low	Low	Medium increasing to High
	Level of Effect	**Major/Moderate** and **Significant** reducing to Moderate and Not Significant	Moderate and Not Significant	**Major/Moderate** and **Significant** increasing to **Major** and **Significant**
	Type of effect	Medium to Long term, direct and adverse becoming beneficial.	Long term, direct and beneficial.	Medium to Long term, direct and adverse becoming beneficial.
Cumulative Magnitude excluding the Proposed Works	Preparations for Quiescence phase: The existing HPA reactor buildings are located to the west of the Proposed Works and are partially screened by the intervening gabion wall. The comparable decommissioning activities to those described in relation to HPB during HPA's Pre-Care and Maintenance phase and formation of the Safestores, would therefore also be visually comparable (although with increased separation distance) and activities would be partially screened. Once the intervening warehouse buildings within HPB have been demolished, a greater proportion of the HPA Safestores would be visible through the perimeter security fence and above the wall. The magnitude of change associated with the HPA decommissioning would be *Low* when assessed against the baseline. With regard to HPC, with the exception of the northern end of the jetty and periodic movement of vessels delivering materials, there would be no views of the construction activity within HPC. The magnitude of change would be *Low/Very Low* during the construction phase, giving rise to a Moderate/Minor level of effect which would be Not Significant. During the operational phase (when this jetty has been removed at the end of the construction phase), a *Zero* magnitude of change would occur.			

Figure 14.5a & b	Viewpoint 1a: King Charles III England Coast Path to the north of Hinkley Point B			
	Quiescence phase: For a large proportion of the Quiescence phase, the HPA Safestore buildings would be a visual component giving rise to a *Very Low* magnitude. The Final Site Clearance phases of HPA would occur within the second half of HPBs Quiescence phase, during which HPA's Safestore buildings would be demolished. This would re-introduce elevated construction and dismantling activity within the view. The magnitude of change associated with the HPA decommissioning would therefore be *Low.* The continued operation of HPC would give rise to a *Zero* magnitude of change. Any subsequent decommissioning at the end of the operational phase and which may occur within the Quiescence phase of HPB would also be *Zero.* Final Site Clearance phase: Scoped out due to the timescales involved.			
Preparations for Quiescence phase	***Additional Cumulative Level of Effect***	Moderate and Not Significant reducing to Moderate / Minor and Not Significant	***Combined Cumulative Level of Effect***	**Major/Moderate** and **Significant** (due to HPB) reducing to Moderate and Not Significant
Quiescence phase	***Additional Cumulative Level of Effect***	Moderate / Minor and Not Significant increasing to Moderate and Not Significant	***Combined Cumulative Level of Effect***	Moderate and Not Significant (due to both HPA and HPB)

Table 14B-3 - Viewpoint 2: King Charles III England Coast Path within Wick Moor close to Wick Moor Drove

Figure 14.5	Viewpoint 2: King Charles III England Coast Path within Wick Moor close to Wick Moor Drove
Description	Viewpoint 2 is located on local PRoW WL 23/70/1 which also forms part of the diverted King Charles III England Coast Path. The viewpoint is located at an elevation of 7 m AOD, approximately 900 m to the south-west of the reactor building within HPB. **Figure 14.5** illustrates the framed view between two hedgerows towards the reactor building which is partially filtered in winter views by the deciduous tree cover along the southern boundary HPA. This screening would be more effective during the summer months when trees are in full leaf and views of the reactor building from this location would therefore be seasonal and limited during the summer. There are no views of the lower height ancillary buildings within the HPB Works Area as a consequence of the tree cover.
Sensitivity	The viewpoint is not located within any nationally or locally designated landscapes but is located on the King Charles III England Coast Path National Trail. The value of the viewpoint is therefore assessed as High. The view would be experienced by recreational

Figure 14.5	Viewpoint 2: King Charles III England Coast Path within Wick Moor close to Wick Moor Drove			
	walkers whose attention is likely to be on the surrounding landscape features. Therefore, susceptibility to change, and consequently the sensitivity is assessed as *High*.			
Magnitude of Change	Preparations for Quiescence phase: All ground and low-level decommissioning activities would be screened by intervening vegetation around the southern perimeter of the Site. The regular deployment of standard mobile cranes would however be partially visible above the trees but are likely to be comparable in height to existing vertical infrastructure in the view including the reactor building and 400kV pylons. The reactor building, partially visible through and above the deciduous trees, would be retained and repurposed as the Safestore, which would occupy the same footprint and height as the existing building. The panels of the Safestore would be of a comparable colour to the existing façade of the reactor building (light grey) thereby reducing visual contrast with the sky which forms the backdrop from this location. The magnitude of visual change would be *Low* during the deployment of cranes and recladding works reducing to *Very Low* towards the end of the Preparations for Quiescence phase, when crane activity ceases and the Safestore building would be the only building remaining on site. Quiescence phase: The Safestore would remain in situ during this phase and there would be reduced activity. The magnitude of visual change, when assessed against the baseline view, would be *Very Low*. Final Site Clearance phase: The periodic deployment of cranes, other elevated construction machinery and the gradual dismantling of the upper sections of the Safestore would be partially visible above or through the intervening tree line. All ground and low-level activities, including the provision of any temporary on-site Waste Management Centre, would be screened by the perimeter vegetation. The removal of the existing large-scale building at the end of the Final Site Clearance phase would give rise to a beneficial visual effect. The magnitude of change associated with both the dismantling activities and the final removal of built form from within eastbound walkers' views would be *Low* when assessed against the baseline view.			
Assessment of Visual Effects	**Sensitivity**	High		
	Phase of Works	Preparations for Quiescence	Quiescence	Final Site Clearance
	Magnitude of visual change	Low reducing to Very Low	Very Low	Low
	Level of Effect	Moderate and Not Significant reducing to Moderate / Minor and Not Significant	Moderate / Minor and Not Significant	Moderate and Not Significant

Figure 14.5	Viewpoint 2: King Charles III England Coast Path within Wick Moor close to Wick Moor Drove			
	Type of effect	Medium to Long term, direct and adverse to neutral.	Long term, direct and neutral.	Medium to Long term, direct and adverse becoming beneficial.
Cumulative Magnitude excluding the Proposed Works	Preparations for Quiescence phase: There are no views of the existing HPA development from this viewpoint. With regard to HPC, the LVIA[1] concluded that the magnitude of visual change from a location at Pixies Mound (Wick Barrow) sited just north-east of Viewpoint 2 location (Viewpoint 14 in the HPC LVIA) would be High during the construction phase, reducing to *Medium* at Year 1 of operation. Quiescence phase: There are no views of the existing HPA development from this viewpoint. The continued operation of HPC would give rise to a *Medium* magnitude of change. Any subsequent decommissioning works (Preparations for Quiescence phase) at the end of the operational phase and which may occur within the Quiescence phase of HPB would be *High*. Final Site Clearance phase: Scoped out due to the timescales involved.			
Preparations for Quiescence phase	***Additional Cumulative Level of Effect***	Moderate and Not Significant reducing to Moderate / Minor and Not Significant	***Combined Cumulative Level of Effect***	**Major** to **Major / Moderate** and Significant (due to HPC)
Quiescence phase	***Additional Cumulative Level of Effect***	Moderate / Minor and Not Significant	***Combined Cumulative Level of Effect***	**Major / Moderate** to **Major** and Significant (due to HPC)

Table 14B-4 - Viewpoint 3: PRoW WL 23/62 at the southern end of Wick Moor

Figure 14.6	Viewpoint 3: PRoW WL 23/62 at the southern end of Wick Moor
Description	This viewpoint is located on local PRoW WL 23/62 and within the open access land of Wick Moor. It is sited at a distance of approximately 1.3 km to the south-south-east of the reactor building within HPB, at an elevation of approximately 10 m AOD. The baseline view is illustrated in **Figure 14.6** and shows an open view across a foreground comprising a drainage ditch and pastoral grassland. The upper façade of the reactor building and adjoining turbine hall within HPB are clearly identifiable on the skyline beyond the more prominent steel lattice pylons and temporary construction activities associated with the overhead line. The reactor buildings of HPA and cranes associated within HPC are also evident on the skyline to the west of HPB. The slight rise in local topography visible above the intervening hedgerow means that all lower height ancillary buildings within the HPB Works Area and the perimeter woodland belts along

Figure 14.6	Viewpoint 3: PRoW WL 23/62 at the southern end of Wick Moor			
	the southern and eastern boundaries of the Site are not evident in baseline views from this location.			
Sensitivity	The viewpoint is not located within any nationally or locally designated landscapes but is located on a local PRoW. The value of the viewpoint is therefore assessed as Medium. The view would be experienced by recreational walkers whose attention is likely to be on the surrounding landscape features. Therefore, susceptibility to change, and consequently the sensitivity is assessed as *High*.			
Magnitude of Change	<u>Preparations for Quiescence phase:</u> All ground level and the majority of low-level decommissioning and dismantling activity would be screened by the intervening local topography from this location. The exception relates to the dismantling of the turbine hall which adjoins the western edge of the reactor building which would be partially visible above the local horizon, along with the regular deployment of standard mobile cranes which would be visible on the skyline. These vertical elements would occupy a narrow proportion of the horizontal field of view and would be smaller in scale than the intervening pylons which would remain the most prominent components of the view. The reactor building would be retained and repurposed as the Safestore which would retain the same footprint and height as the existing building. Work on the south and east facing façades of the building including re-cladding would be visible with the cladding a comparable colour to the existing façade of the reactor building (light grey) thereby reducing visual contrast with the sky which forms the backdrop from this location. The magnitude of visual change would be *Low* during the deployment of cranes and recladding works reducing to *Very Low* towards the end of the Preparations for Quiescence phase, when crane activity ceases and the Safestore building would be the only building remaining on site. <u>Quiescence phase:</u> The Safestore would remain in situ during this phase and there would be reduced activity. The magnitude of visual change, when assessed against the baseline view, would be *Very Low*. <u>Final Site Clearance phase:</u> The periodic deployment of cranes, other elevated engineering machinery and the gradual dismantling of the upper and central sections of the Safestore would be visible above the local ridgeline. All ground and low-level activities, including the provision of any temporary on-site Waste Management Centre, would be screened by the intervening landform. The removal of the existing large-scale building at the end of the Final Site Clearance phase would give rise to a beneficial visual effect. The magnitude of change associated with both the dismantling activities and the final removal of built form from within northbound walkers' views would be *Low* when assessed against the baseline view.			
Assessment of Visual Effects	**Sensitivity**	High		
	Phase of Works	Preparations for Quiescence	Quiescence	Final Site Clearance

Figure 14.6	Viewpoint 3: PRoW WL 23/62 at the southern end of Wick Moor			
	Magnitude of visual change	Low reducing to Very Low	Very Low	Low
	Level of Effect	Moderate and Not Significant reducing to Moderate / Minor and Not Significant	Moderate / Minor and Not Significant	Moderate and Not Significant
	Type of effect	Medium to Long term, direct and adverse to neutral.	Long term, direct and neutral.	Medium to Long term, direct and adverse becoming beneficial.
Cumulative Magnitude <u>excluding the Proposed Works</u>	<u>Preparations for Quiescence phase:</u> A comparable proportion of the built form within HPA is visible from this viewpoint. As such, any elevated decommissioning activities would be evident above the local ridgeline including the recladding of the existing reactor buildings to form the Safestores. A *Low* to magnitude is predicted reducing to *Very Low* at the end of the Preparations for Quiescence phase associated with HPA. With regard to HPC and using HPC Viewpoint 16 as a proxy, the LVIA[1] concluded that the magnitude of visual change from a location to the north of Wick, just to the west of the Viewpoint 3 location would be *Medium* during the construction phase reducing to *Low* at Year 1 of operations and the operational Moderate level of effect was judged to be Significant. <u>Quiescence phase:</u> For a large proportion of the Quiescence phase, the HPA Safestore buildings would be a visual component above the local ridgeline giving rise to a *Very Low* magnitude. The Final Site Clearance phases of HPA would occur within the second half of HPBs Quiescence phase, during which HPA's Safestore buildings would be demolished. This would re-introduce elevated construction and dismantling activity within the view which would be partially screened by intervening landform. The magnitude of change associated with the HPA decommissioning and final removal of all built form would therefore be *Low*. The continued operation of HPC would give rise to a *Low* magnitude and the Moderate level of effect was judged to be Significant in the LVIA[1]. Any subsequent decommissioning works at the end of the operational phase and which may occur within the Quiescence phase of HPB would also be *Low*. <u>Final Site Clearance phase:</u> Scoped out due to the timescales involved.			
Preparations for Quiescence phase	***Additional Cumulative Level of Effect***	Moderate and Not Significant reducing to Moderate / Minor and Not Significant	***Combined Cumulative Level of Effect***	**Major/Moderate** reducing to **Moderate** and **Significant** (due to HPC)

Figure 14.6	Viewpoint 3: PRoW WL 23/62 at the southern end of Wick Moor			
Quiescence phase	***Additional Cumulative Level of Effect***	Moderate / Minor and Not Significant	***Combined Cumulative Level of Effect***	**Moderate** and **Significant** (due to HPC)

Table 14B-5 - Viewpoint 4: King Charles III England Coast Path close to the settlement of Stolford

Figure 14.7	Viewpoint 4: King Charles III England Coast Path close to the settlement of Stolford
Description	Viewpoint 4 is located on the King Charles III England Coast Path which coincides with local PRoW WL 23/95 and follows the coastline to the west of Chapel Cottages on the western edge of Stolford. The viewpoint is located approximately 1.5 km to the east of the reactor building within HPB at an elevation of 9 m AOD. **Figure 14.7** illustrates the baseline view from Viewpoint 4 and shows a foreground which features open grazing marsh to the south and coastal defences and Bridgwater Bay to the north. The reactor building within HPB is clearly visible as a prominent visual component in the middle ground above the woodland belt which lines the eastern perimeter of the Site. This perimeter woodland belt screens or heavily filters views of lower height ancillary buildings and the substation present to the east and south of the reactor building whilst buildings to the north, which include a small number of warehouses and the larger gas turbine houses and associated stack, are visible alongside the reactor building from this direction. The offshore caisson (water intake structure) is also evident in the view. The reactor buildings within HPA are partially visible behind the reactor of HPB, whilst the cranes associated with the construction of HPC are also visible in the same 90° field of view.
Sensitivity	The viewpoint is not located within any nationally or locally designated landscapes but is located on the King Charles III England Coast Path National Trail. The value of the viewpoint is therefore assessed as High. The view would be experienced by recreational walkers whose attention is likely to be on the surrounding landscape features. Therefore, susceptibility to change, and consequently the sensitivity is assessed as *High*.
Magnitude of Change	<u>Preparations for Quiescence phase:</u> Whilst the dismantling of lower height ancillary buildings to the east and south of the reactor building would be predominantly screened by the woodland belt which follows the eastern perimeter of the Site, works associated with the demolition of buildings to the north, including the gas turbine houses and associated stack would be clearly visible in the middle distance to westbound walkers. Works associated with the decommissioning of marine structures (CW system) would also be visible, with plant and equipment discernible as small scale activities, along with the regular deployment of standard mobile cranes and other elevated engineering machinery within the on-shore Works Area. The reactor building would be retained and repurposed as the Safestore which would retain the same footprint and height as the existing building. Work on the east facing façade of the building would be visible including the re-cladding in panels which would be comparable to the existing colour of the building (light grey) thereby

Figure 14.7	Viewpoint 4: King Charles III England Coast Path close to the settlement of Stolford			
	reducing visual contrast with the sky which forms the backdrop from this location. The extent of the horizontal field of view within which works would take place, with clear views of activities occurring in the middle ground would give rise to a periodic Medium-Low magnitude of visual change during peak times of activity on site, which would be adverse. This would reduce to *Low* towards the end of the phase, when crane activity ceases and the Safestore building would be the only building remaining on site. The removal of buildings to the north of the Safestore would give rise to a beneficial visual effect. Quiescence phase: The Safestore would remain in situ during this phase and there would be reduced activity. The magnitude of visual change, when assessed against the baseline view, would be *Low* as a consequence of the removal of built form from areas to the north of the Safestore. Final Site Clearance phase: The periodic deployment of cranes, other elevated construction machinery and the gradual dismantling of the Safestore would be clearly visible in the middle distance. The removal of the existing large-scale building at the end of the Final Site Clearance phase would give rise to a beneficial visual effect. The magnitude of change associated with the dismantling activities would be Medium/Low whilst the magnitude of change associated with the final removal of built form from within westbound walkers' views would be Medium when assessed against the baseline view.			
Assessment of Visual Effects	**Sensitivity**	High		
	Phase of Works	Preparations for Quiescence	Quiescence	Final Site Clearance
	Magnitude of visual change	Medium/Low reducing to Low	Low	Medium/Low increasing to Medium
	Level of Effect	**Moderate** and **Significant** reducing to Moderate and Not Significant	Moderate and Not Significant	**Moderate** and **Significant** increasing to **Major**/**Moderate** and **Significant**
	Type of effect	Medium to Long term, direct and adverse becoming beneficial.	Long term, direct and beneficial.	Medium to Long term, direct and adverse becoming beneficial.
Cumulative Magnitude excluding the Proposed Works	Preparations for Quiescence phase: A small proportion of the built form within HPA is visible from this viewpoint, extending from behind the HPB reactor building. Any elevated decommissioning activities would be evident above the intervening tree belt including partial views of the recladding of the southern and eastern facades of the existing reactor buildings to form the Safestores. A			

Figure 14.7	Viewpoint 4: King Charles III England Coast Path close to the settlement of Stolford			
	Low magnitude is predicted reducing to *Very Low* at the end of the Preparations for Quiescence phase associated with HPA. With regard to HPC, the LVIA[1] concluded that the magnitude of visual change from this location (Viewpoint 19 in the HPC LVIA) would be *Medium* during the construction phase reducing to *Low* for Operation Year 1 and the Moderate level of effect judged to be Significant. Quiescence phase: For a large proportion of the Quiescence phase, the HPA Safestore buildings would be a visual component partially visible behind the HPB Safestore giving rise to a *Very Low* magnitude. The Final Site Clearance phases of HPA would occur within the second half of HPBs Quiescence phase, during which HPA's Safestore buildings would be demolished. This would re-introduce elevated construction and dismantling activity within the view which would be partially screened the Safetore within HPB. The magnitude of change associated with HPA's Final Site Clearance would therefore be *Low.* The continued operation of HPC would give rise to a *Low* magnitude which was assessed as being Significant. Any subsequent decommissioning works (Preparations for Quiescence phase) at the end of the operational phase and which may occur within the Quiescence phase of HPB are also likely to give rise to a *Low* magnitude of change. Final Site Clearance phase: Scoped out due to the timescales involved.			
Preparations for Quiescence phase	***Additional Cumulative Level of Effect***	**Moderate** and **Significant** reducing to Moderate and Not Significant	***Combined Cumulative Level of Effect***	**Major/Moderate** becoming **Moderate** and **Significant** (due to HPC)
Quiescence phase	***Additional Cumulative Level of Effect***	Moderate and Not Significant	***Combined Cumulative Level of Effect***	**Moderate** and **Significant** (due to HPC)

Table 14B-6 - Viewpoint 5: Minor road to the south of HPB (near Gunter's Grove)

Figure 14.8	Viewpoint 5: Minor road to the south of HPB (near Gunter's Grove)
Description	This viewpoint is located on the minor road to the west of Gunter's Grove and close to the junction with the road from Shurton. Viewpoint 5 is sited approximately 1.9 km to the south-south-west of the reactor building within HPB, at an elevation of 25 m AOD. **Figure 14.8** illustrates the baseline view from Viewpoint 5. The foreground of the view comprises pastoral fields beyond a roadside hedgerow with steel lattice pylons which cross the landscape also visible above the intervening tree cover around Wick. The reactor building is clearly visible on the skyline above the perimeter woodland belt which extends along the southern perimeter of HPA and B nuclear power stations. The slight increase in elevation at this viewpoint compared to the Site means that a slightly greater proportion of the adjoining turbine hall is visible above the intervening treeline, and

Figure 14.8	Viewpoint 5: Minor road to the south of HPB (near Gunter's Grove)	
	whilst the majority of the lower height ancillary buildings are screened, a small number of buildings to the east of the reactor building are also partially visible through the trees. The substation within the HPB NSL boundary is not readily discernible in views from this viewpoint. The reactor buildings within HPA are clearly visible to the west of HPB, whilst the cranes associated with the construction of HPC are also visible in the same 90° field of view.	
Sensitivity	The viewpoint is not located within any nationally or locally designated landscapes. The value of the viewpoint is therefore assessed as Medium. The view would be experienced by road users whose attention is likely to be on the road ahead. Therefore, susceptibility to change, and consequently the sensitivity is assessed as *Medium*.	
Magnitude of Change	<u>Preparations for Quiescence phase:</u> All ground and low-level activities would be screened by tree cover along the southern perimeter of the site. The regular deployment of standard mobile cranes and other elevated engineering machinery would be visible above the tree line including works associated with the demolition of the turbine hall to the west of the reactor and the smaller scale building to the east, which is visible through the trees. The reactor building would be retained and repurposed as the Safestore which would retain the same footprint and height as the existing building. Work on the south and west facing façades of the building would be visible including the re-cladding in panels which would be comparable to the existing colour of the building (light grey) thereby reducing visual contrast with the sky which forms the backdrop from this location. Crane activity is likely to be of comparable height to other vertical components in the view including pylons. The magnitude of visual change would be *Medium/Low* during the deployment of cranes and recladding works reducing to *Very Low* towards the end of the Preparations for Quiescence phase, when crane activity ceases and the Safestore building would be the only building remaining on site. Views of the Proposed Works would be oblique for drivers and their passengers in relation to the direction of travel. <u>Quiescence phase:</u> The Safestore would remain in situ during this phase and there would be reduced activity. The magnitude of visual change, when assessed against the baseline view, would be *Very Low*. <u>Final Site Clearance phase:</u> The periodic deployment of cranes, other elevated engineering machinery and the gradual dismantling of the upper and central sections of the Safestore would be visible in the middle distance above the tree line. All ground and low-level activities, including the provision of any temporary on-site Waste Management Centre, would be screened by the intervening perimeter trees. The removal of the existing large-scale building at the end of the Final Site Clearance phase would give rise to a beneficial visual effect. The magnitude of change associated with both the dismantling activities and the final removal of built form from within northbound walkers' views would be *Medium to Low* when assessed against the baseline view.	
	Sensitivity	Medium

<table>
<tr><td>Figure 14.8</td><td colspan="4">Viewpoint 5: Minor road to the south of HPB (near Gunter’s Grove)</td></tr>
<tr><td rowspan="4">Assessment of Visual Effects</td><td>Phase of Works</td><td>Preparations for Quiescence</td><td>Quiescence</td><td>Final Site Clearance</td></tr>
<tr><td>Magnitude of visual change</td><td>Medium/Low reducing to Very Low</td><td>Very Low</td><td>Medium/Low</td></tr>
<tr><td>Level of Effect</td><td>Moderate and Not Significant reducing to Minor and Not Significant</td><td>Minor and Not Significant</td><td>Moderate and Not Significant</td></tr>
<tr><td>Type of effect</td><td>Medium to Long term, indirect and adverse becoming neutral</td><td>Long term, direct and neutral</td><td>Medium to Long term, indirect and adverse becoming beneficial</td></tr>
<tr><td>Cumulative Magnitude <u>excluding the Proposed Works</u></td><td colspan="4"><u>Preparations for Quiescence phase:</u>
A comparable proportion of the built form within HPA is visible from this viewpoint. As such, any elevated decommissioning activities would be evident above the treeline including the recladding of the existing reactor buildings to form the Safestores. A Medium/Low to magnitude is predicted reducing to Very Low at the end of the Preparations for Quiescence phase associated with HPA.
With regard to HPC, the LVIA[1] concluded that the magnitude of visual change from this location (Viewpoint 12 in the HPC LVIA) would be Medium for both the construction phase and Operation Year 1.
<u>Quiescence phase:</u>
For a large proportion of the Quiescence phase, the HPA Safestore buildings would be a visual component above the treeline giving rise to a Very Low magnitude. The Final Site Clearance phases of HPA would occur within the second half of HPBs Quiescence phase, during which HPA’s Safestore buildings would be demolished. This would re-introduce elevated construction and dismantling activity within the view which would be partially screened by intervening vegetation. The magnitude of change associated with the HPA decommissioning and final removal of all built form would be Medium/Low.
The continued operation of HPC would give rise to a Medium magnitude. Any subsequent decommissioning works (Preparations for Quiescence phase) at the end of the operational phase and which may occur within the Quiescence phase of HPB would also be Medium.
<u>Final Site Clearance phase:</u>
Scoped out due to the timescales involved.</td></tr>
<tr><td>Preparations for Quiescence phase</td><td>Additional Cumulative Level of Effect</td><td>Moderate and Not Significant reducing to Moderate/Minor and Not Significant</td><td>Combined Cumulative Level of Effect</td><td>Moderate and Not Significant (due to HPA and HPC)</td></tr>
</table>

Figure 14.8	Viewpoint 5: Minor road to the south of HPB (near Gunter's Grove)			
Quiescence phase	***Additional Cumulative Level of Effect***	Minor and Not Significant	***Combined Cumulative Level of Effect***	Moderate and Not Significant (due to HPA and HPC)

Table 14B-7 - Viewpoint 6: PRoW WL 23/23 on the north side of the settlement of Stogursey

Figure 14.9	Viewpoint 6: PRoW WL 23/23 on the north side of the settlement of Stogursey
Description	Viewpoint 6 is located on local PRoW WL 23/23 to the north of Northfield Close on the northern edge of Stogursey. The viewpoint lies approximately 3.1 km to the south-south-west of the reactor buildings within HPB at an elevation of 35 m AOD. The baseline view from Viewpoint 6 is shown in **Figure 14.9**. This illustrates a foreground which comprises a pastoral field bound by hedgerows along with a complex of barns at Little Lukes Farm to the east of Shurton Lane. The reactor building within HPB is partially visible above and through the intervening trees which line Stogursey Brook although it is not notably prominent in comparison to foreground visual components due to the increased separation distance. No ancillary buildings or substation within the HPB Works Area are visible from this location. A proportion of the cranes associated with the construction of HPC are also visible in the same 90° field of view.
Sensitivity	The viewpoint is not located within any nationally or locally designated landscapes but is located on a local PRoW. The value of the viewpoint is therefore assessed as Medium. The view would be experienced by recreational walkers whose attention is likely to be on the surrounding landscape features. Therefore, susceptibility to change, and consequently the sensitivity is assessed as *High*.
Magnitude of Change	<u>Preparations for Quiescence phase:</u> All ground and low-level activities would be screened by intervening tree cover between the site and this viewpoint. The regular deployment of standard mobile cranes and other elevated engineering machinery would be partially visible as small-scale elements above and through the treeline. The reactor building would be retained and repurposed as the Safestore which would retain the same footprint and height as the existing building. Work on the south and west facing façades of the building would be visible including the re-cladding in panels which would be comparable to the existing colour of the building (light grey) thereby reducing visual contrast with the sky which forms the backdrop from this location. The magnitude of visual change would be *Low/Very Low* during the deployment of cranes and recladding works reducing to *Very Low* towards the end of the Preparations for Quiescence_phase, when crane activity ceases and the Safestore building would be the only building remaining on site. <u>Quiescence phase:</u> The Safestore would remain in situ during this phase and there would be reduced activity. The magnitude of visual change, when assessed against the baseline view, would be *Very Low*. <u>Final Site Clearance phase:</u>

<table>
<tr><td>Figure 14.9</td><td colspan="4">Viewpoint 6: PRoW WL 23/23 on the north side of the settlement of Stogursey</td></tr>
<tr><td></td><td colspan="4">The periodic deployment of cranes, other elevated engineering machinery and the gradual dismantling of the upper sections of the Safestore would be visible in the middle distance above and through the tree line. All ground and low-level activities, including the provision of any temporary on-site Waste Management Centre, would be screened by the intervening trees. The removal of the existing large-scale building at the end of the Final Site Clearance phase would give rise to a beneficial visual effect. The magnitude of change associated with the dismantling activities and the final removal of built form from within walkers’ views would be Low/Very Low when assessed against the baseline view.</td></tr>
<tr><td rowspan="5">Assessment of Visual Effects</td><td>Sensitivity</td><td colspan="3">High</td></tr>
<tr><td>Phase of Works</td><td>Preparations for Quiescence</td><td>Quiescence</td><td>Final Site Clearance</td></tr>
<tr><td>Magnitude of visual change</td><td>Low/Very Low reducing to Very Low</td><td>Very Low</td><td>Low/Very Low</td></tr>
<tr><td>Level of Effect</td><td>Moderate / Minor and Not Significant</td><td>Moderate / Minor and Not Significant</td><td>Moderate / Minor and Not Significant</td></tr>
<tr><td>Type of effect</td><td>Medium to Long term, direct and adverse to neutral.</td><td>Long term, direct and neutral.</td><td>Medium to Long term, direct and adverse becoming beneficial.</td></tr>
<tr><td>Cumulative Magnitude <u>excluding the Proposed Works</u></td><td colspan="4"><u>Preparations for Quiescence phase:</u>
There are no views of the existing HPA development from this viewpoint.
With regard to HPC and using Viewpoint 18 as a proxy, the LVIA[1] concluded that the magnitude of visual change from a location within Stogursey, just to the south of the Viewpoint 6 location would be Low during the construction phase and at operation Year 1.
<u>Quiescence phase:</u>
There are no views of the existing HPA development from this viewpoint.
The continued operation of HPC would give rise to a Low magnitude. Any subsequent decommissioning works at the end of the operational phase (Preparations for Quiescence phase) and which may occur within the Quiescence phase of HPB would also be Low.
<u>Final Site Clearance phase:</u>
Scoped out due to the timescales involved.</td></tr>
<tr><td>Preparations for Quiescence phase</td><td>Additional Cumulative Level of Effect</td><td>Moderate / Minor and Not Significant</td><td>Combined Cumulative Level of Effect</td><td>Moderate and Not Significant (due to HPC)</td></tr>
</table>

Figure 14.9	Viewpoint 6: PRoW WL 23/23 on the north side of the settlement of Stogursey			
Quiescence phase	***Additional Cumulative Level of Effect***	Moderate / Minor and Not Significant	***Combined Cumulative Level of Effect***	Moderate and Not Significant (due to HPC)

Table 14B-8 - Viewpoint 7: PRoW BW 32/1 at Stockland Bristol

Figure 14.10	Viewpoint 7: PRoW BW 32/1 at Stockland Bristol
Description	Viewpoint 7 is located on local PRoW BW 32/1 close to St Mary Magdalene's Church at Stockland Bristol. The viewpoint is located approximately 3.6 km to the south-east of the reactor building within HPB, at an elevation of 10 m AOD. The foreground of the view comprises rough grassland, beyond which lies the shallow valley of the Middle Brook as shown in the baseline view in **Figure 14.10**. The gently rising land which forms a low ridgeline aligned with Woolstone Lane forms a local horizon above which the reactor building is visible. The top of the tall stack associated with the gas turbine houses (located to the north of the reactor) is also partially visible behind small hedgerow trees on the skyline. No other ancillary buildings or substation within the HPB Works Area are visible from this location due to the local landform. The existing steel lattice pylons which cross the landscape between the viewpoint and HPB are moderately prominent visual elements whilst the reactor buildings within HPA and cranes associated with the construction of HPC are also visible in the same 90° field of view. This cranage is dynamic and will be subject to regular change until the construction of HPC is complete at which point it will be replaced by the built form of the operational HPC.
Sensitivity	The viewpoint is not located within any nationally or locally designated landscapes but is located on a local PRoW. The value of the viewpoint is therefore assessed as Medium. The view would be experienced by recreational walkers whose attention is likely to be on the surrounding landscape features. Therefore, susceptibility to change, and consequently the sensitivity is assessed as *High*.
Magnitude of Change	<u>Preparations for Quiescence phase:</u> All ground and low-level decommissioning and dismantling activity would be screened by the intervening local topography from this location whilst the deployment of cranes would be partially visible above the horizon. These vertical elements would occupy a narrow proportion of the horizontal field of view and would be smaller in scale than the intervening pylons which would remain the most prominent components of the view. The reactor building would be retained and repurposed as the Safestore which would retain the same footprint and height as the existing building. Work on the south and east facing façades of the building including re-cladding would be visible with the cladding a comparable colour to the existing façade of the reactor building (light grey) thereby reducing visual contrast with the sky which forms the backdrop from this location. The magnitude of visual change would be *Low/Very Low* during the deployment of cranes reducing to *Very Low* towards the end of the Preparations for Quiescence phase, when

Figure 14.10	Viewpoint 7: PRoW BW 32/1 at Stockland Bristol			
	crane activity ceases and the Safestore building would be the only building remaining on site. Quiescence phase: The Safestore would remain in situ during this phase and there would be reduced activity. The magnitude of visual change, when assessed against the baseline view, would be *Very Low*. Final Site Clearance phase: The periodic deployment of cranes, other elevated construction machinery and the gradual dismantling of the upper and central sections of the Safestore would be visible above the local ridgeline. All ground and low-level activities, including the provision of any temporary on-site Waste Management Centre, would be screened by the intervening landform. The removal of the existing large-scale building at the end of the Final Site Clearance phase would give rise to a beneficial visual effect. The magnitude of change associated with the dismantling activities would be *Low/Very Low* whilst the final removal of built form from walkers' views would be *Low* when assessed against the baseline view. The Moderate level of effect is assessed as being Not Significant due to the small proportion of the horizontal field of view which would be altered and the visual role of other existing vertical infrastructure.			
Assessment of Visual Effects	**Sensitivity**	High		
	Phase of Works	Preparations for Quiescence	Quiescence	Final Site Clearance
	Magnitude of visual change	Low/Very Low reducing to Very Low	Very Low	Low/Very Low increasing to Low
	Level of Effect	Moderate/Minor and Not Significant	Moderate/Minor and Not Significant	Moderate/Minor to Moderate and Not Significant
	Type of effect	Medium to Long term, direct and adverse becoming neutral.	Long term, direct and neutral.	Medium to Long term, direct and adverse becoming beneficial.

Figure 14.10	Viewpoint 7: PRoW BW 32/1 at Stockland Bristol			
Cumulative Magnitude excluding the Proposed Works	Preparations for Quiescence phase: A comparable proportion of the built form within HPA is visible from Viewpoint 7. As such, any elevated decommissioning activities would be evident above the local ridgeline including the recladding of the existing reactor buildings to form Safestores whilst all ground and low-level activity would be screened. A *Low/Very Low* reducing to *Very Low* magnitude is predicted reducing to *Very Low* at the end of the Preparations for Quiescence phase associated with HPA. With regard to HPC, the LVIA[1] concluded that the magnitude of visual change from this location (Viewpoint 20 in the HPC LVIA) would be *Medium* for the construction phase and *Low* for Operation Year 1. The Moderate level of effect was judged to be Significant in the HPC LVIA[1]. Quiescence phase: For a large proportion of the Quiescence phase, the HPA Safestore buildings would be a visual component above the local ridgeline giving rise to a *Very Low* magnitude. The Final Site Clearance phases of HPA would occur within the second half of HPBs Quiescence phase, during which HPA's Safestore buildings would be demolished. This would re-introduce elevated construction and dismantling activity within the view which would be partially screened by intervening landform. The magnitude of change associated with the HPA decommissioning would therefore be *Very Low* increasing to *Low/Very Low*. The continued operation of HPC would give rise to a *Low* magnitude. Any subsequent decommissioning works (Preparations for Quiescence phase) at the end of the operational phase and which may occur within the Quiescence phase of HPB would also be *Low*. The resultant Moderate level of effect was judged to be Significant in the HPC LVIA[1]. Final Site Clearance phase: Scoped out due to the timescales involved.			
Preparations for Quiescence phase	***Additional Cumulative Level of Effect***	Moderate to Moderate/Minor reducing to Moderate/Minor and Not Significant	***Combined Cumulative Level of Effect***	**Major/Moderate** to **Moderate** and **Significant** (due to HPC)
Quiescence phase	***Additional Cumulative Level of Effect***	Moderate/Minor and Not Significant	***Combined Cumulative Level of Effect***	**Moderate** and **Significant** due to HPC)

Table 14B-9 - Viewpoint 8: King Charles III England Coast Path to the west of HPB

Figure 14.11	Viewpoint 8: King Charles III England Coast Path to the west of HPB
Description	Viewpoint 8 is located on the King Charles III England Coast Path (local PRoW WL 24/10) to the west of the Site and north of Lilstock. The viewpoint lies approximately 4.7 km to the west-south-west of the reactor building at HPB, at an elevation of 20 m AOD. The existing open view to the east is shown in **Figure 14.11**. The illustrates a foreground which comprises arable fields to the south and the Bristol Channel to the north. The reactor building within HPB is visible above the horizon in the middle distance, beyond the reactor buildings of HPA and the construction activities associated with HPC including the offshore jetty. The HPB offshore caisson (water intake structure) is also evident in the view beyond the HPC jetty. No other ancillary buildings within the HPB Works Area are visible, with the exception of the stack associated with the gas turbine houses located to the north of the reactor, which forms a small-scale visual component in the wide and open views available from this viewpoint.
Sensitivity	The viewpoint is not located within any nationally or locally designated landscapes but is located on a section of the King Charles III England Coast Path National Trail. The value of the viewpoint is therefore assessed as High. The view would be experienced by recreational walkers whose attention is likely to be on the surrounding landscape features. Therefore, susceptibility to change, and consequently the sensitivity is assessed as *High*.
Magnitude of Change	Preparations for Quiescence phase: **Figure 14.11** indicates that under existing baseline conditions, the demolition works associated with a proportion of the taller structures within the Site, including the gas turbine houses and associated stack, would be visible to eastbound walkers on the King Charles III England Coast Path. The reactor building would be retained and repurposed as the Safestore which would retain the same footprint and height as the existing building. Work on the west facing façade of the building would be visible including the re-cladding in panels which would be comparable to the existing colour of the building (light grey) thereby reducing visual contrast with the sky which forms the backdrop from this location. The magnitude of change would be *Low-Very Low*. A more accurate assessment would be one made against the future baseline in which HPC would be towards the end of its construction phase or has become operational. A review of the visualisations for Viewpoint 3 which accompanied the HPC LVIA[1] indicates that all built form within the HPB site would be screened by the buildings within HPC. Decommissioning activities that would be visible include works associated with the decommissioning of marine structures from pontoons and barges as well as the tops of elevated machinery and cranes above or through the HPC infrastructure. The very small scale of these activities and limited horizontal field of view which may be affected would give rise to a *Very Low* magnitude of change. Quiescence phase: The Safestore would remain in situ during this phase but would be screened by the HPC infrastructure. The magnitude of visual change would be Zero.

Figure 14.11	Viewpoint 8: King Charles III England Coast Path to the west of HPB			
	Final Site Clearance phase: There would be no views of the final dismantling of the Safestore from this location with the HPC infrastructure precluding views. The magnitude of change would be *Zero.*			
Assessment of Visual Effects	**Sensitivity**	High		
	Phase of Works	Preparations for Quiescence	Quiescence	Final Site Clearance
	Magnitude of visual change	Very Low reducing to Zero	Zero	Zero
	Level of Effect	Moderate/Minor reducing to None	None	None
	Type of effect	Medium to Long term, direct and neutral.	Long term, direct and neutral	Medium to Long term, direct and neutral.
Cumulative Magnitude excluding the Proposed Works	Preparations for Quiescence phase: Elevated decommissioning activities associated with HPA would be evident in the middle distance above and beyond the emerging HPC including the recladding of the existing reactor buildings to form the Safestores. A *Low* to magnitude is predicted reducing to Zero at the end of the Preparations for Quiescence phase associated with HPA when the operational HPC infrastructure precludes views. With regard to HPC and using Viewpoint 3 as a proxy, the LVIA[1] concluded that the magnitude of visual change from a location on the beach, to the east of the Viewpoint 8 location would be *Medium* during the construction phase and *Low* at Year 1 of operations. The Moderate level of effect was judged to be Significant in the HPC LVIA[1]. Quiescence phase: There would be no view of the HPA Safestores or their subsequent demolition beyond the HPC infrastructure. The continued operation of HPC would give rise to a *Low* magnitude. Any subsequent decommissioning works (Preparations for Quiescence phase) at the end of the operational phase and which may occur within the Quiescence phase of HPB would also be *Low*. The Moderate level of effect was judged to be Significant in the HPC LVIA[1]. Final Site Clearance phase: Scoped out due to the timescales involved.			
Preparations for Quiescence phase	**Additional Cumulative Level of Effect**	Moderate/Minor reducing to None and Not Significant	**Combined Cumulative Level of Effect**	**Moderate** and **Significant** (due to HPC)
Quiescence phase	**Additional Cumulative Level of Effect**	None and Not Significant	**Combined Cumulative Level of Effect**	**Moderate** and **Significant** (due to HPC)

Table 14B-10 - Viewpoint 9: PRoW BW 25/7/River Parrett Trail/King Charles III England Coast Path within Steart Marshes

Figure 14.12	Viewpoint 9: PRoW BW 25/7/River Parrett Trail/King Charles III England Coast Path within Steart Marshes
Description	Viewpoint 9 is located on the River Parrett Trail / King Charles III England Coast Path (local PRoW 25/7) within Steart Marshes. The viewpoint lies approximately 4.9 km to the east-south-east of the reactor building within HPB and is sited on one of the more elevated sections of route within Steart Marshes (at an elevation of 8 m AOD), therefore offering some of the most open views towards HPB. Westerly views from other, slightly less elevated sections of route within Steat Marshes are partially screened or filtered by hedgerow or tall reeds. The existing view from Viewpoint 9 is illustrated in **Figure 14.12**. This is a wide, open view across grazing marsh and both managed and overgrown hedgerows with small trees, with the reactor building within HPB clearly identifiable above the horizon in the middle distance. As a consequence of the woodland belt along the eastern and southern perimeters of the Site, there are no views of the lower height ancillary buildings to the east, south and north of the reactor building with the exception of the gas turbine houses and associated stack located to the north of the reactor building. The reactor buildings within HPA and cranes associated with the construction of HPC are also visible in the same 90° field of view.
Sensitivity	The viewpoint is not located within any nationally or locally designated landscapes but is located on the King Charles III England Coast Path National Trail and River Parrett Trail promoted walking route. The value of the viewpoint is therefore assessed as High. The view would be experienced by recreational walkers whose attention is likely to be on the surrounding landscape features. Therefore, susceptibility to change, and consequently the sensitivity is assessed as *High*.
Magnitude of Change	<u>Preparations for Quiescence phase:</u> As a consequence of the separation distance and screening provided by the perimeter tree belt, all ground and low-level activities would be screened or would be too small in scale to be discernible. The regular deployment of standard mobile cranes and other elevated engineering machinery would be partially visible as small-scale elements on the skyline occupying a narrow proportion of the horizonal field of view. The reactor building would be retained and repurposed as the Safestore which would retain the same footprint and height as the existing building. Work on the south and east facing façades of the building may be visible including the re-cladding in panels which would be comparable to the existing colour of the building (light grey) thereby reducing visual contrast with the sky. The magnitude of visual change would be *Very Low* during the deployment of cranes, demolition of the gas turbine houses and associated stack and recladding works remaining *Very Low* towards the end of the Preparations for Quiescence phase, when crane activity ceases and the Safestore building would be the only building remaining on site. The removal of the gas turbine houses and associated stack would give rise to a small beneficial visual effect when compared to the baseline view.

<table>
<tr><th>Figure 14.12</th><th colspan="4">Viewpoint 9: PRoW BW 25/7/River Parrett Trail/King Charles III England Coast Path within Steart Marshes</th></tr>
<tr><td></td><td colspan="4"><u>Quiescence phase:</u>
The Safestore would remain in situ during this phase and there would be reduced activity. The magnitude of visual change, when assessed against the baseline view, would be Very Low.
<u>Final Site Clearance phase:</u>
The periodic deployment of cranes, other elevated construction machinery and the gradual dismantling of the upper and central sections of the Safestore would be visible above the intervening vegetation. All ground and low-level activities, including the provision of any temporary on-site Waste Management Centre, would be screened. The removal of the existing large-scale building at the end of the Final Site Clearance phase would give rise to a beneficial visual effect. The magnitude of change associated with the dismantling activities would be Very Low whilst the final removal of built form from walkers' views would be Low/Very Low when assessed against the baseline view.</td></tr>
<tr><td rowspan="5">Assessment of Visual Effects</td><td>Sensitivity</td><td colspan="3">High</td></tr>
<tr><td>Phase of Works</td><td>Preparations for Quiescence</td><td>Quiescence</td><td>Final Site Clearance</td></tr>
<tr><td>Magnitude of visual change</td><td>Very Low</td><td>Very Low</td><td>Very Low increasing to Low/Very Low</td></tr>
<tr><td>Level of Effect</td><td>Moderate/Minor and Not Significant</td><td>Moderate/Minor and Not Significant</td><td>Moderate/Minor and Not Significant</td></tr>
<tr><td>Type of effect</td><td>Medium to Long term, direct and adverse becoming beneficial</td><td>Long term, direct and beneficial</td><td>Medium to Long term, direct and adverse becoming beneficial.</td></tr>
<tr><td>Cumulative Magnitude <u>excluding the Proposed Works</u></td><td colspan="4"><u>Preparations for Quiescence phase:</u>
A slightly reduced proportion of the built form within HPA is visible from Viewpoint 9 when compared to HPB. Any elevated decommissioning activities would be evident as small-scale elements above the intervening vegetation including the recladding of the existing reactor buildings to form Safestores whilst all ground and low-level activity would be screened. A Very Low magnitude is predicted.
With regard to HPC, the magnitude of visual change would be Low for the construction phase and Low for Operation Year 1.
<u>Quiescence phase:</u>
For a large proportion of the Quiescence phase, the HPA Safestore buildings would be a visual component above the local ridgeline giving rise to a Very Low magnitude. The Final Site Clearance phases of HPA would occur within the second half of HPBs Quiescence phase, during which HPA's Safestore buildings would be demolished. This would re-introduce elevated construction and dismantling activity within the view which would be partially screened by intervening landform. The magnitude of change associated with the HPA decommissioning would therefore be Very Low.</td></tr>
</table>

Figure 14.12	Viewpoint 9: PRoW BW 25/7/River Parrett Trail/King Charles III England Coast Path within Steart Marshes			
	The continued operation of HPC would give rise to a *Low* magnitude. Any subsequent decommissioning works (Preparations for Quiescence phase) at the end of the operational phase and which may occur within the Quiescence phase of HPB would also be *Low*. <u>Final Site Clearance phase:</u> Scoped out due to the timescales involved.			
Preparations for Quiescence phase	***Additional Cumulative Level of Effect***	Moderate/Minor and Not Significant	***Combined Cumulative Level of Effect***	Moderate and Not Significant (due to HPC)
Quiescence phase	***Additional Cumulative Level of Effect***	Moderate/Minor and Not Significant	***Combined Cumulative Level of Effect***	Moderate and Not Significant (due to HPC)

Table 14B-11 - Viewpoint 10: PRoW BW 24/3 north of Stringston

Figure 14.13	Viewpoint 10: PRoW BW 24/3 north of Stringston
Description	Viewpoint 10 is located on local PRoW BW 24/3 to the north of the village of Stringston. The viewpoint is sited approximately 5.2 km to the south-west of the reactor building within HPB, at an elevation of 105 m AOD. The foreground of the view comprises open pastoral grassland in a field bound by well-maintained hedgerows and where southerly views are foreshortened by Standard Copse. The reactor building and adjoining turbine hall within HPB are clearly visible as a middle ground element in the panoramic, long-distance views available from this viewpoint which extend from the north-west towards the north-east (i.e. in the direction of travel). In contrast to many of the other viewpoint locations where the buildings are visible on the skyline, the Site is presented against a backdrop of Bridgwater Bay and the distant Bleadon Hill as illustrated in the baseline view in **Figure 14.13**. The elevated nature of this viewpoint in comparison to the Site, means that a greater proportion of ancillary buildings within the HPB Works Area including the gas turbine houses (and associated stack) are visible, appearing as very small-scale visual components as a consequence of the separation distance. The reactor buildings within HPA and cranes and construction activities at HPC are also visible in the same 90° field of view.
Sensitivity	The viewpoint is not located within any nationally or locally designated landscapes but is located on a local PRoW. The value of the viewpoint is therefore assessed as Medium. The view would be experienced by recreational walkers whose attention is likely to be on the surrounding landscape features. Therefore, susceptibility to change, and consequently the sensitivity is assessed as *High*.

Figure 14.13	Viewpoint 10: PRoW BW 24/3 north of Stringston			
Magnitude of Change	<u>Preparations for Quiescence phase:</u> The dismantling of lower height ancillary buildings to the north and south of the reactor building, including the gas turbine houses and associated stack would potentially be visible as small-scale visual changes to eastbound walkers in periods of clear visibility. The deployment of elevated machinery and cranes would take place within a narrow horizontal proportion of the view and would be visible against a landscape backdrop and in the same field of view as other vertical infrastructure including pylons. The reactor building would be retained and repurposed as the Safestore which would retain the same footprint and height as the existing building. Work on the west and south facing façades of the building would be visible including the re-cladding in panels which would be comparable to the existing colour of the building (light grey). The separation distance and small scale of the activities would give rise to a *Very Low* magnitude of change. The removal of lower height ancillary buildings from around the Safestore would give rise to a beneficial visual effect. <u>Quiescence phase:</u> The Safestore would remain in situ during this phase and there would be reduced activity. The magnitude of visual change, when assessed against the baseline view, would be *Very Low*. <u>Final Site Clearance phase:</u> The periodic deployment of cranes, other elevated construction machinery and the gradual dismantling of the Safestore would be visible in the distance against a landscape backdrop. The removal of the existing large-scale building at the end of the Final Site Clearance phase would give rise to a beneficial visual effect. The magnitude of change associated with the dismantling activities would be *Very Low* whilst the final removal of built form from within westbound walkers' views would be *Low* when assessed against the baseline view			
Assessment of Visual Effects	**Sensitivity**	High		
	Phase of Works	Preparations for Quiescence	Quiescence	Final Site Clearance
	Magnitude of visual change	Very Low	Very Low	Very Low increasing to Low
	Level of Effect	Moderate/Minor and Not Significant	Moderate/Minor and Not Significant	Moderate/Minor increasing to Moderate and Not Significant
	Type of effect	Medium to Long term, direct and adverse becoming beneficial	Long term, direct and beneficial	Medium to Long term, direct and adverse becoming beneficial.

Figure 14.13	Viewpoint 10: PRoW BW 24/3 north of Stringston			
Cumulative Magnitude excluding the Proposed Works	Preparations for Quiescence phase: A comparable proportion of the built form within HPA is visible from this viewpoint. The visual presence of comparable decommissioning activities to those described in relation to HPB during HPA's Pre-Care and Maintenance phase and formation of the Safestores would therefore also be comparable at a similar scale and occupying a similarly narrow horizontal proportion of the view. The magnitude of change associated with the HPA decommissioning would therefore be *Very Low*. With regard to HPC, the LVIA[1] concluded that the magnitude of visual change from this location (Viewpoint 5 in the HPC LVIA) would be *Medium* for the construction phase and *Low* for Operation Year 1. Quiescence phase: For a large proportion of the Quiescence phase, the HPA Safestore buildings would be a visual component giving rise to a *Very Low* magnitude when assessed again the baseline view. The Final Site Clearance phases of HPA would occur within the second half of HPBs Quiescence phase, during which HPA's Safestore buildings would be demolished. This would re-introduce elevated construction and dismantling activity which would be small in scale as a consequence of the separation distance. The magnitude of change associated with the HPA decommissioning would therefore be *Very Low*. The continued operation of HPC would give rise to a *Low* magnitude. Any subsequent decommissioning works (Preparations for Quiescence phase) at the end of the operational phase and which may occur within the Quiescence phase of HPB would also be *Low*. Final Site Clearance phase: Scoped out due to the timescales involved.			
Preparations for Quiescence phase	**Additional Cumulative Level of Effect**	Moderate/Minor and Not Significant	**Combined Cumulative Level of Effect**	**Major/Moderate** and **Significant** (due to HPC construction) reducing to Moderate and Not Significant
Quiescence phase	**Additional Cumulative Level of Effect**	Moderate/Minor and Not Significant	**Combined Cumulative Level of Effect**	Moderate and Not Significant (due to HPC)

14B.5 Summary of Viewpoint Analysis

14B.5.1. A summary of the detailed visual assessment undertaken at each of the 10 viewpoints is provided in **Table 14B-12**. This is presented in order of distance from the reactor building within HPB to allow an analysis to be undertaken of the likely threshold within which significant visual effects could occur.

14B.5.2. All significant effects are highlighted in **bold**.

Table 14B-12 - Summary of Cumulative Viewpoint Analysis

Receptor	Distance from HPB reactor	Phase	Sensitivity of Receptor	Magnitude of Change	Significance	Type of effect	Cumulative effects (additional)	Cumulative effects (combined)
Viewpoint 1 King Charles III England Coast Path on the western side of Wick Moor	0.45km	Preparations for Quiescence phase	High	Low reducing to Very Low	Moderate and Not Significant reducing to Moderate/ Minor and Not Significant	Adverse becoming neutral	Moderate and Not Significant reducing to Moderate/ Minor and Not Significant	**Moderate** and **Significant** (due to HPC construction) reducing to Moderate/ Minor and Not Significant (due to both HPA and HPC)
		Quiescence phase	High	Very Low	Moderate/ Minor and Not Significant	Neutral	Moderate/ Minor and Not Significant	Moderate/ Minor and Not Significant (due to both HPA and HPC)
		Final Site Clearance phase	High	Low	Moderate and Not Significant	Adverse becoming beneficial	N/A	N/A

Receptor	Distance from HPB reactor	Phase	Sensitivity of Receptor	Magnitude of Change	Significance	Type of effect	Cumulative effects (additional)	Cumulative effects (combined)
Viewpoint 1a King Charles III England Coast Path to the north of HPB	Within the Works Area	Preparations for Quiescence phase	High	Medium reducing to Low	**Major/ Moderate** and **Significant** reducing to Moderate and Not Significant	Adverse becoming beneficial	Moderate and Not Significant reducing to Moderate/ Minor and Not Significant	**Major/ Moderate** and **Significant** (due to HPB) reducing to Moderate and Not Significant
		Quiescence phase	High	Low	Moderate and Not Significant	Beneficial	Moderate/ Minor and Not Significant increasing to Moderate and Not Significant	Moderate and Not Significant (due to HPA and HPB)
		Final Site Clearance phase	High	Medium increasing to High	**Major/ Moderate** and **Significant** increasing to **Major and Significant**	Adverse becoming beneficial	N/A	N/A
Viewpoint 2 King Charles III England Coast Path within Wick	0.9km	Preparations for Quiescence phase	High	Low reducing to Very Low	Moderate and Not Significant reducing to Moderate /	Adverse becoming neutral	Moderate and Not Significant reducing to Moderate /	**Major** to **Major / Moderate** and **Significant** (due to HPC)

Receptor	Distance from HPB reactor	Phase	Sensitivity of Receptor	Magnitude of Change	Significance	Type of effect	Cumulative effects (additional)	Cumulative effects (combined)
Moor close to Wick Moor Drove					Minor and Not Significant		Minor and Not Significant	
		Quiescence phase	High	Very Low	Moderate / Minor and Not Significant	Neutral	Moderate / Minor and Not Significant	**Major / Moderate** to **Major** and **Significant** (due to HPC)
		Final Site Clearance phase	High	Low	Moderate and Not Significant	Adverse becoming beneficial	N/A	N/A
Viewpoint 3 PRoW WL 23/62 at the southern end of Wick Moor	1.3km	Preparations for Quiescence phase	High	Low reducing to Very Low	Moderate reducing to Moderate / Minor and Not Significant	Adverse becoming neutral	Moderate reducing to Moderate / Minor and Not Significant	**Major/ Moderate** and **Significant** reducing to **Moderate** and **Significant** (due to HPC)
		Quiescence phase	High	Very Low	Moderate / Minor and Not Significant	Neutral	Moderate / Minor and Not Significant	**Moderate** and **Significant** (due to HPC)

Receptor	Distance from HPB reactor	Phase	Sensitivity of Receptor	Magnitude of Change	Significance	Type of effect	Cumulative effects (additional)	Cumulative effects (combined)
		Final Site Clearance phase	High	Low	Moderate and Not Significant	Adverse becoming beneficial	N/A	N/A
Viewpoint 4 King Charles III England Coast Path close to the settlement of Stolford	1.5km	Preparations for Quiescence phase	High	Medium/Low reducing to Low	**Moderate** and **Significant**	Adverse becoming beneficial	**Moderate** and **Significant**	**Major/ Moderate** and **Significant** becoming **Moderate** and **Significant** (due to HPC)
		Quiescence phase	High	Low	Moderate and Not Significant	Beneficial	Moderate and Not Significant	**Moderate** and **Significant** (due to HPC)
		Final Site Clearance phase	High	Medium/Low increasing to Medium	**Moderate to Major/Moderate** and **Significant**	Adverse becoming beneficial	N/A	N/A
Viewpoint 5	1.9km	Preparations for Quiescence phase	Medium	Medium/Low reducing to Very Low	Moderate and Not Significant reducing to Minor and Not Significant	Adverse becoming neutral	Moderate reducing to Minor	Moderate and Not Significant (due to HPA and HPC)

Receptor	Distance from HPB reactor	Phase	Sensitivity of Receptor	Magnitude of Change	Significance	Type of effect	Cumulative effects (additional)	Cumulative effects (combined)
Minor road to the south of the Site (near Gunter's Grove)		Quiescence phase	Medium	Very Low	Minor and Not Significant	Neutral	Minor	Moderate and Not Significant (due to HPA and HPC)
		Final Site Clearance phase	Medium	Medium-Low	Moderate and Not Significant	Adverse becoming beneficial	N/A	N/A
Viewpoint 6 PRoW WL 23/23 on the north side of the settlement of Stogursey	3.1km	Preparations for Quiescence phase	High	Low / Very Low reducing to Very Low	Moderate / Minor and Not Significant	Adverse becoming neutral	Moderate / Minor and Not Significant	Moderate and Not Significant (due to HPC)
		Quiescence phase	High	Very Low	Moderate / Minor and Not Significant	Neutral	Moderate / Minor and Not Significant	Moderate and Not Significant (due to HPC)
		Final Site Clearance phase	High	Low/Very Low	Moderate / Minor and Not Significant	Adverse becoming beneficial	N/A	N/A
Viewpoint 7 PRoW BW 32/1 at Stockland Bristol	3.6km	Preparations for Quiescence phase	High	Low / Very Low reducing to Very Low	Moderate / Minor and Not Significant	Adverse becoming neutral	Moderate / Minor and Not Significant	**Major / Moderate** to **Moderate** and **Significant** (due to HPC)

Receptor	Distance from HPB reactor	Phase	Sensitivity of Receptor	Magnitude of Change	Significance	Type of effect	Cumulative effects (additional)	Cumulative effects (combined)
		Quiescence phase	High	Very Low	Moderate / Minor and Not Significant	Neutral	Moderate / Minor and Not Significant	**Moderate** and **Significant** (due to HPC)
		Final Site Clearance phase	High	Low / Very Low increasing to Low	Moderate / Minor increasing to Moderate	Adverse becoming beneficial	N/A	N/A
Viewpoint 8 King Charles III England Coast Path to the west of Hinkley Point	4.7km	Preparations for Quiescence phase	High	Very Low reducing to Zero	Moderate / Minor and Not Significant reducing to None	Neutral	Moderate / Minor and Not Significant reducing to None	**Moderate** and **Significant** (due to HPC)
		Quiescence phase	High	Zero	None	Neutral	None	**Moderate** and **Significant** (due to HPC)
		Final Site Clearance phase	High	Very Low reducing to Zero	Moderate / Minor and Not Significant reducing to None	Neutral	N/A	N/A
Viewpoint 9	4.9km	Preparations for Quiescence phase	High	Very Low	Moderate / Minor and Not Significant	Adverse becoming neutral	Moderate / Minor and Not Significant	Moderate and Not Significant (due to HPC)

Receptor	Distance from HPB reactor	Phase	Sensitivity of Receptor	Magnitude of Change	Significance	Type of effect	Cumulative effects (additional)	Cumulative effects (combined)
PRoW BW 25/7/River Parrett Trail/England Coast Path within Steart Marshes		Quiescence phase	High	Very Low	Moderate / Minor and Not Significant	Neutral	Moderate / Minor and Not Significant	Moderate and Not Significant (due to HPC)
		Final Site Clearance phase	High	Very Low increasing to Low/Very Low	Moderate / Minor and Not Significant	Adverse becoming beneficial	N/A	N/A
Viewpoint 10 PRoW BW 24/3 north of Stringston	5.2km	Preparations for Quiescence phase	High	Very Low	Moderate/Minor and Not Significant	Adverse becoming neutral	Moderate / Minor and Not Significant	**Major / Moderate** and **Significant** (due to HPC construction) reducing to Moderate and Not Significant
		Quiescence phase	High	Very Low	Moderate/Minor and Not Significant	Neutral	Moderate / Minor and Not Significant	Moderate and Not Significant (due to HPC
		Final Site Clearance phase	High	Very Low increasing to Low	Moderate/Minor increasing to Moderate and Not Significant	Adverse becoming beneficial	N/A	N/A

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Landscape and Visual Survey Report

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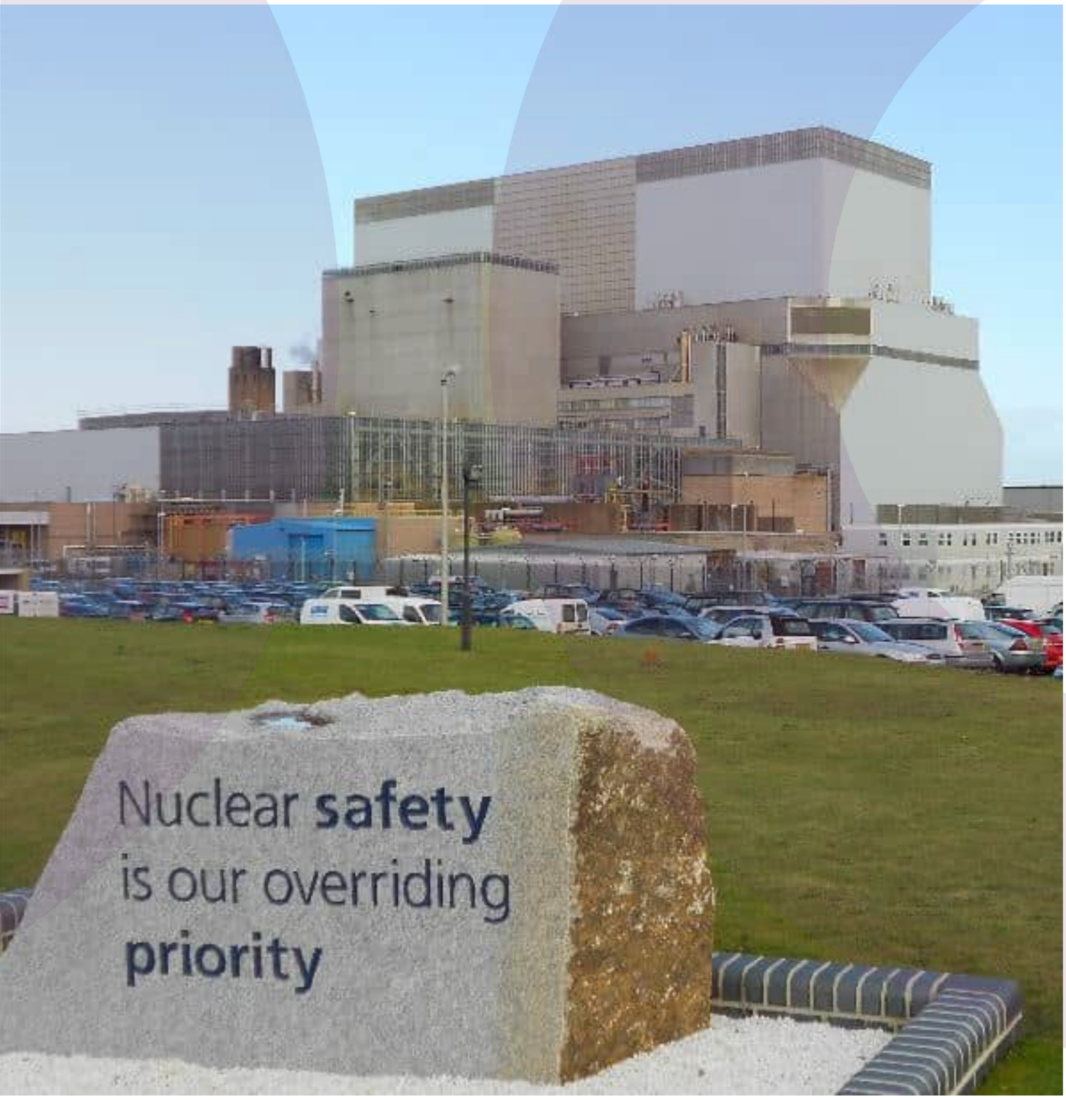
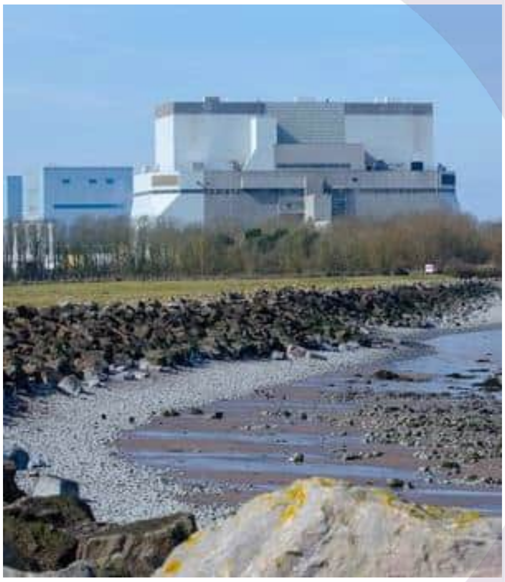
EDF Energy Nuclear Generation Ltd

Decommissioning Hinkley Point B

Landscape and Visual Survey Report





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Wood Group UK Limited – May 2022

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1. Introduction

1.1 Purpose of this report

1.1.1 EDF Energy (the Applicant) is developing proposals to decommission Hinkley Point B Nuclear Power Station ('the Proposed Scheme'). Wood Group UK Ltd has been contracted by the Applicant to complete the baseline data collection to inform the Environmental Impact Assessment (EIA) for the Proposed Scheme.

1.1.2 This report presents details of the landscape and visual surveys that have undertaken to inform the EIA for the Proposed Scheme. It includes a brief description of the Proposed Scheme, before setting out information about the landscape and visual context derived from both desk and field surveys.

1.2 Site context

1.2.1 The Hinkley Point B Nuclear Power Station ('the Site') is situated approximately 12 km to the north-west of Bridgwater, in Bridgwater Bay south of the mouth of the River Severn and on the southern flank of the Severn Estuary. The centre of the Site is at approximate National Grid Reference (NGR) ST 212 459 and the area that is subject to the Nuclear Site Licence (NSL) extends to approximately 40.1 ha.

1.2.2 The majority of the Site is occupied by built structures and hard standing (mainly access roads and car parks). Bridgwater Bay lies immediately to the north. To the south and east of the Site there is a fringe of woodland and scrub, with areas of open grassland. Hinkley Point A borders the Site to the west and further west is the Hinkley Point C Development Project. The wider landscape to the south and east is agricultural.

1.3 Scheme description

1.3.1 The Nuclear Reactors (Environmental Impact Assessment for Decommissioning) Regulations 1999 (as amended)[1] (EIADR) require the environmental impact of decommissioning nuclear power stations to be considered. Under EIADR, The Preparations for Quiescent (PfQ) phase of decommissioning activities at Hinkley Point B, concurrently comprises deplanting, deconstruction, waste processing and Safestore construction, for the purpose of permanently preventing the continued operation of the nuclear power station. Deplanting and deconstruction activities during the PfQ phase, will demolish all buildings to ground level at the Site, excluding the reactor building. The PfQ phase establishes safe conditions for the Quiescent phase; an estimated period of approximately 70 years of relative inactivity, after which Final Site Clearance (FSC) is conducted. The FSC phase involves the re-activity of the site to remove the Safestore, retrieve waste from the debris vaults and complete decommissioning to its end state, so it can be de-licenced.

1.3.2 To facilitate the deplanting and deconstruction in the PfQ phase of decommissioning, new waste processing facilities will be needed on the site which will be delivered by either re-purposing existing buildings or the construction of new buildings, which may be subject to planning approval under the Town and Country Planning Act 1990[2].

[1] The Nuclear Reactors (Environmental Impact Assessment for Decommissioning) (Amendment) Regulations 2018. [Online] Available at: https://www.legislation.gov.uk/uksi/2018/834/made

[2] Town and Country Planning Act 1990. [Online] available at: https://www.legislation.gov.uk/ukpga/1990/8/contents

1.4 Structure of this report

1.4.1 This Landscape and Visual Survey Report is structured as follows:

- **Section 2: Data gathering methodology:** Sets out the sources of data and techniques used in both the desk and field surveys;
- **Section 3: Desk survey findings**: Details the findings of the desk survey utilising published sources of information;
- **Section 4: Field survey findings**: Includes details of field survey locations and description of the baseline views from the viewpoint locations; and
- **Section 5: Summary and conclusions**.

1.4.2 A number of map-based figures have been prepared to illustrate the baseline context as well as annotated panoramic photographs showing baseline views from viewpoints, the locations of which have been agreed with consultees. The observations recorded during the field survey at each of the viewpoint locations are included in **Appendix A**.

2. Data gathering methodology

2.1 Overview

Technical guidance

2.1.1 The landscape and visual data collection and record of findings, as presented in this Landscape and Visual Survey Report, have been undertaken in accordance with the third edition of the *Guidelines for Landscape and Visual Impact Assessment*[3] (hereafter referred to as *GLVIA3*). *GLVIA3* is widely regarded by landscape and planning professions as the 'industry standard' together with best practice and professional experience.

2.1.2 Paragraph 3.15 of *GLVIA3*[3] sets out the purpose of baseline studies and requirements and states:

"The initial step in LVIA is to establish the baseline landscape and visual conditions. The information collected will, when reviewed alongside the description of the proposed development, form the basis for the identification and description of the changes that will result in the landscape and visual effects of the proposal:

- *For the landscape baseline the aim is to provide an understanding of the landscape in the area that may be affected – its constituent elements, its character and the way this varies spatially, its geographic extent, its history (which may require its own specialist study), its condition, the way the landscape is experienced, and the value attached to it.*
- *For the visual baseline the aim is to establish the area in which the development may be visible, the different groups of people who may experience views of the development, the places where they will be affected and the nature of the views and visual amenity at those points."*[3]

2.1.3 The Landscape and Visual Survey Report also takes account of the technical notes published by the Landscape Institute as follows:

- *Technical Guidance Note 06/19 Visual Representation of Development Proposals*[4]. This provides supplementary guidance to *GLVIA3*[3] as to appropriate techniques to capture site photography and the selection, production and presentation of types of visualisation appropriate to the circumstances in which they will be used.

Study Area

2.1.4 For the purposes of the Landscape and Visual Survey Report, a Study Area consisting of a 5 km offset from the site boundary has been defined. The selection of the Study Area has been undertaken in accordance with guidance set out in Sections 5.2 and 6.2 in *GLVIA3*[3] and seeks to ensure that any future Landscape and Visual Impact Assessment (LVIA) concentrates upon receptors that are most likely to be significantly affected by future development proposals. The definition of the Study Area has been informed by the extent of the preliminary Zone of Theoretical Visibility (ZTV) generated for the tallest component of the Proposed Scheme (i.e. the maximum Safestore structure height which is assumed to be 66.5 m above ground level), described in **Section**

[3] Landscape Institute and the Institute of Environmental Management and Assessment, (2013). *Guidelines for Landscape and Visual Impact Assessment. 3rd edition*. London. Routledge.
[4] Landscape Institute. (2019). *Technical Guidance Note 06/19 Visual Representation of Development Proposals* [online]. Available at: https://www.landscapeinstitute.org/visualisation/ [Accessed 19 November 2021].

2.2 and by the findings of the desk and field surveys described in **Section 3** and **Section 4**. The Study Area is shown in **Figure 2.1**.

2.2 Desk survey methodology

Summary of data sources

2.2.1 The desk survey has been undertaken with reference to the following principal data sources:

- Ordnance Survey (OS) 1:25,000 scale mapping:
  - Explorer 140 – Quantock Hills & Bridgwater (or digital mapping).
- National Character Areas (NCA) profiles:
  - 142: Somerset Levels and Moors[5]; and
  - 146: Vale of Taunton and Quantock Fringes[6].
- West Somerset Landscape Character Assessment[7];
- Sedgemoor Landscape Assessment and Countryside Design Guide[8];
- Quantock Hills Area of Outstanding Natural Beauty Management Plan 2019-2024[9];
- Seascape Character Assessment for the South West Inshore and Offshore marine plan areas[10];
- Multi-Agency Geographic Information for the Countryside (MAGIC)[11];
- Light pollution and dark skies mapping produced by LUC for CPRE[12];
- Somerset Public Rights of Way maps[13];
- Aerial Photography (Google Earth Pro – imagery date October 2021) and Street View; and
- LVIA (Chapter 22) prepared for the Hinkley Point C Development Site (Environmental Statement (ES) - Volume 2 Hinkley Point C Development Site, 2011[14]) and associated figures.

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[5] Natural England. (2013). *NCA Profile142: Somerset Levels and Moors (NE451).* [online]. Available at: http://publications.naturalengland.org.uk/publication/12320274?category=587130 [Accessed 19 November 2021].
[6] Natural England. (2014). *NCA Profile:146. Vale of Taunton and Quantock Fringes (NE550)*. [online]. Available at: http://publications.naturalengland.org.uk/publication/6601735426539520?category=587130 [Accessed 19 November 2021].
[7] WS Atkins. (1999). *West Somerset Landscape Character Assessment*. [online]. Available at: https://www.somersetwestandtaunton.gov.uk/media/1224/west-somerset-landscape-character-assessment-1999.pdf [Accessed 19 November 2021].
[8] Sedgemoor District Council. (2003). *Sedgemoor Landscape Assessment and Countryside Design Guide (Revised Edition, 2003)*. [online]. Available at: https://www.sedgemoor.gov.uk/article/1216/Landscape-Assessment-and-Countryside-Design-Summary [Accessed 19 November 2021]
[9] Quantock Hills Joint Advisory Committee (2019). *Quantock Hills Area of Outstanding Natural Beauty Management Plan 2019-2024*. [online]. Available at: https://www.quantockhills.com/qh-aonb-management-plan [Accessed 19 November 2021].
[10] Marine Management Organisation. (2018). *Seascape Character Assessment for the South West Inshore and Offshore marine plan areas*. [online]. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/750228/South_West_-_Seascape_character_assessment_report.pdf [Accessed 19 November 2021].
[11] Department for Environment, Food and Rural Affairs. (2021). *MAGIC*. [online]. Available at https://magic.defra.gov.uk/MagicMap.aspx [Accessed 19 November 2021].
[12] Campaign to Protect Rural England, (2018). *England's Light Pollution and Dark Skies – Map*. [online]. Available at: https://www.nightblight.cpre.org.uk/maps/ [Accessed 19 November 2021].
[13] Somerset County Council. (2020) *Explore Somerset*. [online]. Available at: https://roam.somerset.gov.uk/roam/map [Accessed 19 November 2021].
[14] EDF Energy. (2011). *Environmental Statement – Volume 2 Hinkley Point C Development Site*.

2.2.2 The baseline description of the Site and its surroundings, as derived from the published sources listed above, is set out in **Section 3**.

Zone of Theoretical Visibility

2.2.3 A preliminary ZTV has been generated to inform the selection of viewpoints from which a photographic record would be obtained. ZTV is defined in *GLVIA3* as "*a map, usually digitally produced, showing areas of land within which a development is theoretically visible*"[3] and represents the desk top component of the visibility analysis. The preliminary ZTV is presented in **Figure 2.2**.

2.2.4 The preliminary ZTV was calculated using software that has been developed for use in respect of wind farms together with a Digital Terrain Model (DTM) (OS Terrain 5) and height for the tallest component of the Proposed Scheme i.e. the Safestore (which will house the redundant reactor building) at a worst-case height of 66.5 m above ground level (AGL) (based on recladding of the existing building). The DTM represents the topographic constraints on the visual influence of the existing and Proposed Scheme but does not take account of the built elements or vegetation within the Study Area, both of which can significantly reduce the area and extent of actual visibility. In order to take account of the influence of the presence of small to medium sized plantations, copses and woodlands within the Study Area to the south, south-east and south-west of the Hinkley Point B site, the DTM data has been amended to include areas of woodland as depicted in OS VectorMap District to allow their screening effect to be incorporated in the preliminary ZTV calculation. A height of 12 m AGL has been used for these areas of woodland, the location of which is shown in **Figure 2.3**.

2.2.5 It should be noted that the preliminary ZTV presented in **Figure 2.2** does not include the potential screening effects of other landscape components that may affect visibility, such as buildings, walls, fences, hedgerows or individual trees. An understanding of the role these landscape components play in influencing visibility is therefore obtained during a field survey.

2.3 Field survey methodology

Viewpoint selection criteria

2.3.1 A number of viewpoints have been selected from which a photographic record of existing views has been obtained to inform the assessment. Viewpoint selection has been informed by the desk survey with regard to access and recreation (including promoted walking and cycling routes), tourism including popular vantage points and destinations, and distribution of population. Paragraph 6.20 of *GLVIA3*[3] describes how the selection of viewpoints should take account of a range of factors including:

- "*The accessibility to the public;*
- *The potential number and sensitivity of the viewers who may be affected;*
- *The viewing distance (i.e. short-, medium- and long-distance views) and elevation;*
- *The nature of the viewing experience (for example static views, views from sequential points along routes); and*
- *The view type (for example panoramas, vistas and glimpses).*"[3]

2.3.2 The viewpoint locations are shown in conjunction with the ZTV in **Figure 2.2**.

Viewpoint photography

2.3.3 All photography included within the Landscape and Visual Survey Report has been undertaken in accordance with the specification for Type 4 photography set out in the Landscape Institute's *Technical Guidance Note 06/19: Visual Representation of Development Proposals*[4]. Type 4 uses the highest specification of recording and photographic equipment of the four types defined in *Technical Guidance Note 06/19*[4] and by using this as a basis for the photography, allows flexibility later in the LVIA process when visualisation types are being determined.

2.3.4 All photographs presented in the figures accompanying the Landscape and Visual Survey Report have been taken using:

- A high resolution digital SLR camera with a 'full frame' sensor (i.e. 36 x 24 mm) with the camera set at 1.5 m above ground level[15];
- A 50 mm fixed focal length (prime) lens; and
- A professional quality tripod fitted with a panoramic head.

2.3.5 Accurate locations are established using a hand-held Global Positioning System (GPS) unit and recorded on a standardised proforma. The proforma also allows for other data to be captured as follows:

- The date and time when the viewpoint was visited/photography taken;
- A description of the exact location; and
- Other observational comments regarding the viewpoint location including as to whether relocation was required due to the presence of immediate foreground screening which restricted views in the direction of the development, recording key reference points in the view etc. The proforma is also provides a useful record of observations made in relation to landscape condition and perceptual aspects (such as remoteness and tranquillity) which are not always readily available from published sources.

2.3.6 The viewpoint record sheets containing the viewpoint location data and observation notes are included in **Appendix A**.

2.3.7 In addition to the viewpoint records, there are a number of other important criteria to consider when obtaining viewpoint photography:

- Ensuring photography is undertaken on a dry, clear day with good visibility (weather and visibility to be recorded on the proforma);
- Ensuring locations are visited from east to west as the day progresses to avoid shooting into the sun and avoiding low sun; and
- Avoidance of foreground clutter in the view.

Field survey

2.3.8 The field survey was completed in February 2022 to obtain viewpoint photography at 11 viewpoint locations agreed with Somerset County Council (SCC) during engagement via email in December 2021. Photography has been undertaken during the winter months thereby reflecting the maximum visibility scenario. The viewpoint schedule is set out in **Table 4.1** in **Section 4**.

---

[15] Scottish Natural Heritage. (2017). *Visual Representation of Wind Farms Guidance Version 2.2*. Paragraph 122. [online]. Available at: https://www.nature.scot/sites/default/files/2019-09/Guidance%20-%20Visual%20representation%20of%20wind%20farms%20-%20Feb%202017.pdf

2.3.9 The resultant photographs from the viewpoints have been digitally joined (using Autopano Giga software) to form a panorama and the resultant annotated panoramic photographs have been presented as Type 1 Annotated Viewpoint Photograph in accordance with best practice guidelines set out in the Landscape Institute's *Technical Guidance Note 06/19 Visual Representation of Development Proposals*[4].

2.3.10 A baseline description of the views available from the agreed viewpoint locations is included in **Section 4**.

3. Desk survey findings

3.1 Hinkley Point B Power Station site

3.1.1 The land within the Hinkley Point B NSL boundary lies at an elevation of approximately 10 m Above Ordnance Datum (AOD) and predominantly features built form including the large-scale building housing the reactors and adjoining turbine hall towards the centre of the Site, and an expansive range of smaller ancillary buildings, warehouses and tanks. These are set within operational land-uses comprising access tracks, car parking and substation compounds all bound by security fencing. Inside the security fence along the northern boundary, a high gabion wall prevents views across the Site from the adjoining Brean Down to Minehead section of the England Coast Path which follows the coastline to the immediate north of Hinkley Point A and B Power Stations.

3.1.2 Land outside of the double security fence boundary, but within the wider Hinkley Point B NSL boundary, comprises a mosaic of broadleaved and mixed plantation woodland, semi-improved neutral grassland, scrub, tall ruderal vegetation and ephemeral/short perennial vegetation. The woodland wraps around the eastern and southern boundaries of the main operational land-uses and provides effective screening of the lower-level ancillary buildings and infrastructure within Hinkley Point B.

3.2 Wider landscape and visual context

Topography and drainage

3.2.1 The landform of the Somerset coast forms a broad pattern of gently undulating land rising to form the foothills of the Quantock Hills Area of Outstanding Natural Beauty (AONB). To the east of the Site the land becomes lower-lying, with flat open sedimentary deposits forming marshy grassland. The marshland landscape continues north-eastwards in a continuous belt along the shore to, and beyond, the River Parrett. The shore is dominated by wave cut platforms and mud banks that form an extensive intertidal zone. The foreshore is in places defined by shallow cliffs rising above the outcrops of Jurassic Blue Lias that are of geological significance. The Severn Estuary Special Area of Conservation (SAC), Ramsar Site and Special Protection Area (SPA) on which the headland of Hinkley Point lies is characterised by extensive mud flats and is internationally renowned as being valuable for wildfowl and waders.

3.2.2 A number of streams drain the lower foothills of the Quantocks and flow though the Study Area. These include the Stogursey Brook and Bayley's Brook which join Bum Brook to the north of Shurton. Bum Brook continues to Wick where it splits, forming the East Brook and West Brook, which run broadly parallel, finally discharging as West Brook into Bridgwater Bay north of Stolford. Elsewhere, Middle Brook joins North Brook north of Stockland Bristol, becoming South Brook and draining into the River Parrett within the eastern fringes of the Study Area.

Land use and vegetation pattern

3.2.3 Immediately inland from the Site, the landcover is characterised by hedge-enclosed pastoral and cultivated land. These patterns extend up onto the lower slopes of the Quantock Hills to the south-west of the Site. The open patterns of the grazing marsh and coastal fringes contrast with the nearby hedge-enclosed, higher, cultivated land. Small to medium sized plantations, copses and woodlands are also prevalent across the more elevated land to the south of the Site.

Settlement pattern

3.2.4 Settlement patterns reflect the isolated nature of the coastal landscape. There are small villages located on the higher land to the south of the Site including the hamlets of Wick, Shurton, Burton and Knighton plus the larger village of Stogursey. The hamlet of Stolford lies to the east of the Site separated from Hinkley Point B by the marshes of Wick Moor. On the Site there is minimal evidence of past settlement and activity, other than the access road, Wick Moor Drove, which continues to the shore in the form of remnant parallel banks within wooded areas. Human influence is however extensive on much of the coast, with sea defences and walls, land drainage and water level management structures and ditches, with hedges on the higher and drier land. Recent development includes the large-scale infrastructure project of Hinkley Point C located immediately to the west of Hinkley Point A with the Hinkley Point C development site extending south towards the hamlets of Shurton, Burton and Knighton.

Recreational routes and destinations

National Trails

3.2.5 The 93 km Brean Down to Minehead section of the England Coast Path and its associated Coastal Margin traverses the coastline to the north of Hinkley Point B and continues to the east and west as shown in **Figure 3.1**. A 4.9 km inland alternative is currently in place until Autumn 2023[16] to bypass construction works associated with Hinkley Point C.

Promoted routes

3.2.6 A short section of the River Parrett Trail passes through the Study Area to the north-east of Stockland Bristol (see **Figure 3.1**). At the hamlet of Steart, it meets the start of the West Somerset Coast Path[17], a route which connects the River Parrett Trail with the South West Coast Path National Trail at Minehead. Within the Study Area, both promoted routes coincide with the England Coast Path.

Local Public Right of Way network

3.2.7 The distribution of local Public Rights of Way (PRoWs) is illustrated in **Figure 3.1**. This shows a dense network of footpaths linking roads and settlements.

Open Access Land / Registered Common Land

3.2.8 An extensive tract of land to the south and east of Hinkley Point B is designated as Open Access Land (under the Countryside and Rights of Way Act 2000) and Registered Common Land (see **Figure 3.1**). This includes areas known as Wick Moor, North Moor, Great Hooks and Little Hooks and Ham to the immediate south and east of Hinkley Point B and Sharpham, Redham and North Ham which extend to the west and north of Stolford. To the east of Stolford, Catsford Common and Wall Common form Registered Common Land but are not designated as Open Access Land.

[16] National Trails (n.d.) Diversion at Hinkley Point until 14th September 2023 due to land management operations. [online]. Available at: https://www.nationaltrail.co.uk/en_GB/short-routes/hinkley-point-diversion/ [Accessed 28 February 2022].

[17] Somerset County Council Rights of Way Service. (undated). The West Somerset Coast Path text and maps. [online]. Available at: https://www.mineheadtowncouncil.co.uk/uploads/2/2/3/5/22358578/westsomersetcoastpathmaps&directions.pdf [Accessed 28 February 2022].

Nature Reserves

3.2.9 The Wildfowl and Wetlands Trust's (WWT's) Steart Marshes provides a year-round destination with car parking, accessible routes for walking, cycling and horse riding and bird hides. The nature reserve covers saltmarsh and freshwater wetlands and is located to the north-east of Stockland Bristol and south of Steart.

Transport network

3.2.10 There are no 'A' or 'B' classified roads within the Study Area. A relatively dense network of minor roads and lanes link settlements and are often bound by high hedgerows thereby limiting the availability of views.

3.3 Landscape character

National Character Areas (NCAs)

3.3.1 At the national scale of Natural England's 159 NCAs, the Hinkley Point B NSL boundary spans two NCAs. The reactor buildings and infrastructure within the western half of the Site lies within the eastern edge of NCA 146: Vale of Taunton and Quantock Fringes as illustrated in **Figure 3.2** whilst infrastructure located to the east of the reactor buildings lies within NCA 142: Somerset Levels and Moors. The published profile for NCA 146: Vale of Taunton and Quantock Fringes notes in the opening summary that:

"*Hinkley Point nuclear power station lies on the far eastern edge of the NCA, prominent in sweeping coastal views*." [5]

3.3.2 The description section of the profile for NCA 146 expands the reference to the Power Stations further stating:

"In 1957 the construction began of Hinkley Point A nuclear power station at the north-eastern edge of the area. Subsequently Hinkley Point B was constructed. Hinkley Point A has stopped operating and Hinkley Point B is now reaching the end of its life. Planning permission has been given for a further two reactors, to be known as Hinkley Point C. This forms a prominent feature on the coast and in views from the Quantock Hills AONB. Mitigation works, landscaping, tree planting and habitat improvement, required for the planning permission, are being put in place." [6]

3.3.3 The pertinent key characteristics of NCA 146: Vale of Taunton and Quantock Fringes in relation to the Study Area are as follows:

- *"The topography can be divided into four distinct areas: the flood plain; a gentle low vale underlain by Triassic mudstones; a more elevated, undulating vale underlain by Devonian slates and sandstones as well as Triassic sandstones and mudstones; and the open, wind-swept cliffed coast underlain by Triassic mudstones, Jurassic mudstones and limestones and a small section of Pleistocene gravels.*
- *Open and wind-swept coast with low cliffs, mudflats and wave-cut platforms in mudstones and limestones. The often spectacularly folded and faulted Triassic and Jurassic mudstones and limestones that are visible on the extensive shore platforms and the cliffs are renowned for their fossils, and are of international importance for their stratigraphy.*
- *A number of tree-lined streams wind through the area. To the east many streams drain off the Quantock dip slopes and flow into the River Parrett.*

- *Woodland cover is generally low, at 6 per cent, although the area has a wooded feel as there are many hedgerow trees (such as oak), orchards, remnants of parkland, small woodlands with ash and oak and bankside trees such as alder and, rarely, black poplar.*
- *Lowland mixed farming landscape, with dense hedgerows enclosing rectilinear fields. Permanent grassland characterises the flood plain with arable, pasture, market gardening and orchards in the vales and pasture and arable on more undulating ground.*
- *Scattered settlements of farmsteads, hamlets and villages linked by sunken winding lanes. Distinctive gentry architecture with parkland, local vernacular of red sandstone buildings and prominent Perpendicular church towers to the west and south, and grey Lias along the coast and to the east.*
- *Sweeping views from the coast across the bay to Wales; to Hinkley Point power station in the east; and to Minehead in the west. Exmoor, the Blackdown Hills and the Quantock Hills provide a backdrop to the area and expansive views from these uplands emphasise the lush pastoral nature of this area."* [6]

3.3.4 The pertinent key characteristics of NCA 142: Somerset Levels and Moors which covers the eastern part of the Site and low-lying land within the Study Area are as follows:

- *"This is a flat open landscape of wet pasture, arable and wetland divided by ditches and rhynes, often forming a chequer-board pattern, that clearly illustrate the reclaimed, planned nature of the landscape.*
- *The area includes the largest lowland grazing marsh system in Britain*
- *Rivers draining into the Levels and Moors include the Axe, Brue, Parrett, Yeo and Isle. Most of the area is susceptible to flooding, lying below high tide level and the water level of the main, embanked river systems.*
- *Semi-natural unimproved grasslands, wet meadows, fen, mire and reedbeds underline the area's wetland character, which is internationally important for assemblages of wetland and wading birds, invertebrates, amphibians, wetland mammals, and the aquatic vegetation of the rhynes and ditches.*
- *Reflecting the history of reclamation, roads on the Levels are often sinuous, following the line of rhynes that were once salt marsh creeks; others are straight droves, causeways and flood embankments, slightly raised and related to the drainage channels of the 18th-century landscape of the inland Moors.*
- *The coast fringing Bridgwater Bay is complex and various: dunes extend from Brean Down southwards to Burnham-on-Sea, embankments hug the coastline south of Highbridge, and either side of the Parrett estuary there are mudflats, sand flats, storm shingle beaches and salt marsh. Manmade defences have been created to keep high tides at bay and are a dominant feature of the coastal scene."* [5]

3.3.5 Whilst "*wide panoramic views both from inside the area looking out and from outside the area looking in*"[5] are cited in the description for this NCA, Hinkley Point B is not noted as forming a recognisable feature in these views.

District-level landscape character

3.3.6 At a district level, the Site is located within the Quantock Vale Landscape Character Area (LCA) as defined in the *West Somerset Landscape Character Assessment*[7] and shown in **Figure 3.3**. This LCA covers a lowland landscape of wider valleys and gentle hills which are rarely over 60 m AOD overlain by an essentially ancient agricultural landscape of small fields, hedges, hedgerow trees and small woodlands. The presence of two small areas of marsh and the coast have led to the Quantock Vale LCA being divided into four sub-areas with the Site being within the Eastern Lowlands Sub-Area. The key characteristics of the Eastern Lowlands Sub-Area, are defined as follows:

- *"Field Pattern;*
- *Deciduous Woodland;*
- *Hedges and hedgerow trees; and*
- *Hinkley Point and the power lines*." [7]

3.3.7 Of relevance to Hinkley Point B, the *West Somerset Landscape Character Assessment* states:

"Hinkley Point power station is a notable modem development in the area. Given the lie of the land and vegetation it is not as visually dominant from within the area as might be expected, although it is a significant feature in views of the area from the Quantock Hills. The power lines in the east are locally dominant features." [7]

3.3.8 The landscape to the south and east of the Site is defined as the Wick Moor and Coast Sub-Area which covers a finger of coastal grazing marsh below 10 m AOD known as Steart Flats. The openness of the grazing marsh results in the area being "*visually dominated by the bulk of Hinkley Point power station to the west; it is separated from the sea by a significant sea wall, which provides vehicular access to Hinkley Point*"[7]. Land to the north of the power stations lies within a third sub-area: The Coast (St Audries to Hinkley Point) Sub-Area.

3.3.9 Beyond the host and immediately adjacent LCAs, there are a number of other LCAs as defined by the *West Somerset Landscape Character Assessment*[7] and *Sedgemoor Landscape Assessment and Countryside Design Guide*[8]. A summary of the descriptions provided in the extant documents for all LCAs within the Study Area is provided in **Table 3.1**.

Table 3.1 LCAs within the Study Area: key characteristics

LCA	Key characteristics / description
West Somerset LCAs	
Quantock Vale LCA: Eastern Lowlands Sub-Area	• Predominant topography is low rolling hills to about 70 m AOD, although at the foot of the Quantocks, between Stringston and Dodington, the gentle slopes rise to the Quantock Hills. • The landform and soils are suitable for agriculture. • Medium sized deciduous woodlands and copses are scattered throughout the area. • The frequent lanes, which are straighter than elsewhere in the district, are hedged with mixed species hedges and hedgerow trees as are the fields. • Long settled area, the only village of any size is Stogursey and all other settlements are small, nucleated villages, hamlets and farms. • Hinkley Point power station is a notable modem development in the area.
Quantock Vale LCA: The Coast (St Audries to Hinkley Point) Sub-Area	• Erodible cliffed coastline, the cliffs are fronted by a wave cut, intertidal rock platform, both are of considerable interest for their geological and geomorphological features . • The cliffs are internationally important for their geology and are used as a geological standard for the Jurassic, Blue Lias. • This cliffed coastline differs from the Blue Anchor to St Audrie's section in that there is virtually no settlement or tourist development on the coast.
Quantock Vale LCA: Wick Moor and Coast Sub-Area	• Land lies below 10 m AOD and covered with recent alluvial deposits. • The area is quite open and bleak, used as grazing marsh in the summer with an absence of field boundaries although some scrubby vegetation has developed along the line of drainage ditches. • The marsh is subject to flooding and is of high nature conservation value; it is designated SAC, Ramsar Site, SPA and SSSI, as are the fronting beach and sub tidal areas.

LCA	Key characteristics / description
	• There is a submarine forest off the coast at Wick Moor, which is an important site for marine archaeology. • The area is visually dominated by the bulk of Hinkley Point power station to the west; it is separated from the sea by a significant sea wall, which provides vehicular access to Hinkley Point.
Quantock Vale LCA: Wall Common and Coast Sub-Area	• Land lies below 10 m AOD and covered with recent alluvial deposits, sands and gravels. • Humic alluvial gleyed soils cover these deposits and it is drained by a complex if rectilinear drainage ditches that divide the common into pasture fields. • The area is quite open and bleak, it is used as grazing marsh in the summer and some scrubby vegetation has developed along the line of drainage ditches. • The fields are at risk of flooding but are separated from the sea by a series of low cobble embankments. • To the seaward side there is a strip of salt marsh the fronting beach and sub tidal areas. • This coast is of high nature conservation value; it is designated SAC, Ramsar Site, SPA and SSSI, and forms part of Stert Flats National Nature Reserve. • Two farms are located in the area on rising land toward the Stolford ridge which separates this lowland from Wick Moor to the west.
Doniford Stream and Quantock Fringe LCA: North-East Quantock Agricultural Fringe Sub-Area	• Steep slopes which are incised by headwater streams running the short distance from the Quantock Plateau to the sea. • There are numerous tree groups and copses and some medium sized woodlands dotted across the hillsides. • Settlement pattern consists of small settlements and farms dotted across the landscape. • The views out to sea give this area a less enclosed character and consequently the area feels more exposed and a little wilder.
Sedgemoor LCAs	
Lowland Hills – Stockland Hills	• The area is characterised by its series of small hills, rising from 10 m to an average of 50 to 60 m AOD. • The area contains a patchwork of larger, mainly arable and small pasture fields, unmanaged hedgerows and small woodlands. Field patterns are likely to be largely medieval in origin • The LCA features a dispersed settlement pattern which includes scatter of isolated hamlets and farmsteads and small settlements such as Stockland Bristol which are linear in form and of medium density. Streets run along contours. • Much of the area has an undeveloped backwater character, but features such as electricity pylons linking to the nearby Hinkley Point power stations and the silos of a grain depot bring signs of the modern world into this landscape.
Levels and Moors – Estuarine Levels	• Most of the area is a coastal belt of clay several miles wide at generally about 6 m AOD. • This is a largely flat landscape, with a pattern of fields defined by a combination of drainage channels and hedges. The field pattern is irregular and it is notable that many of the major local drainage channels or rhynes take a sinuous course. • The area is mostly used for pasture for dairy cattle, with some arable cropping, especially for animal feeds. • The areas close to the coast, near the confluence of the Parrett with the Bristol Channel, are generally quite open and windswept, and many of the fields contain small ponds, which were sunk to water the livestock. These areas were also drained or reclaimed in later periods and this is another factor in the lack of hedgerows. • The coastal levels adjacent to the Parrett estuary are largely devoid of buildings.
Levels and Moors – Sea Edge/Intertidal Zone	• The western edge of the Levels meets the Bristol Channel in a broad open landscape of sand dunes, mud flats and river estuaries. • On the western side of the mouth of the River Parrett, Sedgemoor's coastal edge includes the relatively remote settlement of Steart and bird hides associated with the Bridgwater Bay National Nature Reserve. • The pattern of the rivers and the flats has changed many times throughout history, leaving remnant archaeological features in the Parrett estuary, with sea walls and embankments now protecting the area. • The estuarine flats are an important, designated area for nature conservation.

Seascape character

3.3.10 The *Seascape Character Assessment for the South West Inshore and Offshore marine plan areas*[10] identifies the coastline and waters to the north of the Site as Marine Character Area (MCA) 40: Bridgwater Bay. This MCA encompasses the combined arc-shaped bay of Bridgwater and Blue Anchor and is characterised by expansive sand, mud and gravel sediments exposed at low tide. Hinkley Point Power Stations A and B are described as:

"A dominant landmark in an open, largely featureless shoreline; the contrasting uplands of the Quantock Hills and Exmoor rising behind." [10]

3.3.11 It is similarly recognised as one of the key characteristics of this MCA and it:

" … forms a large, box-shaped feature looming on the immediate coastal skyline – strongly recognisable in views from offshore".[10]

3.3.12 Other pertinent key characteristics of this MCA are as follows:

- *"Wide, open expanse of drying Holocene mud and sandflats forming the combined large-scale bays of Bridgwater and Blue Anchor. The tidal rivers of the Parret and Axe drain into Bridgwater Bay.*
- *Shallow, frequently changing water depths owing to the high tidal range of the wider Bristol Channel – up to 10m at springs. Depths reach a maximum of 23m at the transition to the Channel.*
- *A generally featureless shoreline, but of significant geological and biological interest. Wave-cut platforms create a significant rock reef system supporting a range of marine invertebrates.*
- *Expansive mudflats and salt meadows within the wider Severn Estuary SAC, SPA and Ramsar site, supporting diverse populations of overwintering, passage and migrant waders and waterfowl.*
- *Suction dredgers use Dunball Wharf to land aggregates extracted from the Bristol Channel (MCA 49). At Combwich a specialist Ro-Ro terminal is used by barges servicing Hinkley Point power station.*
- *The England Coast Path traverses the coastal edge from Highbridge to Minehead.*
- *The Quantock Hills AONB rises up behind Bridgwater Bay, linking westwards to Exmoor National Park to form an upland backcloth. The MCA forms part of the seascape setting to both protected landscapes.*
- *Expansive views across the wider Severn Estuary and Bristol Channel (MCAs 39 and 41), with strong intervisibility with the South Wales coast including the Glamorgan cliffs and Brecon Beacon foothills."* [10]

3.3.13 The LVIA prepared as part of the ES for the Hinkley Point C project (Chapter 22 of the *Environmental Statement – Volume 2 Hinkley Point C Development Site*) further sub-divides the coastline from Blue Anchor to Brean Down into five local seascape character areas (LSCAs) based upon descriptions in the *West Somerset Landscape Character Assessment*[7] and The Bridgwater Bay to Bideford Bay Shoreline Management Plan[18]. The coastline to the immediate north of Hinkley Point B lies on the boundary between LSCA B: St Audries Bay to Hinkley Point which covers the coastline to the west and LSCA C: Hinkley Point to River Parrett which encompasses the coastline and Steart Flats to the east.

[18] North Devon and Somerset Coastal Group (1998). The Bridgwater Bay to Bideford Bay Shoreline Management Plan.

3.4 Landscape designations

National landscape designations

3.4.1 The Quantock Hills AONB is sited approximately 5.2 km to the west/south-west of Hinkley Point B at its closest point and therefore outside of the Study Area. The *Quantock Hills Area of Outstanding Natural Beauty Management Plan 2019-2024*[9] includes the views from the hilltop area within the AONB as being one of the special qualities of the Quantock Hills and identifies that the new development at Hinkley Point C to the west of Hinkley Point B impacts on the views from the AONB. This is likely to be as a consequence of the scale of the Hinkley Point C construction activities and the reduced separation distance between Hinkley Point C and the Quantock Hills AONB, with a minimum separation distance of approximately 3.9 km compared to approximately 5.2 km to the Hinkley Point B NSL boundary and 5.9 km to the reactor building within Hinkley Point B.

3.4.2 The field survey observations, including a review of the elevated views available from Viewpoint 10 (**Figure 4.10**), which is the closest viewpoint to the AONB being located approximately 1 km to the east of Viewpoint 10, together with a baseline in which Hinkley Point A and B are established components in the landscape and the scale of the decommissioning activities proposed at Hinkley Point B, provides justification for the 5 km LVIA Study Area which seeks to ensure that the LVIA concentrates upon receptors that are most likely to be significantly affected by future development proposals.

Local landscape designations

3.4.3 There are no local landscape designations within the Study Area.

3.5 Visual baseline – existing visibility

3.5.1 As indicated by the preliminary ZTV in **Figure 2.2**, visibility of the tallest component of Hinkley Point B (the existing reactor building at a height of 66.5 m AGL) is concentrated across the lower-lying coastal fringes, primarily to the east of the Site, extending across Steart Flats and across Bridgwater Bay. To the west of the Site, visibility becomes partially fragmented along the coast whilst future views from this direction would be further interrupted by the emerging built form within Hinkley Point C.

3.5.2 Areas where visibility of Hinkley Point B begins to become more limited are concentrated at distances of ~2.5 km to the south and south-east of Hinkley Point B. This fragmentation reflects the localised screening provided by the rolling topography and, in some cases, the small woodlands. Visibility will also be reduced by built form and localised tree cover and vegetation all of which provide a screening role. High roadside hedgerows are prevalent across the local landscape and are effective in screening views towards the existing structures within Hinkley Point B nuclear power station from the narrow lanes which cross the landscape. The field survey indicated that tree cover along the southern and eastern boundaries of Hinkley Point B is of sufficient height and density to provide partial to heavily filtered winter views of the reactor building from some locations in close proximity to the Site as evidenced at Viewpoints 1 and 2.

3.6 Future baseline

Overview

3.6.1 Landscape change is an ongoing and inevitable process and would continue across the Study Area irrespective of whether the Proposed Scheme proceeds. Change can arise through natural processes (e.g. the maturity of woodlands) and natural systems (e.g. river erosion) or, as is often the case, occurs due to human activity, land use, management or neglect.

Hinkley Point C

3.6.2 The landscape within the Study Area of Hinkley Point B is undergoing considerable and continual change as a consequence of the construction and subsequent operation of Hinkley Point C. The LVIA for Hinkley Point C (as reported in the Environmental Statement Non-Technical Summary[19]) identified that the construction phase would lead to a locally significant loss of landscape features and a temporary and significant change in the local landscape and seascape character. The visual assessment also concluded that the views of residents of Shurton, Burton, Knighton, Wick and local properties and users of elevated areas of landscape such as the north-eastern summits of the Quantock Hills AONB would be significantly affected during the Hinkley Point C construction period. The magnitude of visual change would decrease at distances in excess of 5 km.

3.6.3 The future operation of Hinkley Point C would lead to a decrease in the landscape and visual impacts (as reported in the LVIA) as a consequence of the removal of construction plant, equipment and temporary buildings. The landscape impacts are described as being predominantly minor due to the landscape restoration proposals which would introduce several new and valuable landscape features within the Hinkley Point C site. Localised major visual changes would continue to be experienced by the closest residential visual receptors and for users of the Public Right of Way (PRoW) along the adjacent coastline (which has subsequently become part of the England Coast Path since the publication of the Hinkley Point C ES) due to the proximity of the large-scale infrastructure associated with the operational power station. Long-term (15 years onwards) moderate visual effects would also remain within a local area in the north-eastern part of the Quantock Hills AONB due to its elevation.

3.6.4 Reference to paragraph 6.17.2 of the Hinkley Point C Environmental Statement Non-Technical Summary[19] indicates that the diverted section of England Coast Path would be reinstated "*on completion of the construction of seawall*". The PRoWs which currently form the diversion, may consequently revert back to their former local status and there is the potential for these routes to no longer form part of a national trail.

Hinkley Point A

3.6.5 Hinkley Point A, to the immediate west of Hinkley Point B, ceased generation in 2000[20]. Hinkley Point A is undergoing the decommissioning process, which includes the gradual removal of structures from within the Hinkley Point A site and the construction of the Safestores around the two reactor buildings.

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[19] EDF Energy (2011). Hinkley Point C Environmental Statement Non-Technical Summary. [online]. Available at: https://www.edfenergy.com/file/1664/download [Accessed 28 February 2022].
[20] ONR (2021). Hinkey Point A. [Online]. Available at: https://www.onr.org.uk/sites/hinkley-point-a.htm

Ash dieback

3.6.6 Chalara dieback of ash became established in the UK in 2012 with the consequence that the future of common ash (Fraxinus excelsior) as a woodland, hedgerow and urban tree species became under threat. Reference to the Forestry Commission's map[21] of confirmed infection sites for the UK indicates that the two OS 10 km grid squares which cover the LVIA Study Area has a record of confirmed infection of ash trees within a natural environment. Impacts on the landscape are likely to develop relatively slowly, starting with the decline of young trees and only becoming readily apparent if mature trees are felled. This may open up views for visual receptors and alter the structure of existing woodlands.

Other forces for change

3.6.7 Beyond the landscape and visual changes associated with the construction and operation of Hinkley Point C, the published profile reports for NCAs 142: Somerset Levels and Moors[5] and 146: Vale of Taunton and Quantock Fringes[6] reports on a number of drivers of change which may also alter the existing baseline landscape and visual within the LVIA Study Area as follows:

- climate change could lead to:
  - sea level rise, combined with increased storminess, storm-surges and intense rainfall events has the potential to increase the risk of coastal flooding, and accelerate natural erosion of the coastline beyond the stretch in front of Hinkley Point, where coastal defences have been put in place;
  - increased storminess combined with increased summer drought may lead to the loss of mature and/or veteran trees such as hedgerow oak and black poplar and parkland trees;
  - the extent of semi-natural habitats, already fragmented, may deteriorate further due to pressures from changes in climate including a reduction in species diversity as a result of warmer winters and more frequent drought conditions;
  - a longer growing season with higher temperatures may encourage the expansion of arable and horticultural production. An increased pressure for food production as a result of a motivation for greater national food self-sufficiency may also be a driver towards more arable production; and
  - an increasing trend in UK-based holidays may see more coastal development pressures for tourist related infrastructure such as caravan parks along the coastal fringe which could change the windswept and open character of the coastline.

[21] Defra project team (including Fera, Natural Resources Wales and Forestry Commission). (2021). Chalara Map [online] Available at: https://chalaramap.fera.co.uk/

4. Field survey findings

4.1 Viewpoint locations

4.1.1 The locations from which a photographic record has been obtained in February 2022 is set out in **Table 4.1** and are shown on **Figure 2.2**.

Table 4.1 Viewpoint schedule

Viewpoint (VP) Number	Viewpoint Location	Grid Reference	GLVIA3 Typology and Selection Justification
VP1	England Coast Path on the western side of Wick Moor	321679, 145728	Representative Viewpoint – One of the closest and most open publicly accessible locations with views indicative of those available to users of the England Coast Path and Wick Moor area of Open Access Land to the east of the Site. Viewpoint 15 in the 2011 LVIA for Hinkley Point C.
VP2	England Coast Path within Wick Moor close to Wick Moor Drove	320767, 145366	Representative Viewpoint – Another close and open publicly accessible location with views indicative of those available to users of the England Coast Path and Wick Moor area of Open Access Land to the south-west of the Site.
VP3	PRoW WL 23/62 at the southern end of Wick Moor	321834, 144788	Representative Viewpoint – Views available to users of a local footpath network within Wick Moor area of Open Access Land close to the settlement of Wick to the south-east of the Site.
VP4	England Coast Path close to the settlement of Stolford	322929, 145982	Representative Viewpoint – Views available to users of the England Coast Way and potentially residents in Stolford to the east of the Site. Viewpoint 19 in the 2011 LVIA for Hinkley Point C.
VP5	Minor road to the south of the Site (near Gunter's Grove)	320980, 144246	Representative Viewpoint – Middle-distance views available to drivers and their passengers travelling along a minor road to the south of the Site close to Gunter's Grove. Viewpoint 12 in the 2011 LVIA for Hinkley Point C.
VP6	PRoW WL 23/23 on the north side of the settlement of Stogursey	320231, 143158	Representative Viewpoint – Middle-distance views available to users of a local PRoW and residents on the northern edge of Stogursey to the south south-west of Hinkley Point B.
VP7	PRoW BW 32/1 at Stockland Bristol	324037, 143676	Representative Viewpoint – Middle-distance views available to users of a local PRoW and residents at Stockland Bristol to the south-east of Hinkley Point B.

Viewpoint (VP) Number	Viewpoint Location	Grid Reference	GLVIA3 Typology and Selection Justification
VP8	England Coast Path to the west of Hinkley Point B	316683, 145443	Specific Viewpoint – Views available to eastbound users of the England Coast Path selected to demonstrate the future baseline role of Hinkley Point C in views from coastal locations to the west.
VP9	PRoW BW 25/7/River Parrett Trail/England Coast Path within Steart Marshes	326092, 144668	Representative Viewpoint – Views available to users of a promoted trail (River Parrett Trail) which coincides with a national trail (England Coast Path) within Steart Marshes, a visitor attraction with open views along the coastline.
VP10	PRoW BW 24/3 north of Stringston	317091, 143042	Representative Viewpoint – Long-distance views available to users of a local footpath which crosses elevated land to the south-west of Hinkley Point B. Viewpoint 5 in the 2011 LVIA for Hinkley Point C.
VP11	Seafront Promenade close to South Esplanade, Burnham-on-Sea	330289, 148734	Representative Viewpoint – Long-distance views available to users of a seafront promenade and popular visitor location on the eastern side of Bridgwater Bay. Whilst this viewpoint lies outside of the Study Area, it has been requested by SCC and included to demonstrate the influence on views as a consequence of increased separation distance from Hinkley Point B.

4.2 Baseline description

Viewpoint 1: England Coast Path on the western side of Wick Moor

4.2.1 This viewpoint is located on local PRoW WL 23/61 which forms part of the diversion of the England Coast Path, currently in place due to land management operations associated with the construction of Hinkley Point C. Under a future baseline scenario, this diversion would cease, and the route would continue to exist as a local footpath. The viewpoint is located approximately 450 m to the south-east of the reactor building within Hinkley Point B, at an elevation of 5 m AOD.

4.2.2 **Figure 4.1** illustrates the baseline view and a foreground which comprises open grazing marsh, drainage ditch and reed planting associated with a small pond located to the west of the viewpoint. The screening role of the woodland belt which wraps around the eastern and southern edges of the operational land uses within Hinkley Point B is apparent with all lower height ancillary buildings screened by the tree cover whilst the reactor building is partially visible through the deciduous trees under winter conditions. This screening would be more comprehensive during the summer months when the trees are in full leaf. The reactor buildings within Hinkley Point A are also partially visible through the intervening woodland belt in the same field of view as Hinkley Point B.

Viewpoint 2: England Coast Path within Wick Moor close to Wick Moor Drove

4.2.3 Viewpoint 2 is located on local PRoW WL 23/70/1 which also forms part of the diverted England Coast Path. Under a future baseline scenario, the diversion would cease, and the route would continue to exist as a local footpath which continues south, parallel with Wick Moor Drove. The viewpoint is located at an elevation of 7 m AOD, approximately 900 m to the south-west of the reactor building within Hinkley Point B.

4.2.4 **Figure 4.2** illustrates the framed view between two hedgerows towards the reactor building which is partially filtered in winter views by the deciduous tree cover along the southern boundary Hinkley Point A. This screening would be more effective during the summer months when trees are in full leaf and views of the reactor building from this location would therefore be seasonal and limited during the summer. There are no views of the lower height ancillary buildings within the Hinkley Point B NSL boundary as a consequence of the tree cover.

Viewpoint 3: PRoW WL 23/62 at the southern end of Wick Moor

4.2.5 This viewpoint is located on local PRoW WL 23/62 and within the open access land of Wick Moor. It is sited at a distance of approximately 1.3 km to the south-south-east of the reactor building within Hinkley Point B at an elevation of approximately 10 m AOD.

4.2.6 The baseline view is illustrated in **Figure 4.3** and shows an open view across a foreground comprising a drainage ditch and pastoral grassland. The upper façade of the reactor building and adjoining turbine hall within Hinkley Point B are clearly identifiable on the skyline beyond the more prominent steel lattice pylons and temporary construction activities associated with the overhead line. The reactor buildings of Hinkley Point A and cranes associated within Hinkley Point C are also evident on the skyline to the west of Hinkley Point B. The slight rise in local topography visible above the intervening hedgerow means that all lower height ancillary buildings within the Hinkley Point B NSL boundary and the woodland belts along the southern and eastern perimeters of the Site are not evident in baseline views from this location.

Viewpoint 4: England Coast Path close to the settlement of Stolford

4.2.7 Viewpoint 4 is located on the England Coast Path which coincides with local PRoW WL 23/95 and follows the coastline to the west of Chapel Cottages on the western edge of Stolford. The viewpoint is located approximately 1.5 km to the east of the reactor building within Hinkley Point B at an elevation of 9 m AOD.

4.2.8 **Figure 4.4** illustrates the baseline view from Viewpoint 4 and shows a foreground which features open grazing marsh to the south and coastal defences and Bridgwater Bay to the north. The reactor building within Hinkley Point B is clearly visible as a prominent visual component in the middle ground above the woodland belt which lines the eastern perimeter of the Site. This woodland belt screens or heavily filters views of lower height ancillary buildings and the substation present to the east and south of the reactor building whilst buildings to the north, which include a small number of warehouses and the larger gas turbine houses and associated stack are visible alongside the reactor building from this direction. The reactor buildings within Hinkley Point A are partially visible behind the reactor of Hinkley Point B, whilst the cranes associated with the construction of Hinkley Point C are also visible in the same 90° field of view.

Viewpoint 5: Minor road to the south of Hinkley Point B (near Gunter's Grove)

4.2.9 This viewpoint is located on the minor road to the west of Gunter's Grove and close to the junction with the road from Shurton. Viewpoint 5 is sited approximately 1.9 km to the south-south-west of the reactor building within Hinkley Point B, at an elevation of 25 m AOD.

4.2.10 **Figure 4.5** illustrates the baseline view from Viewpoint 5. The foreground of the view comprises pastoral fields beyond a roadside hedgerow with steel lattice pylons which cross the landscape also visible above the intervening tree cover around Wick. The reactor building is clearly visible on the skyline above the perimeter woodland belt which extends along the southern perimeter of Hinkley Point A and B nuclear power stations. The slight increase in elevation at this viewpoint compared to the Site means that a slightly greater proportion of the adjoining turbine hall is visible above the intervening treeline, and whilst the majority of the lower height ancillary buildings are screened, a small number of buildings to the east of the reactor building are also partially visible through the trees. The substation within the Hinkley Point B NSL boundary is not readily discernible in views from this viewpoint. The reactor buildings within Hinkley Point A are clearly visible to the west of Hinkley Point B, whilst the cranes associated with the construction of Hinkley Point C are also visible in the same 90° field of view.

Viewpoint 6: PRoW WL 23/23 on the north side of the settlement of Stogursey

4.2.11 Viewpoint 6 is located on local PRoW WL 23/23 to the north of Northfield Close on the northern edge of Stogursey. The viewpoint lies approximately 3.1 km to the south-south-west of the reactor buildings within Hinkley Point B at an elevation of 35 m AOD.

4.2.12 The baseline view from Viewpoint 6 is shown in **Figure 4.6**. This illustrates a foreground which comprises a pastoral field bound by hedgerows along with a complex of barns at Little Lukes Farm to the east of Shurton Lane. The reactor building within Hinkley Point B is partially visible above and through the intervening trees which line Stogursey Brook although it is not notably prominent in comparison to foreground visual components due to the increased separation distance. No ancillary buildings or substation within the Hinkley Point B NSL boundary are visible from this location. A proportion of the cranes associated with the construction of Hinkley Point C are also visible in the same 90° field of view.

Viewpoint 7: PRoW BW 32/1 at Stockland Bristol

4.2.13 Viewpoint 7 is located on local PRoW BW 32/1 close to St Mary Magdalene's Church at Stockland Bristol. The viewpoint is located approximately 3.6 km to the south-east of the reactor building within Hinkley Point B, at an elevation of 10 m AOD.

4.2.14 The foreground of the view comprises rough grassland, beyond which lies the shallow valley of the Middle Brook as shown in the baseline view in **Figure 4.7**. The gently rising land which forms a low ridgeline aligned with Woolstone Lane forms a local horizon above which the reactor building is visible. The top of the tall stack associated with the gas turbine houses (located to the north of the reactor) is also partially visible behind small hedgerow trees on the skyline. No other ancillary buildings or substation within the Hinkley Point B NSL boundary are visible from this location due to the local landform. The existing steel lattice pylons which cross the landscape between the viewpoint and Hinkley Point B are moderately prominent visual elements whilst the reactor buildings within Hinkley Point A and cranes associated with the construction of Hinkley Point C are also visible in the same 90° field of view. This cranage is dynamic and will be subject to regular change until the construction of Hinkley Point C is complete at which point it will be replaced by the built form of the operational Hinkley Point C.

Viewpoint 8: England Coast Path to the west of Hinkley Point B

4.2.15 Viewpoint 8 is located on the England Coast Path (local PRoW WL 24/10) to the west of the Site and north of Lilstock. The viewpoint lies approximately 4.7 km to the west-south-west of the reactor building at Hinkley Point B, at an elevation of 20 m AOD.

4.2.16 The existing open view to the east is shown in **Figure 4.8**. The illustrates a foreground which comprises arable fields to the south and the Bristol Channel to the north. The reactor building within Hinkley Point B is visible above the horizon in the middle distance, beyond the reactor buildings of Hinkley Point A and the construction activities associated with Hinkley Point C including the offshore jetty. No other ancillary buildings within the Hinkley Point B NSL boundary are visible with the exception of the stack associated with the gas turbine houses located to the north of the reactor which forms a small-scale visual component in the wide and open views available from this viewpoint.

Viewpoint 9: PRoW BW 25/7/River Parrett Trail/England Coast Path within Steart Marshes

4.2.17 Viewpoint 9 is located on the River Parrett Trail / England Coast Path (local PRoW 25/7) within Steart Marshes. The viewpoint lies approximately 4.9 km to the east-south-east of the reactor building within Hinkley Point B, and is sited on one of the more elevated sections of route within Steart Marshes (at an elevation of 8 m AOD), therefore offering some of the most open views towards Hinkley Point B. Westerly views from other, slightly less elevated sections of route are partially screened or filtered by hedgerow or tall reeds.

4.2.18 The existing view from Viewpoint 9 is illustrated in **Figure 4.9**. This is a wide, open view across grazing marsh and both managed and overgrown hedgerows with small trees, with the reactor building within Hinkley Point B clearly identifiable above the horizon in the middle distance. As a consequence of the woodland belt along the eastern and southern perimeters of the Site, there are no views of the lower height ancillary buildings to the east, south and north of the reactor building with the exception of the gas turbine houses and associated stack located to the north of the reactor building. The reactor buildings within Hinkley Point A and cranes associated with the construction of Hinkley Point C are also visible in the same 90° field of view.

Viewpoint 10: PRoW BW 24/3 north of Stringston

4.2.19 Viewpoint 10 is located on local PRoW BW 24/3 to the north of the village of Stringston. The viewpoint is sited approximately 5.2 km to the south-west of the reactor building within Hinkley Point B, at an elevation of 105 m AOD.

4.2.20 The foreground of the view comprises open pastoral grassland in a field bound by well-maintained hedgerows and where southerly views are foreshortened by Standard Copse. The reactor building and adjoining turbine hall within Hinkley Point B are clearly visible as a middle ground element in the panoramic, long-distance views available from this viewpoint which extend from the north-west towards the north-east (i.e. in the direction of travel). In contrast to many of the other viewpoint locations where the buildings are visible on the skyline, the Site is presented against a backdrop of Bridgwater Bay and the distant Bleadon Hill as illustrated in the baseline view in **Figure 4.10**. The elevated nature of this viewpoint in comparison to the Site, means that a greater proportion of ancillary buildings within the Hinkley Point B NSL boundary including the substation and the gas turbine houses (and associated stack) are visible, appearing as very small-scale visual components as a consequence of the separation distance. The reactor buildings within Hinkley Point A and cranes and construction activities at Hinkley Point C are also visible in the same 90° field of view.

Viewpoint 11: Seafront Promenade close to South Esplanade, Burnham-on-Sea

4.2.21 Located approximately 9.2 km to south-west of the reactor building within Hinkley Point B, Viewpoint 11 is sited on the promenade which is aligned parallel with South Esplanade at Burnham-on-Sea, at an elevation of approximately 6 m AOD.

4.2.22 The foreground of the expansive views which are available from this coastal location, comprises the sands, mudflats and water of Bridgwater Bay as illustrated in **Figure 4.11**. The reactor building at

Hinkley Point B is identifiable as a distant visual component, occupying a narrow proportion of the wide panoramic views and is viewed alongside the reactor buildings of Hinkley Point A against a backdrop of the distant hills. The lower height ancillary buildings located close to the more open northern boundary of the Site are not readily discernible in baseline views as a consequence of the separation distance with the exception of the taller gas turbine houses (and associated stack) which are visible in front of the reactor building within Hinkley Point A.

5. Summary and conclusions

5.1.1 The landscape and visual baseline set out in this report has been derived from both desk and field surveys. The field survey confirmed the validity of the description of the LCAs as set out in the extant Landscape Character Assessments. It has also allowed the following broad conclusions to be made with regard to the existing visibility of infrastructure within the Hinkley Point B NSL boundary, which is influenced by a combination of vegetative screening, topography, elevation, distance and direction from the Site:

- **The role of vegetative screening within the NSL boundary**: in many of the views from the closest publicly accessible locations to the Site (e.g. from local PRoWs, including the diverted England Coast Path, and from Wick Moor open access land), the reactor building within Hinkley Point B is partially to heavily filtered during the winter months by the deciduous woodland belt which extends along the southern and eastern perimeter of the operational land uses within the Site, as evidenced in the baseline photography from Viewpoints 1 and 2. This screening would be more effective during the summer months when there would be only occasional close-distance views of the reactor building within Hinkley Point B. The woodland belt is also of sufficient height and density to screen views of the lower height ancillary buildings within the NSL boundary from locations where other influences on the availability of views across the Site play a more minor role. The field survey verified the important screening role of the woodland belt in preventing the reactor building from becoming a dominant or overbearing visual component in close-distance views.

- **The role of topography within the Study Area:** in middle-distance views from inland areas to the south, south-east and south-west of the Site, local variations in topography play a role in influencing the visibility of infrastructure within the Hinkley Point B NSL boundary. Local ridgelines and horizons formed by intervening areas of slightly elevated land, screen views of the woodland belt around the southern and eastern perimeter of the Site. All of the lower height ancillary buildings within the NSL boundary are also screened by the intervening topography in these views, leaving the upper façade of the reactor building visible as a moderately prominent visual component on the skyline above the interning landform. This influence on visibility is most evident at Viewpoints 3 and 7.

- **The role of elevation within the Study Area:** the clearest views of infrastructure within the Hinkley Point B NSL boundary are from the low lying areas of grazing marsh and coastal locations to the east of the Site as evidenced at Viewpoint 4 and partially at Viewpoints 9 and 11, which are all located at elevations which are comparable to or slightly lower than those within the Site (less than 10 m AOD). From coastal locations to the east, infrastructure to the north of the reactor building is evident in baseline views including the gas turbine houses and associated stack which are greater in height than the neighbouring warehouses.

  A slight increase in elevation compared to the Site, as evidenced at Viewpoint 5 at 25 m AOD, allows a slightly greater proportion of infrastructure within the Site to be visible above the perimeter woodland belt. The most elevated views are available from the hills within the western fringes of the Study Area. However, as shown in the baseline view from Viewpoint 10 (at an elevation of 105 m AOD), the increasing separation distance means that whilst a greater proportion of infrastructure within the Hinkley Point B NSL boundary is visible, the Site forms a small proportion of the elevated, panoramic views which are available.

- **The role of distance and direction:** 10 of the 11 viewpoints from which a photographic record has been obtained and included in this baseline report are from locations within 5 km of the NSL boundary. The photography in **Figures 4.1** to **4.11** illustrates the role of increasing separation distance from the reactor building as follows:

- the reactor building within the Hinkley Point B NSL boundary forms a prominent visual component at distances of up to 2 km (Viewpoints 1 to 5);
- at distances of between 2 km and 4 km, the reactor building often becomes a co-prominent visual component alongside foreground and mid-ground elements as a consequence of its mass and height (Viewpoints 6 and 7); and
- at distances in excess of 4 km, the reactor building forms an identifiable but more minor component of the often wide, panoramic baseline views which are available from coastal or elevated locations (Viewpoints 8, 9 and 10).

- Viewpoint 11 is located at a distance of 9.2 km from the reactor building and illustrates that whilst visible at such distances, building details are less apparent and only the height and mass of the reactor building remain evident occupying a narrow proportion of baseline views.

5.1.2 A review of the baseline photography also indicates that there are very few locations within the Study Area in which the infrastructure within Hinkley Point B is viewed in isolation from other large-scale infrastructure. The proximity to the reactors within Hinkley Point A and the construction site of Hinkley Point C means that this existing and emerging infrastructure is nearly always visible in the same field of view as Hinkley Point B. In addition, Hinkley Point B is often viewed beyond the steel lattice pylons which cross the landscape to the south of the Site and which form locally prominent vertical elements in receptors' views. It is also important to note that this not a static landscape and baseline views will continue to gradually alter notably as built form and infrastructure within the Hinkley Point C development site are completed and become operational.

Figures

Appendix A
Viewpoint Record Sheets

Viewpoint 1: England Coast Path on the western side of Wick Moor		
Camera format: *Digital SLR*	**Camera height**: approx. *1.50m*	**Lens focal length**: *50mm (fixed)*
Date / Time: 10/02/2022 11:45	**GPS**: ST 21679, 45728 **GPS Accuracy**: ~4m	**Weather / visibility**: Sun with clouds Very good to good visibility
Description of Exact Location: South-east of Hinkley Point B on local footpath WL 23/61 which forms part of the diversion of the England Coast Path. Small pond with reeds lies to the west.		
Perceptual Qualities (remoteness/sounds/tranquillity): Location does not feel remote due to the presence of the power station. Signage relating to access/restricted access, creates a tense feel. Low humming sound from power station and overhead lines. Other audible influences include the sea and wind rustling nearby trees.		
Landscape Condition: Grass track adjacent field boundary, very muddy. No users at time of visit.		

Viewpoint 2: England Coast Path within Wick Moor close to Wick Moor Drove		
Camera format: *Digital SLR*	**Camera height**: approx. *1.50m*	**Lens focal length**: *50mm (fixed)*
Date / Time: 10/02/2022 14:00	**GPS**: ST 20767, 45366 **GPS Accuracy**: ~4m	**Weather / visibility**: Sun with clouds Very good to good visibility
Description of Exact Location: PRoW adjacent to the Power Station, current diversion for England Coast Path. Dense tall hedgerow screening the power station for much of the route. Occasional small gaps, viewpoint located at most substantial gap at the western end of the footpath adjacent to Wick Moor Drive.		
Perceptual Qualities (remoteness/sounds/tranquillity): Viewpoint location is not tranquil, clear presence of power station activity with HGVs on the adjacent road visible, surveillance portacabin. Noise from traffic on Wick Moor Drove.		
Landscape Condition: Good quality track, recent fencing to the south.		

Viewpoint 3: PRoW WL 23/62 at the southern end of Wick Moor		
Camera format: *Digital SLR*	**Camera height**: approx. *1.50m*	**Lens focal length**: *50mm (fixed)*
Date / Time: 10/02/2022 12:40	**GPS**: ST 21834, 44788 **GPS Accuracy**: ~4m	**Weather / visibility**: Sun with clouds Very good to good visibility
Description of Exact Location: PRoW WL 23/62 to the east of West Brook, close to the junction with footpath WL 23/63 and the bridge over West Brook. Construction activity associated with the overhead lines taking place within the field to the north-west of the viewpoint at the time of the survey. Some screening afforded by hedgerow and trees on the sections of the route closer to Wick.		
Perceptual Qualities (remoteness/sounds/tranquillity): Construction activities and presence of pylons and power station have urbanising influence on perceptual qualities such as tranquillity and remoteness.		
Landscape Condition: Poor quality gate. Good quality hedgerows in parts.		

Viewpoint 4: England Coast Path close to the settlement of Stolford		
Camera format: *Digital SLR*	**Camera height**: approx. *1.50m*	**Lens focal length**: *50mm (fixed)*
Date / Time: 10/02/2022 11:15	**GPS**: ST 22929, 45982 **GPS Accuracy**: ~4m	**Weather / visibility**: Light cloud Very good to good visibility
Description of Exact Location: PRoW WL 23/95 to the west of Chapel Cottages in Stolford.		
Perceptual Qualities (remoteness/sounds/tranquillity): Increased perception of remoteness and feels exposed when compared to other locations within the Study Area. Audible influence of wind, waves breaking on the beach and occasional bird sounds.		
Landscape Condition: Good quality paved route, some sections made of stone and well maintained. At the time of survey four people were observed on this section of the Coastal Path.		

Viewpoint 5: Minor road to the south of Hinkley Point B (near Gunter's Grove)		
Camera format: *Digital SLR*	**Camera height**: approx. *1.50m*	**Lens focal length**: *50mm (fixed)*
Date / Time: 10/02/2022 13:10	**GPS**: ST 20980, 44246 **GPS Accuracy**: ~4m	**Weather / visibility**: Sun with clouds Very good to good visibility
Description of Exact Location: Southern highway verge of the minor road to the west of Gunter's Grove and close to the junction with the road from Shurton. Viewpoint located close to the black and white signpost.		
Perceptual Qualities (remoteness/sounds/tranquillity): Very busy with traffic, limited sense of remoteness or tranquillity.		
Landscape Condition: Hedgerows are intact and well-maintained. No litter evident along highway.		

Viewpoint 6: PRoW WL 23/23 on the north side of the settlement of Stogursey		
Camera format: *Digital SLR*	**Camera height**: approx. *1.50m*	**Lens focal length**: *50mm (fixed)*
Date / Time: 10/02/2022 14:35	**GPS**: ST 20231, 43158 **GPS Accuracy**: ~4m	**Weather / visibility**: Sun with clouds Very good to good visibility
Description of Exact Location: PRoW WL 23/23 to the north of Stogursey, to the east of Stogursey Playground and north of Northfield Close. Hinkley Point B not visible from Stogursey Playground due to screening from hedgerow.		
Perceptual Qualities (remoteness/sounds/tranquillity): Proximity to properties within Stogursey limits the sense of remoteness.		
Landscape Condition: Path overgrown at both entrances and no obvious worn route on the ground. High degree of visual clutter associated with farm property and opposite barns.		

Viewpoint 7: PRoW BW 32/1 at Stockland Bristol		
Camera format: *Digital SLR*	**Camera height**: approx. *1.50m*	**Lens focal length**: *50mm (fixed)*
Date / Time: 11/02/2022 10:45	**GPS**: ST 24037, 43676 **GPS Accuracy**: ~4m	**Weather / visibility**: Sun with clouds Very good to good visibility
Description of Exact Location: Viewpoint located on local footpath which is signposted and accessed via a gate from the minor road through Stockland Bristol to the east of St Mary Magdalene's Church.		
Perceptual Qualities (remoteness/sounds/tranquillity): Sound of bird song, church provides a sense of time depth. Tranquil but not remote due to the proximity of the settlement. Intact hedgerows provide some screening in parts.		
Landscape Condition: Good footpath access, not overgrown. Village is well-maintained.		

Viewpoint 8: England Coast Path to the west of Hinkley Point B		
Camera format: *Digital SLR*	**Camera height**: approx. *1.50m*	**Lens focal length**: *50mm (fixed)*
Date / Time: 10/02/2022 14:30	**GPS**: ST 16683, 45443 **GPS Accuracy**: ~4m	**Weather / visibility**: Sun with clouds Very good to good visibility
Description of Exact Location: Viewpoint located on the England Coast Path, above cliffs and Lilstock beach.		
Perceptual Qualities (remoteness/sounds/tranquillity): Very pleasant, good scenic quality, remote and exposed. Audible influence includes waves breaking and wind rustling vegetation.		
Landscape Condition: Good condition.		

Viewpoint 9: PRoW BW 25/7/River Parrett Trail/England Coast Path within Steart Marshes		
Camera format: *Digital SLR*	**Camera height**: approx. *1.50m*	**Lens focal length**: *50mm (fixed)*
Date / Time: 11/02/2022 11:25	**GPS**: ST 26092, 44668 **GPS Accuracy**: ~4m	**Weather / visibility**: Sun with clouds Very good to good visibility
Description of Exact Location: Raised section of PRoW BW 25/7/River Parrett Trail/England Coast Path near bird watching area. Much of the power station is screened from large parts of the of the routes within Steart Marshes by dense hedgerows and tall reeds. There are two to three raised areas from which Hinkley Point B is most visible. Views from other sections of footpath are intermittent/ partial.		
Perceptual Qualities (remoteness/sounds/tranquillity): Remote, tranquil, some bird sounds. Feels closer to nature.		
Landscape Condition: Very good managed facility with toilets, café, car park, bird hides and information boards. Car park full at time of visit with over 25 cars. A lot of bird watching walkers and volunteers present at the time of the survey.		

Viewpoint 10: PRoW BW 24/3 north of Stringston		
Camera format: *Digital SLR*	**Camera height**: approx. *1.50m*	**Lens focal length**: *50mm (fixed)*
Date / Time: 10/02/2022 15:30	**GPS**: ST 17091, 43042 **GPS Accuracy**: ~4m	**Weather / visibility**: Sun with clouds Very good to good visibility
Description of Exact Location: Local PRoW BW 24/3 to the north of the village of Stringston. Viewpoint located to the north of Standard Copse on the highest part of the slope.		
Perceptual Qualities (remoteness/sounds/tranquillity): Pleasant, good scenic quality, remote and elevated nature means it feels partially exposed.		
Landscape Condition: Elevated and scenic views across the Bristol Channel. Some littering at the entrance to the PRoW close to Stringston. Little evidence of this being a well-used route.		

Viewpoint 11: Seafront Promenade close to South Esplanade, Burnham-on-Sea		
Camera format: *Digital SLR*	**Camera height**: approx. *1.50m*	**Lens focal length**: *50mm (fixed)*
Date / Time: 11/02/2022 09:40	**GPS**: ST 30289, 48734 **GPS Accuracy**: ~4m	**Weather / visibility**: Sun with clouds Very good to good visibility
Description of Exact Location: Burnham-on-Sea promenade opposite Pier Street car park and adjacent to the Bay View café.		
Perceptual Qualities (remoteness/sounds/tranquillity): Relatively busy for morning time. Traffic noise and sounds from café (extraction fan).		
Landscape Condition: Good quality and maintained streetscape. Over 15 users observed at the time of the survey, popular location for morning dog walkers on the beach.		

14D

Effects on Visual Receptors

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14D Effects on Visual Receptors

14D.1 Introduction

14D.1.1. The effects of the Proposed Works on the views of visual receptors within the Study Area are assessed in this appendix. The visual receptors are identified as having the potential for significant effects in **Table 14-9** of the Landscape and Visual Impact Assessment (LVIA) in **Chapter 14: LVIA** and include:

- Visual effects on views from settlements and residential properties (**Section 14D.2**);
- Visual effects on views from recreational routes (**Section 14D.3**);
- Visual effects on views from recreational destinations (**Section 14D.4**); and
- Visual effects on views from transport routes (**Section 14D.5**).

14D.2 Visual effects on views from settlements and residential properties

14D.2.1. The visual effects likely to be experienced from settlements include consideration of residential areas, the public realm and public open spaces within the settlement boundaries that would be frequented by people. The visual effects on residents within the settlements that coincide with the Zone of Theoretical Visibility (ZTV, as presented in **Figure 14.2**) within the Study Area are assessed in **Table 14D-1** and include:

- Residents in the village of Stolford;
- Residents in the hamlet of Wick; and
- Residents in the village of Stogursey.

14D.2.2. It should be noted that whilst the settlements of Knighton, Burton and Shurton lie within the ZTV, a review of the visualisations prepared for viewpoints in and around these settlements as part of the Landscape and Visual Impact Assessment (LVIA) for HPC Environmental Statement[1] (specifically Viewpoints 8, 9, 10 and 11) has been undertaken. This indicates that under future visual baseline conditions, the Proposed Works at HPB would not be visible due to the proposed landform between Shurton and the Holford Stream, which is up to 10-15m higher than ground levels were prior to the commencement of HPC construction (upon which the ZTV is based), allied with the gradual maturation of advanced planting associated with HPC and the woodland planting proposed as part of the restoration. The advanced planting is now well established and beginning to provide effective screening.

14D.2.3. The sensitivity of each of these receptors (people) at settlements has been assessed as *High* due to residential visual receptors being assessed as possessing high susceptibility in accordance with paragraph 6.33 of the Guidelines for Landscape and Visual Impact Assessment[2] (hereafter referred to as GLVIA3) and the high likelihood that these receptors attach medium or high value to the views that are available from the windows and curtilage of their properties.

[1] EDF Energy (2011). Hinkley Point C Development Site. Environmental Statement – Volume 2.
[2] Landscape Institute and Institute of Environmental Management & Assessment (LI and IEMA). (2013). *Guidelines for Landscape and Visual Impact Assessment. 3rd Ed. Third Edition*. Routledge, London and New York.

14D.2.4. In summary, there would be localised Significant visual effects on the views from a small number of locations on the western edge of Stolford from which views would be comparable to those for Viewpoint 4 (**Figure 14.7** and which has been assessed in detail in **Table 14B-5** of **Appendix 14B)**. Significant adverse effects may occur during peak times of activity within the Works Area during the Preparations for Quiescence phase and again during the Final Site Clearance phase. Significant beneficial effects would occur at the end of the Final Site Clearance phase for receptors in the same localised areas on the western edge of Stolford, where foreground screening (vegetation or neighbouring built form) is absent.

14D.2.5. Scattered residential receptors within 1.5 km of the Proposed Works (the threshold at which Significant effects are predicted and which coincide with the ZTV (**Figure 14.2**) are very limited but include Doggetts Farm on the southern edge of the HPC site and Sunshine Cottage and Burnt House, two neighbouring properties on the minor road which runs between Stolford and Wick. With regard to north-easterly views from Doggetts Farm, these are screened by gradually maturing tree cover which will ultimately form Shurton Wood, and which has been implemented as part of the Landscape Restoration/Habitats Plan for HPC. For Sunshine Cottages and Burnt House, the dense tall hedgerow on the northern side of the minor road and for Burnt House, additional vegetation along its garden boundary, would screen views towards the Proposed Works. As such, the magnitude of change would be Zero for the scattered residential receptors within 1.5 km of the Proposed Works Area.

Table 14D-1 - Visual effects on views from Settlements

Settlement: Stolford
The village of Stolford is located at a separation distance of approximately 1.1 km to the east of the Works Area at its closest point. This is a heavily dispersed settlement featuring small clusters of farms and properties which extend across a low ridge of land (10 m AOD) between the two areas of grazing marsh to the east and west. For the purposes of the assessment, this receptor group extends to cover all residential properties between Little Dowden's Farm and nearby cottages on the west, Chapel Cottages on the coast to the north, Whitewick Farm to the east and properties around St Peter's Church to the south. Viewpoint 4 (**Figure 14.8**) is located approximately 150 m from the closest properties within Stolford and can be used as a proxy for the most open views available from localised parts of the settlement. Assessment: ZTV coverage is extensive across Stolford although for the majority of residents, views to the west are at least partially obscured or limited by a combination of orientation of the property, single storey nature of the dwelling and/or by the presence of intervening foreground screening including garden vegetation, roadside hedgerows or neighbouring built form. From the majority of the settlement, views towards the Proposed Works would therefore be partially or fully screened (Low to Very Low magnitude). However, there are a small number of locations on the western edge of the settlement from which open views are available. In these localised open views, all low-level activities would be screened by the retained perimeter tree belt whilst elevated activities associated with the demolition of the Gas Turbine Houses and associated stack and recladding works to form the Safestore would be visible in the middle distance (Medium/Low magnitude).

Settlement: Stolford
In summary: ▪ The Preparations for Quiescence phase would result in a **Moderate** to **Moderate** / **Minor**, adverse and Not Significant level of effect for the majority of the settlement due to the factors listed above and a **Moderate**, adverse and Significant effect from localised areas on the western edge where open views are available; ▪ The Quiescence phase would result in a **Moderate / Minor**, neutral and Not Significant level of effect for the majority of the settlement whilst **Moderate**, beneficial and Not Significant effects would occur from localised areas on the western edge due to the reduction in built form (Gas Turbine Houses and associated stack); and ▪ The Final Site Clearance phase would result in a **Moderate to Moderate / Minor**, adverse but becoming beneficial and Not Significant effect for the majority of the settlement whilst **Moderate**, adverse becoming beneficial and Significant effects would occur from within localised areas on the western edge. Cumulative Assessment: *Preparations for Quiescence phase*: The HPA Pre-Care and Maintenance phase would result in a worst-case **Low** magnitude of change from localised areas on the western edge of the settlement. This would become a worst-case **Very Low** magnitude of change as HPA enters its Care and Maintenance phase during HPB's Preparations for Quiescence phase. HPC construction phase would give rise to a worst-case **Medium** magnitude of change whilst its operation would give rise to a **Low** magnitude of change as reported in the HPC LVIA[1] for Viewpoint 19 (which aligns with HPB Viewpoint 4). *Quiescence phase:* The HPA Pre-Care and Maintenance phase would give rise to a worst-case **Very Low** magnitude of change. This would increase to a worst-case **Low** magnitude of change from localised areas on the western edge of Stolford during HPA's Care and Maintenance phase. The operation of HPC would lead to a continued (worst-case) **Low** magnitude of change which the HPC LVIA[1] assessed as being Significant. Cumulative Effects (Additional): The additional effects from the Proposed Works (worst-case from a small number of locations) would be **Moderate**, adverse and Significant (for the Preparations for Quiescence and Final Site Clearance phases). Cumulative Effects (Combined): The combined cumulative effect would be **Major/Moderate** becoming **Moderate**, adverse and Significant (due to HPC).
Settlement: Wick
The small settlement of Wick is located at a separation distance of approximately 1.1 km to the south of the Works Area at its closest point. This is a nucleated settlement sited at an elevation of approximately 10 m AOD. For the purposes of the assessment, this receptor group extends to cover all residential properties between Wick Farm to the north, Zine Farm to the east, Wick Villa to the south and properties along Restricted Byway WL 23/57 to the west. Viewpoint 3 (**Figure 14.7**) is located approximately 275 m to the north-west of the closest properties within Wick.

Settlement: Stolford

Assessment:

ZTV coverage is extensive across Wick although for the majority of residents, views to the north are at least partially obscured or entirely restricted by a combination of orientation of the property, single storey nature of the dwelling and/or by the presence of intervening foreground screening including garden vegetation, tall roadside hedgerows and neighbouring built form. Additional screening is provided by intervening vegetation including the tree cover along West Brook and East Brook. From the majority of the settlement, views towards the elevated components of the Proposed Works would therefore be partially or fully screened (Low to Very Low magnitude).

In summary:

- The Preparations for Quiescence phase would result in a **Moderate** to **Moderate / Minor**, adverse and Not Significant level of effect;
- The Quiescence phase would result in a **Moderate / Minor**, neutral and Not Significant level of effect; and
- The Final Site Clearance phase would result in a **Moderate to Moderate / Minor**, adverse but becoming beneficial and Not Significant effect.

Cumulative Assessment:

Preparations for Quiescence phase: The HPA Pre-Care and Maintenance phase would result in a worst-case **Low** magnitude of change from this settlement. This would become a worst-case **Very Low** magnitude of change as HPA enters its Care and Maintenance phase during HPB's Preparations for Quiescence phase.

HPC construction phase would give rise to a worst-case **Low** magnitude of change whilst its operation would give rise to a **Low** magnitude of change due to the vegetative screening provided in an around Wick.

Quiescence phase: The HPA Care and Maintenance phase would give rise to a worst-case **Very Low** magnitude of change. This would increase to a worst-case **Low** magnitude of change from localised areas during HPA's Final Site Clearance phase.

The operation of HPC would lead to a continued (worst-case) **Low** magnitude of change.

Cumulative Effects (Additional):

The additional effects from the Proposed Works (worst-case from a small number of locations) would be **Moderate**, adverse and Not Significant (for the Preparations for Quiescence and Final Site Clearance phases).

Cumulative Effects (Combined):

The combined cumulative effect would be **Moderate**, adverse and Not Significant (due to HPA and HPC).

Settlement: Stogursey

The larger village of Stogursey is located at a separation distance of approximately 2.7 km to the south-south-west of the Works Area at its closest point. This settlement is sited at an elevation of approximately 35 m-40 m AOD. For the purposes of the assessment, this receptor group extends to cover the settlement together with Little Lukes Farm to the north and Dawlea Farm to the west. Viewpoint 6 (**Figure 14.10**) is located on PRoW WL 23/23 along the northern edge of Stogursey, to the north of Northfield Close and close to Stogursey Playground.

Settlement: Stolford
<u>Assessment:</u> ZTV coverage is moderately extensive across Stogursey although the eastern edge of the settlement, including St Andrew's Church, lies outside of the ZTV as does a localised peripheral area on the northern fringes along Town Close. For the majority of residents, the tight pattern of built form means that northerly views out of the settlement are highly limited, and Viewpoint 6 (**Figure 14.10**) is likely to represent one of the most open views towards the Proposed Works. Views from single and two storey properties along the northern edge of the settlement, which do not benefit from the screening of neighbouring dwellings, are commonly screened by rear garden boundary vegetation. From the majority of the settlement, the magnitude of change would be Zero whilst from the northern edge, close to Viewpoint 6, the elevated components of the Proposed Works would be partially visible above or through the intervening trees which line Stogursey Brook (Low/Very Low magnitude). In summary: ▪ The Preparations for Quiescence phase would result in a (worst-case) **Moderate / Minor**, adverse and Not Significant level of effect; ▪ The Quiescence phase would result in a (worst-case) **Moderate / Minor**, neutral and Not Significant level of effect; and ▪ The Final Site Clearance phase would result in a (worst-case) **Moderate / Minor**, adverse but becoming beneficial and Not Significant effect. <u>Cumulative Assessment:</u> *Preparations for Quiescence phase*: HPA is not widely visible from this settlement and therefore the magnitude of change from HPA's Pre-Care and Maintenance phase and subsequent Quiescence phase would be Zero. HPC construction phase would give rise to a worst-case Low magnitude of change whilst its operation would also give rise to a Low magnitude of change as concluded in the HPC LVIA[1] for a viewpoint location within Stogursey. *Quiescence phase:* HPA's Care and Maintenance and subsequent Final Site Clearance phases would give rise to a Zero magnitude of change. The operation of HPC would lead to a continued (worst-case) Low magnitude of change. <u>Cumulative Effects (Additional):</u> The additional effects from the Proposed Works (worst-case from a small number of peripheral locations) would be **Moderate/Minor**, adverse and Not Significant. <u>Cumulative Effects (Combined):</u> The combined cumulative effect would be **Moderate**, adverse and Not Significant (due to HPC).

14D.3 Visual effects on views from recreational routes

14D.3.1. The visual assessment has considered the potential visual effects likely to be experienced by people (walkers / cyclists / horse riders / joggers / others) on recreational routes within the Study Area. It includes national trails, regionally promoted long-distance routes and networks of local public rights of way (PRoWs). The assessment outcomes are reported in **Table 14D-2** and the routes are shown in **Figure 14.15**.

14D.3.2. Users of all recreational routes have been assessed as being of *High* sensitivity due to them being assessed as possessing high susceptibility in accordance with paragraph 6.33 of GLVIA3[1] and the strong likelihood that these recreational receptors attach a medium or high value to the views, with their appreciation being a factor in their use.

14D.3.3. With regard to local PRoWs, these have been grouped into logical networks where geographical proximity, elevation and direction from the Site mean that effects are likely to be comparable. Six distinct networks have been identified as follows:

- PRoW network A: west of HPC and Shurton Lane;
- PRoW network A: Stogursey to HPC;
- PRoW network C: Farringdon Hill;
- PRoW network D: Wick to Stolford;
- PRoW network E: Stolford to Stockland Bristol; and
- PRoW network F: Hillside Farm to Lower Cock Farm.

14D.3.4. These networks are colour coded on **Figure 14.14** for clarity.

14D.3.5. In summary, there would be significant visual effects for westbound walkers using the King Charles III England Coast Path / West Somerset Coast Path from an approximately 2.5 km section of the routes between Stolford (close to Viewpoint 4) and the western edge of the Site during the Preparations for Quiescence and Final Site Clearance phases. For eastbound users of these routes, there would be significant effects from an approximately 750 m section as it passes to the north of HPA/HPB, due to the proximity of the routes to the Proposed Works, including the offshore works associated with the CW System.

14D.3.6. Significant visual effects would also occur from a proportion of the local routes within PRoW network D (Wick to Stolford) during the Preparations for Quiescence and Final Site Clearance phases. The worst-case scenario is likely to occur for walkers using local PRoWs 23/95, 23/107 and 23/101 close to the coastline and Viewpoint 4. For these receptors, changes would occur in direct views (i.e. immediately in front of the walker in the direction of travel) and the proximity to the Proposed Works and proportion of the horizontal fields of view which would be affected would give rise to a Medium/Low magnitude during period of peak activity.

Table 14D-2 - Visual effects on views from Recreational Routes

Route: King Charles III England Coast Path
The King Charles III England Coast Path is a National Trail which extends along the entire section of coastline within the LVIA study area, with an inland diversion currently in place due to works associated with HPC. The route passes adjacent to the northern boundary of the on-shore Works Area, separated by a high wall. Viewpoints 1, 2, 4 and 8 are representative of views from the King Charles III England Coast Path and its inland diversion. For the purposes of the assessment and to reflect a worst-case scenario, is assumed that the section of route to the north of HPB, HPA and HPC has been re-opened and that the inland section has also been retained as an alternative route. Assessment (westbound walkers along the coastal section): ZTV coverage is extensive across the section of National Trail to the east of HPB. For westbound walkers, the Proposed Works would be evident in direct views (i.e. directly in front of the walker in the direction of travel) and the magnitude of change would gradually increase as the separation distance reduces. The

Route: King Charles III England Coast Path
magnitude of change is likely to be Low to the east of Stolford (Moderate and Not Significant) increasing to Medium/Low at Stolford (Moderate and Significant) as assessed in detail in **Table 14B-5 of Appendix 14B**). This magnitude is likely to increase further to Medium from sections closer to HPB as the Proposed Works, including the offshore works associated with the CW System, increase in prominence due to the closer proximity and as assessed in detail in **Table 14-2** of **Appendix 14B** for Viewpoint 1a (**Figure 14.5a&b**). Once walkers are beyond the western boundary of the Works Area (on the coastal section), the Proposed Works would be behind the viewer (Zero magnitude). Within this approximately 2.5 km section of King Charles III England Coast Path from which significant visual effects may be experienced, there is a short section of route close to the eastern edge of the Works Area, where the perimeter tree belt is likely to limit views in a similar way to those described for Viewpoint 1 (**Table 14B-1 of Appendix 14B**). In summary, for westbound walkers: ▪ The Preparations for Quiescence phase would result in a **Major/Moderate** to **Moderate**, adverse and Significant level of effect for an approximately 2.5 km section of the route between Stolford and the western edge of the Works Area and a **Moderate**, adverse and Not Significant effect from the section to the east of Stolford. Effects to the west of the Works Area would be None; ▪ The Quiescence phase would result in a **Moderate / Minor**, beneficial and Not Significant level of effect for users of the route to the east of Stolford whilst **Moderate**, beneficial and Not Significant effects would occur between Stolford and the western edge of the Works Area due to the reduction in built form (including the Gas Turbine Houses, associated stack and offshore Caisson). Effects to the west of the Works Area would be None; and ▪ The Final Site Clearance phase would result in a **Major/Moderate** to **Moderate**, adverse and Significant level of effect for an approximately 2.5 km section of the route between Stolford and the western edge of the Works Area and a **Moderate**, adverse and Not Significant effect from the section to the east of Stolford. At the end of the Final Site Clearance phase, there would be a Medium to High magnitude of visual change between Stolford and the western edge of the Works Area, and a **Major** to **Major/Moderate**, beneficial and Significant effect due to the removal of the large-scale reactor buildings/Safestore. Effects to the west of the Works Area would be None. <u>Assessment (eastbound walkers along the coastal section):</u> ZTV coverage is fragmented across the section of National Trail to the west of HPB. For westbound walkers, the Proposed Works would also be evident in direct views (i.e. directly in front of the walker in the direction of travel). As described in the detailed assessment for Viewpoint 8 (**Table 14B-9 in Appendix 14B**), the operational HPC would screen the Proposed Works in many of the views from this section of the route (Zero to Very Low magnitude). Within the approximately 750m section of King Charles III England Coast Path to the north of HPA/HPB, the magnitude would increase due to the proximity of the route to the Proposed Works, including the offshore works associated with the CW System (Medium magnitude). Once walkers are beyond the eastern boundary of the Works Area (on the coastal section), the Proposed Works would be behind the viewer (Zero magnitude). In summary: ▪ The Preparations for Quiescence phase would result in a **None to Moderate / Minor**, neutral/adverse and Not Significant level of effect for the route to the west of HPA and a **Major/Moderate**, adverse and Significant effect from the approximately 750m section of route immediately north of HPA/HPB. Effects to the east of the site would be None; ▪ The Quiescence phase would result in a **None** to **Moderate / Minor**, neutral and Not Significant level of effect to the west of HPA and a **Moderate**, beneficial and Not Significant effect from the section of route immediately north of HPA/HPB due to the reduction in built form (including the Gas Turbine Houses,

Route: King Charles III England Coast Path

associated stack and offshore Caisson). Effects to the east of the Works Area would be None for eastbound walkers; and

- The Final Site Clearance phase would result in a **None** to **Moderate / Minor**, neutral/adverse and Not Significant level of effect for the route to the west of HPA and a **Major/Moderate**, adverse and Significant effect from the section immediately north of HPA/HPB. At the end of the Final Site Clearance phase, there would be a Medium to High magnitude of visual change from immediately north of HPA/HPB and a **Major** to **Major/Moderate**, beneficial and Significant effect.

Assessment (users of the inland diversion):

ZTV coverage is fragmented across the routes of the inland diversion of the King Charles III England Coast Path. For westbound walkers, HPC and landscape restoration works to the north of Shurton would limit views towards to Proposed Works from the section of route between the coast and Wick Moor Drove (Zero magnitude). Views to the east of Wick Moor Drove are represented by Viewpoints 1 and 2 and changes to views are described in detail in **Tables 14B-1** and **14B-3** of **Appendix 14B** (Low magnitude).

In summary:

- The Preparations for Quiescence phase would result in a **Zero** to **Moderate**, adverse and Not Significant level of effect (moving west to east);
- The Quiescence phase would result in a **Zero** to **Moderate / Minor**, neutral and Not Significant level of effect; and
- The Final Site Clearance phase would result in a **Zero** to **Moderate**, adverse and Not Significant effect but becoming beneficial at the end of the Final Site Clearance phase.

Cumulative Assessment:

Preparations for Quiescence phase: The HPA Pre-Care and Maintenance phase would result in a worst-case **Low** magnitude of change from the majority of the route increasing to Medium from the section of route immediately north of HPA. This would become a worst-case **Very Low** magnitude of change as HPA enters its Care and Maintenance phase during HPB's Preparations for Quiescence phase.

HPC construction phase would give rise to a worst-case **High** magnitude of change whilst its operation would also give rise to a **High** magnitude of change from the section of route closest to the HPC site (coastal route and inland diversion).

Quiescence phase: The HPA Pre-Care and Maintenance phase would give rise to a worst-case **Very Low** magnitude of change. This would increase to a worst-case **Medium to High** magnitude of change from a localised section of route immediately to the north of the HPA site during and following HPA's Final Site Clearance phase.

The operation of HPC would lead to a continued (worst-case) **High** magnitude of change from section of the route closest to HPC (coastal route and inland diversion) with Significant effects extending from Stolford in the east to Lilstock in the west (as reported for Viewpoints 2, 3 and 19 of the HPC LVIA[1] as a consequence of a **Medium** to **Low** magnitude).

Cumulative Effects (Additional):

The additional effects from the Proposed Works (worst-case from up to 2.5 km section of route) would be **Major** to **Major/Moderate** to **Moderate**, adverse and Significant (for the Preparations for Quiescence and Final Site Clearance phases).

Cumulative Effects (Combined):

The combined cumulative effect would be **Major** becoming **Moderate**, adverse and Significant (due to HPC and HPA).

Route: King Charles III England Coast Path
Route: West Somerset Coast Path
See assessment for King Charles III England Coast Path (west and eastbound users of the coastal sections).
Route: Castles and Coast Way
The Castles and Coast Way is located at a separation distance of approximately 1.8 km to the west and south-west of the Works Area at its closest point. Assessment: Reference to the ZTV (**Figure 14.2**) indicates fragmented visibility from the sections of route which coincide with the LVIA study area, with this fragmented visibility intensified by the presence of hedgerows and build form immediately adjacent to the local PRoWs which make up the Way. Limited visibility would also be present around Shurton, Burton and Knighton as a consequence of the proposed restored landform and planting between Shurton and Holford Stream, implemented as part of the HPC development (as shown in Viewpoints 8, 9 and 10 of the HPC LVIA[1]). Views of the Proposed Works from the section of the Castles and Coast Way which follows the western edge of the HPC site and the coastline to the west of HPC would also be highly limited by the infrastructure within HPC. The magnitude of change as a consequence of the Proposed Works within HPB would commonly be Zero or Very Low and is unlikely to exceed Low. In summary: ▪ The Preparations for Quiescence phase would result in a **Moderate** to **Moderate** / **Minor to Zero**, adverse/neutral and Not Significant level of effect; ▪ The Quiescence phase would result in a **Moderate** / **Minor** to **Zero**, neutral and Not Significant level of effect; and ▪ The Final Site Clearance phase would result in a **Moderate** to **Moderate** / **Minor** to **Zero**, adverse/neutral and Not Significant effect becoming beneficial along sections in which HPB is currently visible. Cumulative Assessment: *Preparations for Quiescence phase*: The HPA Pre-Care and Maintenance phase would result in a worst-case **Low** magnitude of change from infrequent and localised sections of route. This would become a worst-case **Very Low** magnitude of change as HPA enters its Care and Maintenance phase during HPBs Preparations for Quiescence phase. HPC construction phase would give rise to a worst-case **High** magnitude of change from the section of route adjacent to its western boundary which would reduce to **Medium** during operation (using Viewpoint 1 in the HPC LVIA as a proxy. *Quiescence phase:* The HPA Pre-Care and Maintenance phase would give rise to a worst-case **Very Low** magnitude of change. This would increase to a worst-case **Low** magnitude of change from occasional and localised sections of route during and following HPA's Final Site Clearance phase. The operation of HPC would lead to a continued (worst-case) **Medium** magnitude of change. Cumulative Effects (Additional): The additional effects from the Proposed Works (worst-case from a small number of locations) would be **Moderate**, adverse and Not Significant (for the Preparations for Quiescence and Final Site Clearance phases).

Route: King Charles III England Coast Path
<u>Cumulative Effects (Combined):</u> The combined cumulative effect would be **Major** becoming **Major/Moderate**, adverse and Significant (due to HPC).
Route: PRoW network A (west of HPC and Shurton Lane)
This network extends to the west of HPC and Shurton Lane and includes local routes WL 23/110, WL 23/43, WL 23/42, WL23/45, WL23/52, WL 23/111, WL 23/41, WL 23/25, WL 23/27 and WL 23/23. Other local routes within this network are covered under the King Charles III England Coast Path (eastbound walkers and inland diversion) and Castles and Coast Way assessments. This network lies a minimum of 1.5km from the Proposed Works. <u>Assessment:</u> ZTV coverage (**Figure 14.2**) is fragmented within this network. Sections of route from which intervisibility is limited would also be increased by the factors outlined in paragraph 14D.2.2 particularly around Knighton, Burton and Shurton. For local PRoWs between the coast and Knighton, views towards the Proposed Works would also be restricted by infrastructure within HPC. Viewpoint 6 (**Figure 14.9** and assessed in detail in **Table 14B-7 of Appendix 14B**) is sited on PRoW WL 23/23 and views from this part of the network would be similar and are likely to represent the worst-case scenario (Low/Very Low magnitude). In summary: ▪ The Preparations for Quiescence phase would result in a **Moderate / Minor**, adverse and Not Significant level of effect; ▪ The Quiescence phase would result in a **Moderate / Minor**, neutral and Not Significant level of effect; and ▪ The Final Site Clearance phase would result in a **Moderate / Minor**, adverse but becoming beneficial and Not Significant effect. <u>Cumulative Assessment:</u> *Preparations for Quiescence phase*: The HPA Pre-Care and Maintenance phase would result in a worst-case Low/Very Low magnitude of change which would become Very Low as HPA enters its Quiescence phase during HPB's Preparations for Quiescence phase. HPC construction phase is likely to give rise to a worst-case High magnitude of change whilst its operation would give rise to a Medium magnitude of change. *Qiescence phase:* The HPA Care and Maintenance phase would give rise to a worst-case Very Low magnitude of change which may increase to a Low/Very Low magnitude through HPA's Final Site Clearance phase. The operation of HPC would lead to a continued Medium magnitude of change. <u>Cumulative Effects (Additional):</u> The additional effects from the Proposed Works would be **Moderate/Minor**, adverse and Not Significant during the Preparations for Quiescence and Final Site Clearance phases. <u>Cumulative Effects (Combined):</u> The combined cumulative effect would be **Major** to **Major/Moderate**, adverse and Significant (due to HPC).

Route: King Charles III England Coast Path
Route: PRoW network B (Stogursey to HPC)
Local PRoW network B extends to the south of HPC and east and north of Stogursey and includes local routes WL 23/54, WL 23/55, WL 23/56, WL 23/57, WL 23/58, WL 23/59, WL 23/16, WL 23/21, WL 23/22 WL 23/17 and WL 23/11. This network lies a minimum of 1.1 km from the Proposed Works. Assessment: Much of this local PRoW network coincides with the ZTV presented in **Figure 14.2**. However, views would be limited to varying degrees by foreground hedgerows or middle ground tree cover (worst-case **Low** magnitude). In summary: ▪ The Preparations for Quiescence phase would result in a **Moderate**, adverse and Not Significant level of effect; ▪ The Quiescence phase would result in a **Moderate / Minor**, neutral and Not Significant level of effect; and ▪ The Final Site Clearance phase would result in a **Moderate**, adverse but becoming beneficial and Not Significant effect. Cumulative Assessment: *Preparations for Quiescence phase*: The HPA Pre-Care and Maintenance phase would result in a worst-case Low magnitude of change which would become Very Low as HPA enters its Care and Maintenance phase during HPB's Preparations for Quiescence phase. HPC construction phase is likely to give rise to a worst-case High magnitude of change whilst its operation would give rise to a Low magnitude of change (as concluded for Viewpoint 11 in the HPC LVIA[1]). *Quiescence phase:* The HPA Care and Maintenance phase would give rise to a worst-case Very Low magnitude of change which may increase to a Low magnitude through HPA's Final Site Clearance phase. The operation of HPC would lead to a continued Low magnitude of change. Cumulative Effects (Additional): The additional effects from the Proposed Works would be **Moderate**, adverse and Not Significant during the Preparations for Quiescence phase. Cumulative Effects (Combined): The combined cumulative effect would be **Major** to **Moderate**, adverse and Significant (due to HPC).
Route: PRoW network C (Farrington Hill)
This local ProW network extends to the south of Wick Moor Drove (and Viewpoint 5) and crosses elevated land with a maximum elevated of 60 m AOD. The network includes local routes WL 23/20, WL 23/15 and WL 23/18. This network lies a minimum of 1.5 km from the Proposed Works. Assessment: The sections of WL 23/20 and WL 23/15 which cross the north facing slopes coincide with the ZTV presented in **Figure 14.2** whilst the majority of WL 23/18 and the southern end of WL 23/15 traverse the south facing slopes and therefore fall outside of the ZTV. Elevated views from the footpaths which cross open fields to the north of Farrington Hill Plantation are expansive and long distance and offer opportunities to observe a greater proportion of lower height built form within the Works Area including the turbine hall. The Proposed Works would take place within a narrow proportion of the wide panoramic views which are available and would be viewed at separation distances in excess of 1.5 km, in context with existing large-

Route: King Charles III England Coast Path
scale infrastructure and beyond the 400 kV overhead line and towers which cross the intervening landscape (Low magnitude). In summary: ▪ The Preparations for Quiescence phase would result in a **Moderate**, adverse and Not Significant level of effect; ▪ The Quiescence phase would result in a **Moderate** / **Minor**, beneficial and Not Significant level of effect due to a reduction in built form; and ▪ The Final Site Clearance phase would result in a **Moderate**, adverse but becoming beneficial and Not Significant effect. Cumulative Assessment: *Preparations for Quiescence phase*: The HPA Pre-Care and Maintenance phase would result in a worst-case Low magnitude of change which would become Low/Very Low as HPA enters its Care and Maintenance phase during HPB's Preparations for Quiescence phase. HPC construction phase is likely to give rise to a Medium magnitude of change whilst its operation would give rise to a Low magnitude of change (as concluded for Viewpoint 17 in the HPC LVIA[1] and which can be used as a proxy). *Quiescence phase:* The HPA Care and Maintenance phase would give rise to a Very Low magnitude of change which would increase to a Low magnitude during and following HPA's Final Site Clearance phase. The operation of HPC would lead to a continued Low magnitude of change. Cumulative Effects (Additional): The additional effects from the Proposed Works would be **Moderate**, adverse and Not Significant during the Preparations for Quiescence phase. Cumulative Effects (Combined): The combined cumulative effect would be **Major/Moderate** to **Moderate**, adverse and Significant (due to HPC).
Route: PRoW network D (Wick to Stolford)
This local PRoW network extends between Wick and Gorpit Lane on the eastern edge of Stolford with Viewpoints 1, 2, 3 and 4 located on or close to one of the PRoWs which form the network. The network comprises local routes WL 23/59, WL 23/57, WL 23/60, WL 23/61, WL 23/62, WL 23/63, WL 23/64, WL 23/67, WL 23/82, WL 23/83, WL 23/101, WL 23/107, WL 23/109, WL 23/112, WL 23/114 and WL 23/70/1 which follows Wick Moor Drove. Other local routes within this network are covered under the King Charles III England Coast Path (westbound walkers and inland diversion) assessments. This network lies a minimum of 100m from the Proposed Works. Assessment: ZTV coverage is extensive across this network of local PRoWs. As demonstrated by Viewpoints 1 and 2 (**Figures 14.4 and 14.5** which are assessed in detail in **Tables 14B-1** and **14B-3** of **Appendix 14B**), views from the closet sections of local PRoW to the Works Area are typically heavily filtered by the perimeter woodland belt (Low magnitude). With increasing separation distance towards Wick (Viewpoint 3, **Figure 14.7** and as assessed in **Table 14B-4** of **Appendix 14B**) intervening landform begins to play a role in the vertical proportion of the reactor building which is visible (Low magnitude). The worst-case scenario is likely to occur for walkers using local PRoWs 23/95, 23/107 and 23/101 close to the coastline and Viewpoint 4 (**Figure 14.8** and as assessed in **Table 14B-5** of **Appendix 14B**). For these receptors changes would occur in direct views (i.e. immediately in front of the walker in the direction of travel) and the proximity to the

Route: King Charles III England Coast Path

Proposed Works and proportion of the horizontal fields of view which would be affected would give rise to a Medium/Low to Medium magnitude during periods of peak activity and a Medium magnitude of change post removal of all buildings and de-licensing of site.

In summary:

- The Preparations for Quiescence phase would result in a **Moderate**, adverse and Significant level of effect;
- The Quiescence phase would result in a **Moderate**, beneficial and Not Significant level of effect due to a reduction in built form; and
- The Final Site Clearance phase would result in a **Moderate to Major/Moderate**, adverse and Significant effect, becoming a **Major/Moderate**, beneficial and Significant effect following Final Site Clearance.

Cumulative Assessment:

Preparations for Quiescence phase: The HPA Pre-Care and Maintenance phase would result in a worst-case Low magnitude of change which would become Very Low as HPA enters its Care and Maintenance phase during HPB's Preparations for Quiescence phase.

HPC construction phase is likely to give rise to a High magnitude of change whilst its operation would give rise to a Medium to Low magnitude of change.

Quiescence phase: The HPA Care and Maintenance phase would give rise to a Very Low magnitude of change which would increase to a Low magnitude through and following HPA's Final Site Clearance phase.

The operation of HPC would lead to a continued Low magnitude of change.

Cumulative Effects (Additional):

The additional effects from the Proposed Works would be **Moderate to Major/Moderate**, adverse and Significant during the Final Site Clearance phase becoming a **Major/Moderate**, beneficial and Significant effect.

Cumulative Effects (Combined):

The combined cumulative effect would be **Major to Major/Moderate**, adverse and Significant (due to HPC).

Route: PRoW network E (Stolford to Stockland Bristol)

PRoW network E extends from the eastern edge of Stolford (east of Gorpit Lane) towards Stockland Bristol. Viewpoint 7 (**Figure 14.11** which is assessed in detail in **Table 14B-8 of Appendix 14B**) is located just beyond the most southerly extent of this network. The network comprises local routes WL 23/99, WL 23/84, WL 23/103, WL 23/65, WL 23/85, WL 23/86, WL 23/106 and BW 32/2. Other local routes within this network are covered under the King Charles III England Coast Path (westbound walkers) assessment. This network lies a minimum of 1.5 km from the Proposed Works.

Assessment:

ZTV coverage (**Figure 14.2**) is extensive across the northern half of this network but routes towards the southern limits fall outside of the ZTV. The increasing separation distance and the increased presence of hedgerows and middle-distance tree cover around the settlements of Wick and Stolford provide varying degrees of screening (worst-case Low magnitude, more commonly Low/Very Low magnitude).

In summary:

- The Preparations for Quiescence phase would result in a **Moderate**, adverse and Not Significant level of effect;
- The Quiescence phase would result in a **Moderate / Minor**, neutral and Not Significant level of effect; and

Route: King Charles III England Coast Path
▪ The Final Site Clearance phase would result in a **Moderate**, adverse but becoming beneficial and Not Significant effect. Cumulative Assessment: *Preparations for Quiescence phase*: The HPA Pre-Care and Maintenance phase would result in a worst-case Low magnitude of change which would become Very Low as HPA enters its Care and Maintenance phase during HPB's Preparations for Quiescence phase. HPC construction phase is likely to give rise to a Medium magnitude of change whilst its operation would give rise to a Low magnitude of change (using Viewpoint 20 at Stockland Bristol in the HPC LVIA[1] as a proxy). *Quiescence phase:* The HPA Care and Maintenance phase would give rise to a worst-case Very Low magnitude of change which may increase to Low through HPA's Final Site Clearance phase. The operation of HPC would lead to a continued Low magnitude of change. Cumulative Effects (Additional): The additional effects from the Proposed Works would be **Moderate**, adverse and Not Significant during the Preparations for Quiescence and Final Site Clearance phases. Cumulative Effects (Combined): The combined cumulative effect would be **Major/Moderate** to **Moderate**, adverse and Significant (due to HPC).
Route: PRoW network F (Hillside Farm to Lower Cock Farm)
This PRoW network covers two local routes close to the southern edge of the Study Area, to the north of Cockwood and west of Stockland Bristol. The network comprises local routes WL 23/88, BW 32/7 and WL 23/89 and lies a minimum of 2.8 km from the Proposed Works. Assessment: ZTV coverage (**Figure 14.2**) is fragmented along WL 23/88 with the western end (west of Steyning Manor) lying outside of the ZTV. Similarly, the eastern section (east of Hillside Farm) typically lies outside of the ZTV. Walkers may experience oblique views of the top of elevated crane activity and the recladding of the top of the reactor buildings and eventual demolition of the top of Safestore within a narrow proportion of their horizontal field of view, typically viewed above or alongside middle ground pockets of woodland (Low/Very Low magnitude). In summary: ▪ The Preparations for Quiescence phase would result in a **Moderate / Minor**, adverse and Not Significant level of effect; ▪ The Quiescence phase would result in a **Moderate / Minor**, neutral and Not Significant level of effect; and ▪ The Final Site Clearance phase would result in a **Moderate / Minor**, adverse but becoming beneficial and Not Significant effect. Cumulative Assessment: *Preparations for Quiescence phase*: The HPA Pre-Care and Maintenance phase would result in a worst-case Very Low magnitude of change which would remain Very Low as HPA enters its Care and Maintenance phase during HPB's Preparations for Quiescence phase. HPC construction phase is likely to give rise to a worst-case Low magnitude of change whilst its operation would give rise to a Very Low magnitude of change.

Route: King Charles III England Coast Path
Quiescence phase: The HPA Care and Maintenance phase would give rise to a worst-case Very Low magnitude of change which would continue through HPA's Final Site Clearance phase. The operation of HPC would lead to a continued Very Low magnitude of change. Cumulative Effects (Additional): The additional effects from the Proposed Works would be **Moderate/Minor**, adverse and Not Significant during the Preparations for Quiescence and Final Site Clearance phases. Cumulative Effects (Combined): The combined cumulative effect would be **Moderate**, adverse and Not Significant (due to HPC).

14D.4 Visual effects on views from recreational destinations

14D.4.1. The visual assessment has considered the potential visual effects likely to be experienced by people at recreational destinations, which are overlapped by the ZTV and within the Study Area (see **Table 14D-3**).

14D.4.2. All of the destinations have been assessed as of *High* sensitivity on account of their **High** to **Medium** value as recreational and tourist destinations, and the **High** susceptibility of the people visiting these destinations, whose attention would be focused on the landscape around them.

14D.4.3. In summary, there would be significant effects as a result of the Proposed Works on receptors using the Open Access Land (Ham, Sharpham and North Ham/Goose Marsh areas) to the east of the HPB Works Area.

Table 14D-3 - Visual effects on views from recreational and tourist destinations

Open Access Land: Man Moor, North Moor, Wick Moor, Great Hooks and Little Hooks, Ham, Sharpham, North Ham and Goose Marsh and Redham
The Open Access Land comprising Man Moor, North Moor, Wick Moor, Great Hooks and Little Hooks, Ham, Sharpham, North Ham and Goose Marsh and Redham lies to the south and east of the HPB Works Area with its location and geographical extent illustrated in **Figure 14.15.** Viewpoints 1, 2, 3 and 4 are located within this Open Access Land which lies a minimum of 40m from the Proposed Works. Assessment: ZTV coverage is extensive across the Open Access Land as shown in **Figure 14.2**. As demonstrated by Viewpoints 1 and 2 (**Figures 14.4** and **14.6** which are assessed in detail in **Tables 14B-1** and **14B-3** of **Appendix 14B**), views from some of the closest areas of Open Access Land to the Works Area are typically heavily filtered by the perimeter woodland belt (Low magnitude). With increasing separation distance towards Wick (Viewpoint 3, **Figure 14.7** and as assessed in **Table 14B-4 of Appendix 14B**) intervening landform begins to play a role in the vertical proportion of the reactor building which is visible (Low magnitude). The worst-case scenario is likely to occur for users of the Ham, Sharpham and North Ham/Goose Marsh areas of Open Access Land close to the coastline and Viewpoint 4 (**Figure 14.8** and as assessed in **Table 14B-5** of **Appendix 14B**). For these receptors, the moderate proportion of the horizontal field of view which would be affected by the Proposed Works, including the offshore works, and their proximity would give rise to a Medium/Low to Medium magnitude during periods of peak activity and a Medium magnitude of change post removal of all buildings and de-licensing of site.

Open Access Land: Man Moor, North Moor, Wick Moor, Great Hooks and Little Hooks, Ham, Sharpham, North Ham and Goose Marsh and Redham

In summary:

- The Preparations for Quiescence phase would result in a **Major/Moderate to Moderate**, adverse and Significant level of effect;
- The Quiescence phase would result in a **Moderate,** beneficial and Not Significant level of effect due to a reduction in built form; and
- The Final Site Clearance phase would result in a **Major/Moderate to Moderate**, adverse and Significant effect, becoming a **Major/Moderate**, beneficial and Significant effect following Final Site Clearance.

Cumulative Assessment:

Preparations for Quiescence phase: The HPA Pre-Care and Maintenance phase would result in a worst-case Low magnitude of change which would become Very Low as HPA enters its Care and Maintenance phase during HPB's Preparations for Quiescence phase.

HPC construction phase is likely to give rise to a High magnitude of change whilst its operation would give rise to a Medium to Low magnitude of change.

Quiescence phase: The HPA Care and Maintenance phase would give rise to a Very Low magnitude of change which would increase to a Low magnitude through and following HPA's Final Site Clearance phase.

The operation of HPC would lead to a continued Low magnitude of change.

Cumulative Effects (Additional):

The additional effects from the Proposed Works would be **Major/Moderate to Moderate**, adverse and Significant during the Preparations for Quiescence and Final Site Clearance phases becoming a **Major/Moderate**, beneficial and Significant effect.

Cumulative Effects (Combined):

The combined cumulative effect would be **Major to Major/Moderate**, adverse and Significant (due to HPC).

14D.5 Visual effects on views from transport routes

14D.5.1. **Table 14D-4** details the visual effects on views of the Proposed Works from the main transport route within the Study Area.

14D.5.2. The views from this route would be experienced transiently by road users (mainly drivers and where appropriate cyclists and walkers) who would experience the Proposed Works as part of the changing sequence of views experienced from the along the route.

14D.5.3. The route does not pass through a nationally or locally designated landscape within the Study Area and is not designated as a tourist route. The value of the route is therefore assessed as Medium. The susceptibility to change from the introduction of the Proposed Works is considered to be Low and the overall sensitivity of this route is therefore assessed as Medium.

14D.5.4. In summary, there would be no significant visual effects from Wick Moor Drove.

Table 14D-4 - Visual effects on views from transport routes

Wick Moor Drove
The main transport route through the Study Area is Wick Moor Drove which passes south of the HPA/HPB between the settlements of Wick and Shurton before continuing east and south-east as an unnamed road. Viewpoint 5 (**Figure 14.9**) is located on the road to the south of the Works Area close to Gunter's Grove. The route lies a minimum of approximately 350 m from the Works Area. <ins>Assessment:</ins> ZTV coverage (**Figure 14.2**) indicates fragmented visibility from along this route. A short section of road coincides with the ZTV to the north of Claylands Corner at a minimum separation distance of 2.8 km. From this section, the top of elevated activities would be visible to northbound drivers and their passengers during the Preparations for Quiescence and Final Site Clearance phases (Low/Very Low magnitude), with the top of the Safestore only visible above the intervening vegetation during the Quiescence phase (Very Low magnitude). The route then continues in a north-westerly direction and outside of the ZTV for a distance of 1.2 km as it passes through Wick Park Covert (Zero magnitude). The route re-enters the ZTV to the west of Mud House Copse and users would experience oblique views of elevated works beyond the 400 kV overhead line and towers which would periodically be screened/filtered by fore and mid-ground tree cover around Wick (Low magnitude increasing to Medium/Low close to Viewpoint 5 where the road increases in elevation slightly). This Low to Medium/Low magnitude is likely to continue for northbound receptors along Wick Moor Drove where the lower elevation, roadside hedgerows/vegetation and middle-distance tree cover combine to filter views to varying degrees despite the reduced separation distance. In summary: ▪ The Preparations for Quiescence phase would result in a **Moderate to Moderate / Minor,** adverse and Not Significant level of effect; ▪ The Quiescence phase would result in a **Minor**, beneficial/neutral and Not Significant level of effect; and ▪ The Final Site Clearance phase would result in a **Moderate to Moderate / Minor**, adverse but becoming beneficial and Not Significant. <ins>Cumulative Assessment:</ins> *Preparations for Quiescence phase*: The HPA Pre-Care and Maintenance phase would result in a worst-case **Medium/Low** magnitude of change from localised sections of the route close to Viewpoint 5 and from along Wick Moor Drove. This would become a worst-case **Very Low** magnitude of change as HPA enters its Care and Maintenance phase during HPB's Preparations for Quiescence phase. HPC construction phase would give rise to a worst-case **High** magnitude of change whilst its operation would give rise to a **Medium** magnitude of change. *Quiescence phase:* The HPA Care and Maintenance phase would give rise to a worst-case **Very Low** magnitude of change. This would increase to a worst-case **Medium/Low** magnitude of change during HPA's Final Site Clearance phase. The operation of HPC would lead to a continued (worst-case) **Medium** magnitude of change. <ins>Cumulative Effects (Additional):</ins> The additional effects from the Proposed Works (worst-case) would be **Moderate**, adverse and Not Significant (for the Preparations for Quiescence phase and Final Site Clearance phases). <ins>Cumulative Effects (Combined):</ins> The combined cumulative effect would be **Major/Moderate** becoming **Moderate**, adverse and Significant (due to HPC).

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15

Noise and vibration

PUBLIC

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15A

Noise level prediction details

PUBLIC

Sound power of plant for conventional area deplanting and demolition

Zone	Plant item	Activity	Plant Quantity	% on time	Sound power level, dBA L_W	Sound power corrected for no. & on time, dBA L_W	Total sound power per zone, dBA L_W
1	Asbestos Removal system and equipment		1	25	97	91	125
	Burning Equipment (Personnel)		20	98	101	114	
	Crane Mobile (50 te)		1	98	95	94	
	Crusher (For Conc/Masonry arisings)		1	50	112	109	
	Dump Truck		8	98	108	117	
	Dust Suppression		3	70	107	110	
	Excavator 30t		8	98	110	119	
	Excavator 60t		2	98	111	114	
	Grapple		10	16	110	112	
	Impact Hammer 2 T		10	16	97	99	
	Impact Hammer 4 T		10	16	109	111	
	Loading Shovel		1	70	108	107	
	Materials Handler		1	85	99	98	
	Pulverisor		10	16	108	110	
	Scissor Lift		3	60	106	109	
	Shears 2 T		10	16	107	109	
	Shears 4 T		10	16	107	109	
	Telehandler		1	98	99	98	
	20T HGV for Recycling Transportation		3	98	108	113	
2	Asbestos Removal system and equipment		1	25	97	91	128
	5t Mini Breaker		2	98	121	124	
	60T Low Loader		2	98	108	111	
	Burning Equipment (Personnel)		20	98	101	114	
	Compaction Plant		2	98	96	99	
	Crane (150 te)		2	98	95	97	
	Crusher (For Conc/Masonry arisings)		1	50	112	109	
	Dump Truck		8	98	108	117	
	Dust Suppression		3	70	107	110	
	Excavator 30t		8	98	110	119	
	Excavator 60t		4	98	111	117	
	Grapple		12	16	110	113	
	Hi Reach (21m)		2	75	95	97	
	Impact Hammer 2 T		12	16	97	99	
	Impact Hammer 4 T		12	16	109	112	
	Loading Shovel		1	70	108	107	
	Materials Handler		1	85	99	98	
	Pulverisor		12	16	108	111	
	Scissor Lift		2	60	106	107	
	Shears 2 T		12	16	107	110	
	Shears 4 T		12	16	107	110	
	Telehandler		1	98	99	98	
	20T HGV for Recycling Transportation		3	98	108	113	
3	Asbestos Removal system and equipment		1	25	97	91	126
	150mm Dredge Pump & hoses		1	98	93	93	
	150mm High Volume Submersible Pump & hoses		1	98	93	93	
	150mm Univac Pump & hoses		1	98	93	93	
	15M Dive Support Boat		1	98	90	89	
	450HP Tug/Workboat		1	98	102	102	
	4-Man Confined Space equipment		1	98			
	5t Mini Breaker		1	75	121	120	
	60t Crane/Excavator Offshore Pontoon		1	75	110	109	
	60T Low Loader		1	98	108	108	
	Air Tools + Air Hose		1	75	97	96	
	Burning Equipment (Personnel)		20	98	101	114	
	Compaction Plant		1	98	96	96	
	Compressor 275cfm		1	75	103	102	
	Concrete Pump 28 m		1	75	103	102	
	Concrete Pump 31 m		1	75	106	105	
	Containerised 2-Diver Surface Demand dive system		1	98	97	97	
	Crane (150 te)		1	75	95	93	
	Crane (70 te)		1	75	104	103	
	Crane Mobile (30 te)		1	75	95	93	
	Crusher (For Conc/Masonry arisings)		1	50	112	109	
	Dump Truck		10	98	108	118	
	Dust Suppression		3	70	107	110	
	Excavator 30t		8	98	110	119	
	Excavator 60t		2	98	111	114	
	Grapple		10	16	110	112	
	Hi Reach (21m)		2	75	95	97	
	High Pressure Aquablast		1	98	91	91	
	Impact Hammer 2 T		10	16	97	99	
	Impact Hammer 4 T		10	16	109	111	
	Loading Shovel		1	70	108	107	
	Long Reach (25m)		1	75	95	94	
	Materials Barge		1	98	102	102	
	Materials Handler		1	85	99	98	
	Pulverisor		10	16	108	110	
	Safety/Workboat		1	98	102	102	
	Scissor Lift		2	60	106	107	
	Shears 2 T		10	16	107	109	
	Shears 4 T		10	16	107	109	
	Telehandler		1	98	99	98	
	Welding Set 300/400A		1	98	101	101	
	20T HGV for Recycling Transportation		3	98	108	113	
4	Asbestos Removal system and equipment		1	25	97	91	121
	Burning Equipment (Personnel)		20	98	101	114	
	Crusher (For Conc/Masonry arisings)		1	50	112	109	
	Dump Truck		2	98	108	111	
	Dust Suppression		3	70	107	110	
	Excavator 30t		2	98	110	113	
	Excavator 60t		1	98	111	111	
	Grapple		3	16	110	107	
	Hi Reach (21m)		1	75	95	94	
	Impact Hammer 2 T		3	16	97	93	
	Impact Hammer 4 T		3	16	109	106	
	Loading Shovel		1	70	108	107	
	Materials Handler		1	85	99	98	
	Pulverisor		3	16	108	105	
	Scissor Lift		2	60	106	107	
	Shears 2 T		3	16	107	104	
	Shears 4 T		3	16	107	104	
	Telehandler		1	98	99	98	
	20T HGV for Recycling Transportation		3	98	108	113	
5	Asbestos Removal system and equipment		1	25	97	91	120
	Burning Equipment (Personnel)		10	98	101	111	
	Crusher (For Conc/Masonry arisings)		1	50	112	109	
	Dump Truck		2	98	108	111	
	Dust Suppression		2	70	107	108	
	Excavator 30t		1	98	110	110	
	Excavator 60t		1	98	111	111	
	Grapple		2	24.5	110	107	
	Impact Hammer 4 T		2	24.5	109	106	
	Loading Shovel		1	70	108	107	
	Materials Handler		1	85	99	98	
	Pulverisor		2	24.5	108	105	
	Scissor Lift		2	60	106	107	

	Shears 4 T	2	24.5	107	104	
	Telehandler	1	98	99	98	
	20T HGV for Recycling Transportation	3	98	108	113	
6	Asbestos Removal system and equipment	1	25	97	91	123
	150mm Univac Pump & hoses	1	25	93	87	
	25T Articulated Dumptruck	1	98	108	108	
	60T Low Loader	1	50	108	105	
	Aerial Platform (30M)	1	50	95	92	
	Bulldozer	1	98	103	103	
	Burning Equipment (Personnel)	30	98	101	116	
	Crane (150 te)	1	75	95	93	
	Crane Crawler (300te)	1	50	95	92	
	Crane Mobile (50 te)	1	98	95	94	
	Crane Mobile (70 te)	1	98	95	94	
	Crusher (For Conc/Masonry arisings)	1	50	112	109	
	Dust Suppression	3	70	107	110	
	Excavator 30t	4	98	110	116	
	Excavator 60t	2	98	111	114	
	Grapple	6	16	110	110	
	Hi Reach (21m)	1	75	95	94	
	Impact Hammer 2 T	6	16	97	96	
	Impact Hammer 4 T	6	16	109	109	
	Loading Shovel	1	70	108	107	
	Materials Handler	1	85	99	98	
	Pulverisor	6	16	108	108	
	Scissor Lift	6	16	106	106	
	Shears 2 T	6	16	107	107	
	Shears 4 T	6	16	107	107	
	Small Dozer + Roller	1	75	98	96	
	Telehandler	1	98	99	98	
	20T HGV for Recycling Transportation	3	98	108	113	
7	Asbestos Removal system and equipment	1	25	97	91	120
	Burning Equipment (Personnel)	10	98	101	111	
	Crusher (For Conc/Masonry arisings)	1	50	112	109	
	Dump Truck	2	98	108	111	
	Dust Suppression	3	70	107	110	
	Excavator 30t	2	98	110	113	
	Grapple	2	24.5	110	107	
	Impact Hammer 2 T	2	24.5	97	93	
	Loading Shovel	1	70	108	107	
	Materials Handler	1	85	99	98	
	Pulverisor	2	24.5	108	105	
	Scissor Lift	2	60	106	107	
	Shears 2 T	2	24.5	107	104	
	Telehandler	1	98	99	98	
	20T HGV for Recycling Transportation	3	98	108	113	
8	Asbestos Removal system and equipment	1	25	97	91	125
	Burning Equipment (Personnel)	20	98	101	114	
	Crusher (For Conc/Masonry arisings)	1	50	112	109	
	Dump Truck	6	98	108	116	
	Dust Suppression	3	70	107	110	
	Excavator 30t	6	98	110	118	
	Excavator 60t	4	98	111	117	
	Grapple	10	16	110	112	
	Impact Hammer 2 T	10	16	97	99	
	Impact Hammer 4 T	10	16	109	111	
	Loading Shovel	1	70	108	107	
	Materials Handler	1	85	99	98	
	Pulverisor	10	16	108	110	
	Scissor Lift	6	60	106	112	
	Shears 2 T	10	16	107	109	
	Shears 4 T	10	16	107	109	
	Telehandler	1	98	99	98	
	20T HGV for Recycling Transportation	3	98	108	113	
9	Asbestos Removal system and equipment	1	25	97	91	124
	Burning Equipment (Personnel)	20	98	101	114	
	Crusher (For Conc/Masonry arisings)	1	50	112	109	
	Dump Truck	4	98	108	114	
	Dust Suppression	3	70	107	110	
	Excavator 30t	4	98	110	116	
	Excavator 60t	3	98	111	116	
	Grapple	7	16	110	111	
	Impact Hammer 2 T	7	16	97	97	
	Impact Hammer 4 T	7	16	109	109	
	Loading Shovel	1	70	108	107	
	Materials Handler	1	85	99	98	
	Pulverisor	7	50	108	114	
	Scissor Lift	6	60	106	112	
	Shears 2 T	7	16	107	107	
	Shears 4 T	7	16	107	107	
	Telehandler	1	98	99	98	
	20T HGV for Recycling Transportation	3	98	108	113	
10	Asbestos Removal system and equipment	1	25	97	91	121
	Burning Equipment (Personnel)	10	98	101	111	
	Crusher (For Conc/Masonry arisings)	1	50	112	109	
	Dump Truck	3	98	108	113	
	Dust Suppression	3	70	107	110	
	Excavator 30t	2	98	110	113	
	Excavator 60t	1	98	111	111	
	Grapple	3	16	110	107	
	Impact Hammer 2 T	3	16	97	93	
	Impact Hammer 4 T	3	16	109	106	
	Loading Shovel	1	70	108	107	
	Materials Handler	1	85	99	98	
	Pulverisor	3	16	108	105	
	Scissor Lift	2	60	106	107	
	Shears 2 T	3	16	107	104	
	Shears 4 T	3	16	107	104	
	Telehandler	1	98	99	98	
	20T HGV for Recycling Transportation	3	98	108	113	
11	Asbestos Removal system and equipment	1	25	97	91	125
	Burning Equipment (Personnel)	20	98	101	114	
	Crusher (For Conc/Masonry arisings)	1	50	112	109	
	Dump Truck	4	98	108	114	
	Dust Suppression	3	70	107	110	
	Excavator 30t	4	98	110	116	
	Excavator 60t	2	98	111	114	
	Grapple	12	98	110	121	
	Impact Hammer 2 T	6	16	97	96	
	Impact Hammer 4 T	6	16	109	109	
	Loading Shovel	1	70	108	107	
	Materials Handler	1	85	99	98	
	Pulverisor	6	16	108	108	
	Scissor Lift	2	60	106	107	
	Shears 2 T	6	16	107	107	
	Shears 4 T	6	16	107	107	
	Telehandler	1	98	99	98	
	20T HGV for Recycling Transportation	3	98	108	113	

Total sound powers of plant in Proposed Works area, 2029 & 2037

Year 7 (2028)				
Zone 2	1	100	128	128
Zone 3	1	100	126	126
Zone 5	1	100	120	120
Zone 6	1	100	123	123
Zone 11	1	100	125	125
			Total Sound power, dBA L_W	**132**

Year 10 (2031)				
Zone 2	1	100	128	128
Zone 4	1	100	121	121
Zone 6	1	100	123	123
Zone 10	1	100	121	121
			Total Sound power, dBA L_W	**130**

Calculation of sound power level due to on site vehicle movements 2029 & 2037 (1 per hour)

Calculation of worst case sound level due to on site vehicle movements 2029 & 2037 (1 per hour)				
Plant	No. per hour	Speed, km/h	Sound Power, dBA L_W	Sound power corrected for no. & on time, dBA L_W
C2.34 Lorry	1	12	94	94
Total Sound power corrected for no. & on time, dBA L_W				**94**
Approx length of haul road, m				**1500**
Percentage of assessment period when vehicles are present, %				**100**

Prediction of sound level due to on-site vehicle movements

Total sound power	Receptor	Receiver	Propagation distance to centre of haul road r, m	Approx length of haul road, m	Approx. angle of view, °	Percentage of assessment period when vehicles are present, %	Estimated haul road sound level at receiver, dB $L_{Aeq,T}$ (not accounting for screening or reflections)
94	R1	Knighton / Glebe House	1900	1500	43	100	11
94	R2	Shurton/ Yellowdoor Cottage	1400	1500	56	100	14
94	R3	Doggetts Nordheide	1200	1500	64	100	15
94	R4	Wick Farm/ Headweir House	1000	1500	74	100	16
94	R5	Stolford	1200	1500	64	100	15
94	R6	English Coastal Path A	286	1500	138	100	24
94	R7	English Coastal Path B	504	1500	112	100	21

Prediction of sound level due to activity in Proposed Works area, 2029

Total sound power	SPL at 10m	Receptor	Receiver	Approx. distance to NSR, m	Proportion of hard ground, %	Hard ground attenuation Kh, dB	Soft ground attenuation Ks, dB	Predicted noise level, dB $L_{Aeq,T}$		Predicted noise level, plant and vehicle movements, dB $L_{Aeq,T}$ (not accounting for screening or reflections)	BS 5228 threshold of significance, dBA	Threshold of significance – predicted noise level, dBA
132	104							Plant noise	On-site vehicle movements			
132	104	R1	Knighton / Glebe House	1900	30	46	55	52	11	52	65	-13
132	104	R2	Shurton/ Yellowdoor Cottage	1400	30	43	52	55	14	55	65	-10
132	104	R3	Doggetts Nordheide	1200	30	42	50	57	15	57	65	-8
132	104	R4	Wick Farm/ Headweir House	1000	30	40	48	59	16	59	65	-6
132	104	R5	Stolford	1200	30	42	50	57	15	57	65	-8
132	104	R6	English Coastal Path A	286	30	29	34	71	24	71	65	6
132	104	R7	English Coastal Path B	504	30	34	41	66	21	66	65	1

Prediction of sound level due to activity in Proposed Works area, 2037

Total sound power	SPL at 10m	Receptor	Receiver	Approx. distance to NSR, m	Proportion of hard ground, %	Hard ground attenuation Kh, dB	Soft ground attenuation Ks, dB	Predicted noise level, dB $L_{Aeq,T}$		Predicted noise level, plant and vehicle movements, dB $L_{Aeq,T}$ (not accounting for screening or reflections)	BS 5228 threshold of significance, dBA	Threshold of significance – predicted noise level, dBA
130	102							Plant noise	On-site vehicle movements			
130	102	R1	Knighton / Glebe House	1900	30	46	55	50	11	50	65	-15
130	102	R2	Shurton/ Yellowdoor Cottage	1400	30	43	52	53	14	53	65	-12
130	102	R3	Doggetts Nordheide	1200	30	42	50	55	15	55	65	-10
130	102	R4	Wick Farm/ Headweir House	1000	30	40	48	57	16	57	65	-8
130	102	R5	Stolford	1200	30	42	50	55	15	55	65	-10
130	102	R6	English Coastal Path A	286	30	29	34	69	24	69	65	4
130	102	R7	English Coastal Path B	504	30	34	41	64	21	64	65	-1

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16

Traffic and transport

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16A

Outline Construction Traffic Management Plan

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Appendix 16A:
Outline Construction Traffic Management Plan (CTMP)

Hinkley Point B Power Station - Decommissioning

16A.1 Introduction

Overview

16A.1.1 Hinkley Point B Nuclear Power Station (HPB) (hereafter referred to as the 'Site' which is shown in **Figure 16A-1: Proposed study area**), ceased electricity generation in September 2022. Defueling of the Site commenced shortly after and is due to be completed in 2026. Decommissioning is anticipated to start shortly after the end of defueling. Prior to the commencement of decommissioning activities at the Site, EDF Energy Nuclear Generation Limited (EDF), as the current licensee of the Site, is legally required to gain consent to carry out the decommissioning project from the Office for Nuclear Regulation (ONR)) under the Nuclear Reactors (Environmental Impact Assessment for Decommissioning) Regulations 1999 (as amended) (EIADR)[1].

16A.1.2 The decommissioning works (the 'Proposed Works') will include the dismantling and deconstruction of buildings and structures in areas within and outside of the Nuclear Site Licence (NSL) boundary that are part of the HPB power station. The Proposed Works also include the enveloping of the nuclear reactors and directly related built structures into a Safestore enclosure structure. The Proposed Works will be undertaken in three phases:

- Preparations for Quiescence phase;
- Quiescence phase; and
- Final Site Clearance phase.

16A.1.3 It is anticipated that the Preparations for Quiescence phase will generate the most traffic during the Proposed Works. This Outline Construction Traffic Management Plan (CTMP) has been prepared to set out how traffic will be managed during the Proposed Works, during the Preparations for Quiescence phase. The works required for the Preparations for Quiescence phase are expected to be completed within approximately 13 years, from 2026. It is expected that an updated CTMP, or

[1] UK Government (1999). The Nuclear Reactors (Environmental Impact Assessment for Decommissioning) Regulations 1999 (as amended). Available at: https://www.legislation.gov.uk/uksi/1999/2892/contents.

equivalent document, will be prepared in advance of Final Site Clearance Works commencing.

16A.1.4 This Outline CTMP sets out the anticipated activities which would generate decommissioning traffic over the Preparations for Quiescence phase and identifies potential management measures to control traffic movements during this phase.

16A.1.5 This Outline CTMP is based on assumptions set out within the Environmental Statement (ES) that accompanies the application for EIADR consent. A detailed CTMP will be prepared when the design of the Proposed Works has been finalised and prior to the Preparations for Quiescence phase commencing. During the course of the Preparations for Quiescence phase, in the event that project design changes could affect assumptions used for the ES, the CTMP will be revised and updated as required.

16A.1.6 Revisions and/or updates to the CTMP will be undertaken in consultation with Somerset Council and National Highways as they are the relevant highway authorities.

Report purpose

16A.1.7 This Outline CTMP details appropriate measures that could be implemented to provide mitigation during the Proposed Works. The Outline CTMP has been prepared to ensure that the management and mitigation measures contained within this document minimise the likely impact on existing road users. The Outline CTMP has been developed to inform the forthcoming CTMP, which will be reviewed prior commencement of works to ensure the mitigation solutions contained within the forthcoming CTMP are up-to-date and remain appropriate.

16A.1.8 The Outline CTMP aims to:

- Ensure the movement of people and materials in a safe, efficient, timely, and sustainable manner.
- Minimise the impact of traffic associated with the Proposed Works on the highway network;
- Minimise the impact and disruption on local communities where possible due to the impact of traffic associated with the Proposed Works;
- Minimise vehicle trips associated with the Proposed Works where possible; and
- Limit the impacts on the natural and built environment.

Engagement

16A.1.9 Engagement has been undertaken with SCC[2] and National Highways via virtual meetings on 11 August 2021 and 16 May 2022, and 12 and 13 June 2024. The

[2] Somerset Unitary Authority was created in April 2023 and replaces Somerset County Council. The new unitary council brings together the services previously provided by the four district councils in Somerset (Mendip, Sedgemoor, Somerset West and Taunton, and South Somerset) alongside the services formerly provided by Somerset County Council. Where text refers to Somerset County Council, these discussions occurred prior to April 2023.

initial consultation, pre-application and technical engagements have been summarised in **Section 16.4** of ES **Chapter 16: Traffic and Transport.**

Report structure

16A.1.10 The remainder of this Outline CTMP is structured as follows:

- Section 2: Decommissioning traffic;
- Section 3: Access routes;
- Section 4: Traffic management measures; and
- Section 5: Traffic management governance and structure.

16A.2 Decommissioning traffic

16A.2.1 The following section describes vehicle types and traffic assumptions made in order to calculate the number of vehicle trips generated during the Preparations for Quiescence phase of the Proposed Works. Traffic generated during the Quiescence phase is expected to minimal and therefore traffic movements during this phase are not included in the scope of this Outline CTMP. In addition, any measures required during the Final Site Clearance phase will be confirmed closer to the commencement of that phase which is likely to be approximately 70 years.

Site Working Hours

16A.2.2 As per **Chapter 2: The Decommissioning Process** of the ES, HPB has operated a 24-hours a day, seven days a week operational working pattern using shifts throughout operations, outage events and subsequent defueling. During the Preparations for Quiescence, working hours will change to represent the different types and nature of ongoing activities on the Site. Whilst some aspects of Active Area deplanting may necessitate the need for maintaining shift working, the majority of the Proposed Works during the Preparations for Quiescence phase, such as conventional deplanting and deconstruction and Safestore construction, will be limited to normal working hours (07:30 to 18:00 hours Monday to Friday). There may be occasional infrequent exceptions when the working day may be extended in order to complete specific items of work safely. During the Preparations for Quiescence phase, it is anticipated that security personnel will remain on site 24 hours a day, seven days a week, using shift arrangements.

Vehicle Classification

16A.2.3 A number of vehicle types will be used during the course of the Proposed Works. The ES identifies the Preparations for Quiescence phase as the phase which will generate the highest traffic flows. During this phase, it is estimated the Proposed Works during its peak will generate 100 two-way cars or Light Goods Vehicles

(LGVs)[3] for site-based staff and up to 30 two-way HGVs trips daily in the peak year of 2034.

Traffic Generation

16A.2.4 To calculate decommissioning traffic flows, anticipated total HGV and cars/light vehicle (LV) flows of construction staff and support vehicles are established. These flows are divided by the relevant works duration and working days. This approach is considered to be a representative worst case for traffic generated by the Proposed Works. Estimated trip generation during the decommissioning phases is shown in **Table 16A-1**.

16A.2.5 All HGVs will have their paperwork and security checked prior to entering the licensed site. Also, a suitable security check will be conducted on the vehicles entering the Site.

Table 16A-1 Estimated trip generation during the decommissioning phases (vehicles per day)

Decommissioning phase	Activity	Timescale	Max HGVs (vehs/day – two ways)	Max Car/LGV traffic (vehs/ day – two ways)
Preparations for Quiescence phase	Deplanting and deconstruction, Active area deplanting, Waste processing and packaging, void filling and Safestore construction.	Y1- Y13	<30	100
Quiescence phase		Y13 - Y81	-	
Final Site Clearance phase	Waste management centre construction/operation and decommissioning Retrieval of interim level waste from debris vaults Reactor dismantling Site remediation for future re-use	Y82 – Y96	<29	<99

[3] The number of cars/LGVs reported is additional to the existing operational baseline for car/LGV movements to and from the Site. This ensures a reasonable worst-case assessment of the potential net change in car/LGV movements.

16A.2.6 There may be a small number of Abnormal Indivisible Loads (AILs) required during the Preparation for Quiescence Phase which are not considered to be significant with respect to traffic management requirements. An AIL assessment and swept path analysis will be undertaken before any AILs are used and if required the relevant highway authorities consulted on the details of the load and timings of the movement.

16A.3 Access Routes

Introduction

16A.3.1 This section considers the access routes for decommissioning traffic to the Site compound particularly for HGV movements. The primary considerations for an access route strategy are:

- Use of the shortest route available from the location of the access points to the primary road network ('A' roads and the strategic road network (SRN));
- Avoiding single carriageway highways where alternatives are available;
- Use of established access routes; and
- Avoiding settlements and sensitive receptors where possible.

Primary Access Route

16A.3.2 A primary access route has been identified, taking into consideration the transport network constraints in relation to the conveyance of decommissioning traffic to and from the Site.

16A.3.3 HGVs including the tippers that will be used to import and export materials, will be required to follow a preferred route to and from the SRN and local road network, as required to comply with the Site's consent to decommission.

Current baseline

16A.3.4 A detailed baseline of the current transport infrastructure in the Study Area is provided in ES **Chapter 16: Traffic and Transport**.

Road access

16A.3.5 **Figure 16A-2: Anticipated fixed routes for HGVs** depicts the preferred route that HGVs will be required to follow to the SRN to transport the waste materials from the Site, plant and equipment required for the delivery of the Proposed Works. Exact locations of the waste disposal/management sites are to be confirmed once the relevant contractor is appointed.

16A.3.6 The proposed decommissioning preferred routing utilises the following road sections:

- A39 Cannington Bypass Roundabout;
- Homberg Way;

- A38 Bristol Road; and
- Dunball Interchange.

16A.3.7 Beyond these road sections, traffic generated by the Proposed Works disperses onto the wider SRN where its effect would be diluted to a point where the numbers and proportional increase would be minimal.

Bus services

16A.3.8 The nearest bus stop to the facility is Wayside Bus stop, Shurton which is approximately 3 km from the Site and is served by route number 14 with frequency of two buses per day.

16A.3.9 The construction of Hinkley Point C (HPC) nuclear new build is currently ongoing and is expected to begin operation at the end of the decade. As part of the HPC construction works, to manage the construction workforce transport movements to the HPC site and reduce trips on the local highway network in the Somerset area, park and ride services have been implemented across four sites (Williton, Cannington, at Junction 23 of the M5, and Junction 24 of the M5). The facilities operate seven days per week to accommodate HPC construction project shift patterns. These movements form part of the existing baseline environment in the Study Area, however, it is anticipated that these facilities will be removed at the end of the HPC construction.

Rail access

16A.3.10 The nearest railway station is Bridgwater Station, situated approximately 10.7 miles southwest of the Site and approximately 25 minutes' drive. This station is serviced by Great Western Railway. The standard weekday service pattern includes one train in each direction every hour, with the majority of trains going to and from Cardiff Central and Penzance, however there are fewer services on Sundays.

Cycling

16A.3.11 There is no designated cycle infrastructure within the immediate vicinity of the Site. However, existing cycle track can be observed around the HPC campus roundabout. There are several locations within the Study Area where good cycling infrastructure can be observed such as along Homberg Way.

16A.3.12 National Cycle Route (NCR) 3 is the only national cycle route that is present within the Study Area, which runs through Bridgwater and crosses the A38 Broadway.

Public Rights of Way (PRoW)

16A.3.13 A desk-study has been undertaken to identify PRoW within the Study Area which may need to be closed or diverted (temporarily or permanently) to manage any potential conflict between non-motorised users and development generated traffic.

16A.3.14 Based on the current baseline, there are no PRoWs identified within vicinity of the Works Area which are likely to require closure or diversion as part of the Proposed

Works. There are PRoW that intersect road links along the preferred traffic route. In addition, Footpath WL 23/95 (which forms part of the promoted King Charles III Coast Path Brean to Minehead National Trail) is temporarily diverted to facilitate the construction of HPC. This footpath will be reverted to its existing alignment upon completion of HPC construction. Whilst it will then pass through the Works Area (which extends beyond the Site due to works in the marine environment) it is not expected to require any closures or diversions as most of the marine works will be completed by this time.

16A.3.15 Details on PRoW interacting with road links are described in **Table 16A-2** and illustrated on **Figure 16A-3: PRoW in the vicinity of the study area**.

Table 16A-2- PRoW Network

PRoW in the Study Area
WL 23/95 (Kings Charles III Coast Path Brean Down to Minehead) - located North of the Site, this path runs around the Sea Wall of the Hinkley Point Power Stations. The section of WL 23/95 north of Hinkley Point C has been temporarily closed since May 2012.
WL 23/70/1 - this is a restricted byway running adjacent to Wick Moor Drove which later diverts as byway No. 23/57.
BW 34/1 – starting from Wembdon Rise crossing A39 Homberg Way, this footway follows Wares Lane continuing up to Booth Way.
WL23/59 - the path crosses Wick Moor Drove diagonally, extending in an east-west direction from West Brook to Stogursey Brook.
BW25/22 - starting from Bolham Bridge at Withycombe Hill and runs southwest to Moxhill Farm and alongside Moxhill Rhyne to the parish boundary. Continues to Beere Manor Farm as FP No.5/29.
BW38/3 - runs on the West Quay along the riverbank of the River Parrett from the Dock Cottages up to Linham Road, crossing A39 Western Way.
BW5/22 - starting Lovers Walk through High Street, BW5/22 runs to Old Town Mill in a south-westerly direction over a stream and continues to Brooklands Farm and thence south westerly across a stream to Blackmore Lane crossing A39 Cannington Bypass.
BW38/14 - starting from Quantock Road and runs Northeast to Borough boundary and on to Wembdon.
BW34/6 - starting from the junction of FP No 34/4 and 34/5 opposite the entrance to Church Farm, this runs in Eastern direction to Crow pill Rhyne intersecting A39 Homberg Way.

Local road safety

16A.3.16 A number of collision clusters were identified on A39 Cannington Bypass, The Drove/Wylds Road, Dunball Roundabout and A38 Taunton Road/Huntworth Roundabout. Typically, collision clusters occur at, and on the approach to junctions, however it is notable that shunt collisions due to driver behaviour featured heavily within the data.

16A.3.17 The annual PIA rates calculated from the collision data have been assessed within **Chapter 16: Traffic and Transport** of the ES. The collision data revealed that there are no underlying highway design and / or safety issues within the Search Area, with no patterns of collision type, location, or movement revealed by the data. Therefore, due to the level of traffic associated with the Proposed Works and assumed usage of the preferred routing and timing of the traffic, it is considered unlikely that road safety issues will arise.

16A.4 Traffic management measures

Introduction

16A.4.1 To minimise the impact of decommissioning traffic on the local road network and local communities surrounding the HPB Site, off-site traffic management measures have been identified.

16A.4.2 There are two routes available from the HPB Site to join the M5, and they are presented in **Figure 16A-2: Anticipated fixed routes for HGVs** and described below:

- **Northern Route (Route 1) -** starts from Wick Moor Drove via an unnamed rural road connecting Withycombe Hill and passing through Cannington Bypass before proceeding further on New Road. New Road joins A39 Quantock Road at the A39 New Road roundabout and Route 1 continues onto Homberg Way and The Drove. Route 1 joins Bristol Road at the Bristol Road traffic signal junction and then continues northwards onto the Dunball Roundabout to join the M5 at the Dunball Interchange (M5 Junction 23).
- **Southern Route (Route 2)** -This route shares the same route as Route 1 up to A39 Quantock Road. At Quantock Road / Homberg Way roundabout, Route 2 continues onto Quantock Road proceeding further Wembdon Road and joining the A38 Taunton Road at Broadway / Taunton Road traffic signal junction. Route 2 continuous southwards along the A38 Taunton Road to join the M5 at the Huntworth Interchange (M5 Junction 24).

16A.4.3 These routing strategies are the principal measures to manage the impacts of decommissioning traffic.

16A.4.4 The following management measures are proposed to additionally reduce the impacts on the local highways network and local users.

16A.4.5 To date, there has not been an identified need for temporary parking restrictions to manage the HGV movements during the Proposed Works, and Temporary Traffic Regulation Order (TTRO) applications have not been made.

16A.4.6 Radioactive wastes consigned off-site will be transported off-site utilising processes already embedded during station operation and in-line with the requirements of the Radioactive Materials (Road Transport) Act 1991 (as amended)[4] and are therefore not considered within this Outline CTMP.

HGV emission and noise

16A.4.7 All vehicles used for the Proposed Works will be to Euro standard IV class. The drivers should avoid idling their engines for large periods of time and keep speeds low. Due to the very long overall programme for decommissioning to achievement of Final End State conditions, the vehicle specifications requirement will be reviewed in line with technological advances during each key phase activities.

Wheel cleaning and vehicle sheeting

16A.4.8 If necessary, the Contractor will deploy a mechanical road sweeper, manual sweeping, scraping and/or jet washing to further ensure the site roads remains clear of dirt and debris to avoid carryover onto local roads.

16A.4.9 Vehicles carrying loads that could generate dust or carrying objects that could be shed during carriage will be sheeted, where appropriate, to minimise the amount of debris transferred to the local road network.

Information packs and communications

16A.4.10 Information packs will be provided to all contractors engaged to deliver the Proposed Works, which will form part of the contractual agreement between the relevant contractors and the Site Licensee. The information pack will contain the details of the following CTMP requirements:

- Decommissioning transport routes;
- HPB decommissioning site internal road layout;
- CTMP protocols;
- Guidance on standard communication procedures between contractors and the Site; and
- Site contacts (emergency and non-emergency).

16A.4.11 A timetable will be developed and communicated to the Contractor(s) to help minimise queues and delays in the vicinity of the Site, by ensuring that HGV delivery vehicles to Site are distributed across the working day where possible.

16A.4.12 The timing of HGV movements to the Site related to the Proposed Works, will be confirmed by the Site Licensee and relevant details will be addressed in the CTMP. Upon commencement, all deliveries, operatives and visitors to the Site will report to the security gate. This will be communicated to all contractors at their pre-start meeting and in the overarching Site Information Pack.

[4] UK Government (1991). Radioactive Materials (Road Transport) Act 1991 (as amended). Available at: Radioactive Material (Road Transport) Act 1991 (legislation.gov.uk).

16A.4.13 The Information Pack will be issued to suppliers in advance of the delivery date to allow the supplier to inform their drivers and also to enable the drivers to become familiar with the Site layout and safety procedures prior to entering the Site.

16A.4.14 The main contractor will develop a site layout plan highlighting the primary access point for the Proposed Works, any loading bays[5] (if applicable), pedestrian/vehicular segregation, welfare, storage, security and materials handling that would be enforced following full site establishment.

16A.4.15 Given the remote location of the Site in relation to the public transport network, the opportunity for employees and contractors to travel to work by public transport is not considered practical. The distance of the Site from the established cycle network and lack of footway connections to local amenities and establishments means that travel to work by active modes is unlikely to be chosen by employees and contractors. However, car sharing is something that can be promoted. To identify and support travel choice initiatives, a site travel information pack such as existing public transport information and car-sharing club could be developed and distributed to construction staff.

16A.5 Traffic management governance and structure

Introduction

16A.5.1 It is important that a strong management structure is in place to oversee the CTMP and ensure the CTMP objectives are met and that continued monitoring and review of the CTMP is maintained. The Site Licensee will consider assigning a Transport Co-ordination Officer (TCO) to govern traffic movements associated with the Proposed Works as appropriate.

Monitoring and Review

16A.5.2 The Site Licensee will undertake monitoring as necessary to ensure compliance with the requirements of the CTMP, this will include the maintenance of traffic management measures. Short reviews – called Project Safety Reviews (PSR) – will look at specific risks associated with decommissioning. The appointed Contractor will also undertake monitoring as necessary to ensure compliance with the requirements of the CTMP.

Compliance

16A.5.3 All parties, including staff and visitors will be required to comply with the requirements set out in the CTMP.

Enforcement and Corrective Measures

16A.5.4 Staff will submit a Learning Capture Form (LCF) for any vehicle/pedestrian accidents, any vehicle/pedestrian near misses and any unsafe vehicle movements observed off-site and on-site (which includes vehicles not following CTMP and Site

[5] Where material may be loaded or unloaded on to HGVs

rules). Additional monitoring and review will be carried out as part of Project Safety Review (PSR) process and relevant actions taken where relevant.

16A Figures

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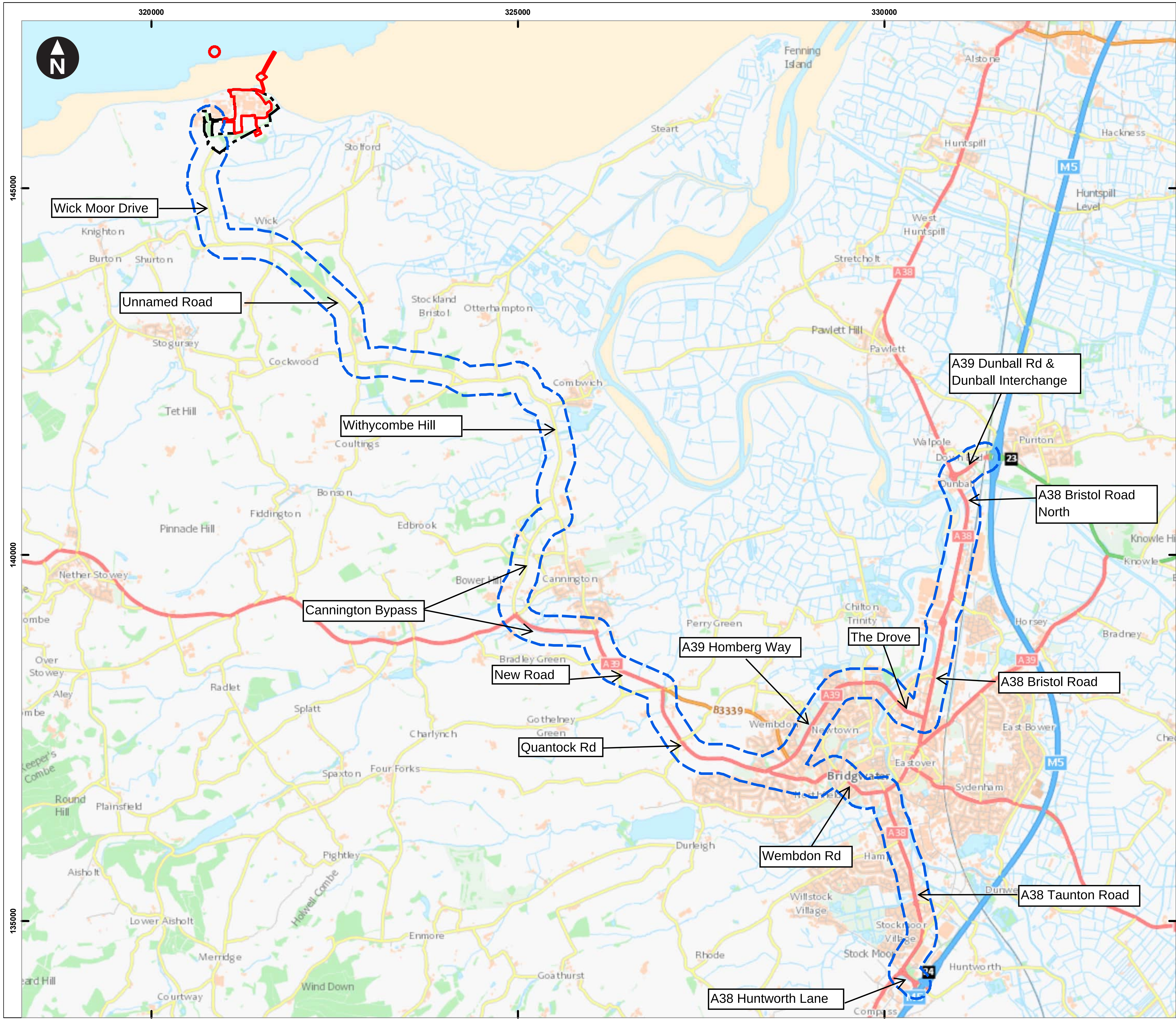

Key

Indicative Dismantling Works Area ("Works Area")

Nuclear Site Licence Boundary ("The Site")

Study area

0 500 1,000 1,500 2,000 2,500 m

Scale at A3: 1:50,000

Decommissioning of Hinkley Point B Nuclear Power Station
Environmental Statement

Figure 16A.1
Proposed study area

March 2024

852351-WSPE-XX-XX-FG-OT-00006_S2_P01.1

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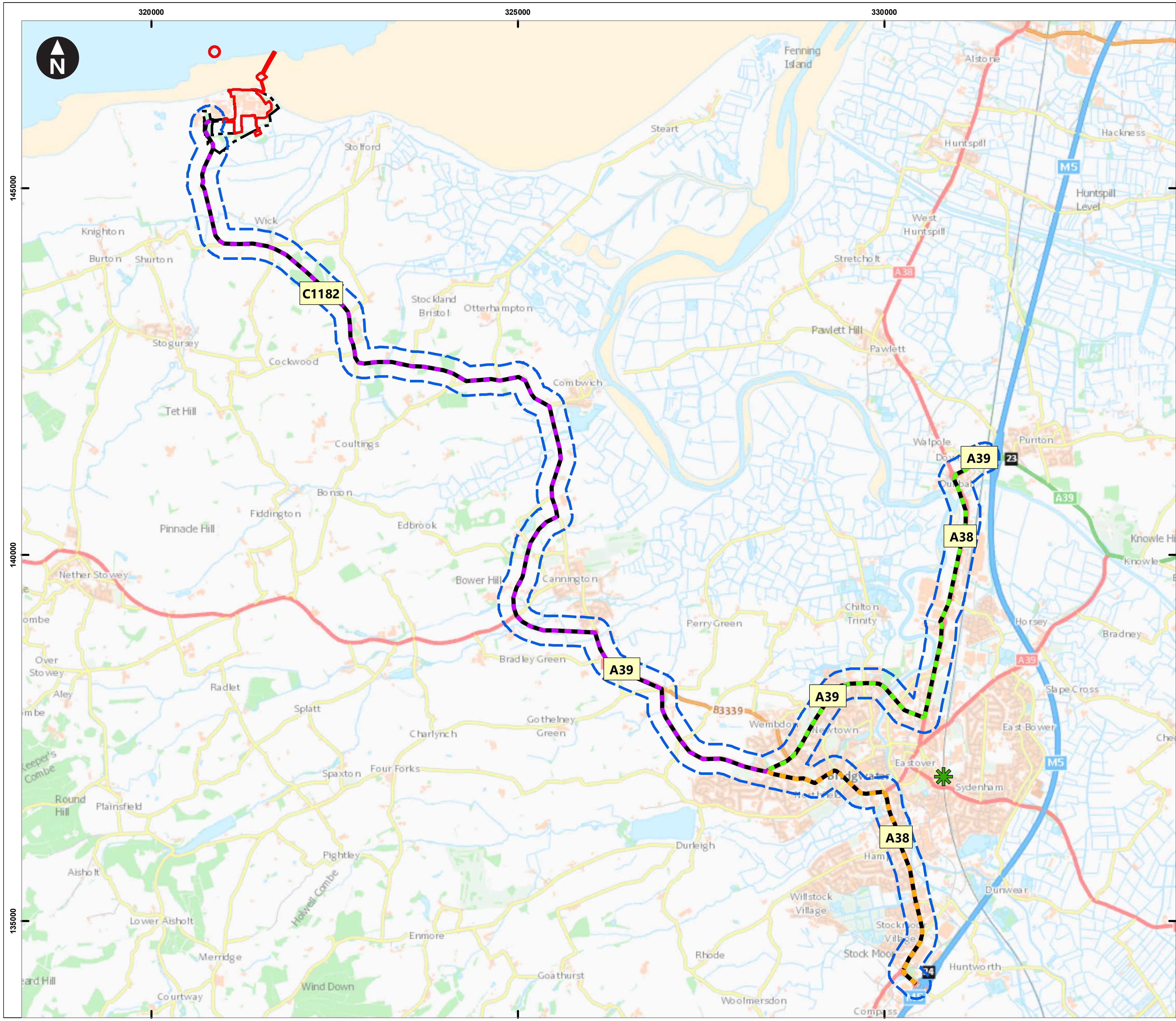

Key

- Indicative Dismantling Works Area ("Works Area")
- Nuclear Site Licence Boundary ("The Site")
- Study area
- Bridgwater Railway Station
- Access Route
- Northern Route: A39 Cannington Bypass Roundabout -Homberg way -A38 Bristol Road -Dunball Interchange
- Southern Route: A39 Quantock Road- Quantock Road- Broadway -Taunton road -Huntworth Interchange

0 500 1,000 1,500 2,000 2,500 m

Scale at A3: 1:50,000

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Decommissioning of Hinkley Point B Nuclear Power Station
Environmental Statement

Figure 16A.2
Anticipated fixed routes for HGV

March 2024

wsp

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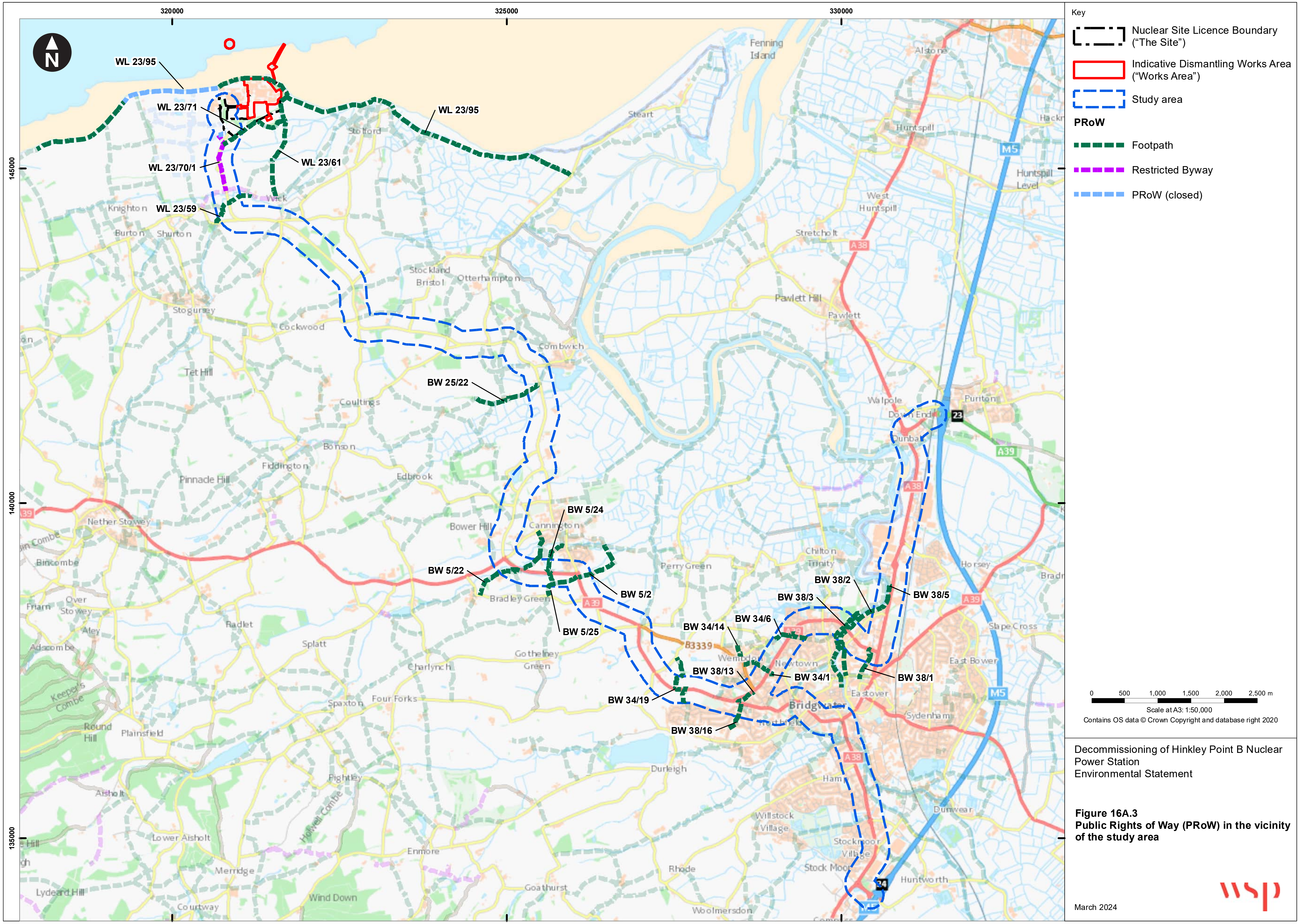

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Decommissioning of Hinkley Point B Nuclear Power Station
Environmental Statement

Figure 16A.3
Public Rights of Way (PRoW) in the vicinity of the study area

March 2024

852351-WSPE-XX-XX-FG-OT-0010_S2_P01.1

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16B

Collision Data

PUBLIC

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Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months

Selection: **Notes:**

Table 1 - Accidents by Month

	2018	2019	2020	2021	2022	2023	Total
January	-	4	1	2	3	2	12
February	-	4	2	2	1	3	12
March	-	4	3	3	1	3	14
April	2	2	1	4	3	-	12
May	1	4	1	2	4	-	12
June	1	2	1	1	2	-	7
July	2	2	3	4	-	-	11
August	5	4	1	3	1	-	14
September	1	2	2	5	2	-	12
October	-	2	1	3	1	-	7
November	4	3	4	1	2	-	14
December	2	4	3	3	2	-	14
TOTAL	18	37	23	33	22	8	141

Table 2 - Casualties by Month

	2018	2019	2020	2021	2022	2023	Total
January	-	4	5	2	4	71	86
February	-	4	5	2	1	6	18
March	-	5	3	3	1	3	15
April	2	2	1	5	4	-	14
May	3	6	1	2	7	-	19
June	1	2	1	1	2	-	7
July	2	2	3	8	-	-	15
August	10	5	1	3	1	-	20
September	1	2	3	7	3	-	16
October	-	3	1	3	3	-	10
November	4	3	5	1	2	-	15
December	4	5	5	3	3	-	20
TOTAL	27	43	34	40	31	80	255

Table 3 - All Accidents by Severity

	2018	2019	2020	2021	2022	2023	Total
Fatal	0	0	0	0	0	0	0
Serious	1	5	4	6	5	3	24
Slight	17	32	19	27	17	5	117
TOTAL	18	37	23	33	22	8	141

Table 4 - Casualties by Severity

	2018	2019	2020	2021	2022	2023	Total
Fatal	0	0	0	0	0	0	0
Serious	1	5	4	6	6	20	42
Slight	26	38	30	34	25	60	213
TOTAL	27	43	34	40	31	80	255

Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months

Selection: **Notes:**

Table 5 - Pedestrian Accidents by Severity

	2018	2019	2020	2021	2022	2023	Total
Fatal	0	0	0	0	0	0	0
Serious	0	1	0	2	2	2	7
Slight	1	1	3	0	1	0	6
TOTAL	1	2	3	2	3	2	13

Table 6 - Cycle Accidents by Severity

	2018	2019	2020	2021	2022	2023	Total
Fatal	0	0	0	0	0	0	0
Serious	0	2	0	0	0	0	2
Slight	1	11	1	1	4	1	19
TOTAL	1	13	1	1	4	1	21

Table 7 - Motor Vehicle Only Accidents by Severity

	2018	2019	2020	2021	2022	2023	Total
Fatal	0	0	0	0	0	0	0
Serious	1	2	4	4	3	1	15
Slight	15	20	15	26	13	4	93
TOTAL	16	22	19	30	16	5	108

Table 8 - 60+ Accidents by Severity

	2018	2019	2020	2021	2022	2023	Total
Fatal	0	0	0	0	0	0	0
Serious	0	1	0	2	1	1	5
Slight	3	5	0	3	0	1	12
TOTAL	3	6	0	5	1	2	17

Table 9 - Child Accidents by Severity

	2018	2019	2020	2021	2022	2023	Total
Fatal	0	0	0	0	0	0	0
Serious	0	1	0	1	0	0	2
Slight	1	5	0	2	1	0	9
TOTAL	1	6	0	3	1	0	11

Table 10 - P2W Accidents by Severity

	2018	2019	2020	2021	2022	2023	Total
Fatal	0	0	0	0	0	0	0
Serious	0	0	0	0	1	1	2
Slight	5	3	1	0	1	2	12
TOTAL	5	3	1	0	2	3	14

Details of Personal Injury Accidents for Period - 01/04/2018 to 31/03/2023 (60) months

Selection:

Notes:

Police Ref. / Road No. / 2nd Road No. / Grid Ref.	Day / Date / Time / D/L / R.S.C / Weather / Speed / Account of Accident	Location Description	Vehicles: Veh No / Type / Manv / Dir / Class	Casualties: Sex / Age / Sev

Causation Factor:

181803840
R1: A 38
E 330,852
N 139,266

Sunday
15/04/2018
0935hrs
Daylight:street lights present
Dry
Fine without high winds
40 mph

A38 BRISTOL ROAD, NEAR EXPRESS PARK ROUNDABOUT, BRIDGWATER

Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Car	Going ahead	N to S	Dri	M	72	Slight

Causation Factor:		Participant:	Confidence:
1st:	Illness or disability, mental or physical	Vehicle 001	Very Likely

V1 TRAVELLING SOUTH. DRIVER MOMENTARILY BLACKED OUT, LOSING CONTROL OF V1 WHICH MOUNTED THE GRASS VERGE AND COLLIDED WITH A LAMP POST.

181803847
R1: A 38
R2: U
E 330,681
N 138,428

Wednesday
18/04/2018
1210hrs
Daylight:street lights present
Dry
Fine without high winds
30 mph

A38 BRISTOL ROAD, AT JUNCTION WITH VOLKSWAGEN GARAGE, BRIDGWATER

Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Car	Turning left	W to N				
Veh 2	Pedal cycle	Going ahead	N to S	Dri	F	69	Slight

Causation Factor:		Participant:	Confidence:
1st:	Vehicle travelling along pavement	Vehicle 002	Very Likely
2nd:	Cyclist entering road from pavement	Vehicle 002	Very Likely
3rd:	Vehicle blind spot	Vehicle 001	Possible
4th:	Passing too close to cyclist, horse rider or pedestrian	Vehicle 001	Possible
5th:	Failed to look properly	Vehicle 001	Very Likely

V1 TRAVELLING EAST, V2 (P/CYCLE) TRAVELLING SOUTH. V1 WAS TURNING LEFT NORTH. V2 WAS RIDING ON THE PAVEMENT AN WAS HIT BY V1.

181804370
R1: A 38
R2: U
E 330,601
N 138,027

Tuesday
08/05/2018
1851hrs
Daylight:street lights present
Dry
Fine without high winds
30 mph

A38 BRISTOL ROAD, BRIDGWATER

Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Car	Stopping	NE to SW	FSP	F	11	Slight
Veh 1	Car	Stopping	NE to SW	FSP	F	10	Slight
Veh 2	Car	Stopping	NE to SW	Dri	M	51	Slight
Veh 3	Car	Stopping	NE to SW				

Causation Factor:		Participant:	Confidence:
1st:	Following too close	Vehicle 003	Very Likely
2nd:	Following too close	Vehicle 002	Very Likely
3rd:	Sudden braking	Vehicle 001	

V1, V2 & V3 TRAVELLING SOUTH WEST. V1 STOPPED AT ZEBRA CROSSING TO LET PEDESTRIANS CROSS. V2 ALSO STOPPED BUT V3 FAILED TO STOP IN TIME AND COLLIDED WITH REAR OF V2 WHICH IN TURN COLLIDED WITH REAR OF V1.

Details of Personal Injury Accidents for Period - **01/04/2018** **to** **31/03/2023** (60) months

Selection:

Notes:

Police Ref. / **Road No.** / **2nd Road No.** / **Grid Ref.**	Day / Date / Time / D/L / R.S.C / Weather / Speed	Location Description	Vehicles: Veh No / Type / Manv / Dir / Class	Casualties: Sex / Age / Sev

Account of Accident

Causation Factor:

181805002
R1: A 38
R2: U
E 330,071
N 136,482

Wednesday
06/06/2018
0815hrs
Daylight:street lights present
Dry
Fine without high winds
30 mph

A38 TAUNTON ROAD, AT JUNCTION WITH ELMWOOD AVENUE, BRIDGWATER

Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Car	Turning right	NW to SW				
Veh 2	M/C < 125 cc	Going ahead	SE to NW	Dri	F	49	Slight

Causation Factor:		**Participant:**	**Confidence:**
1st:	Poor turn or manoeuvre	Vehicle 001	Very Likely
2nd:	Failed to look properly	Vehicle 001	Very Likely

V1 TRAVELLING SOUTH EAST, V2 (M/CYCLE) TRAVELLING OPPOSITE DIRECTION. V1 ENTERED RIGHT TURN FILTER LANE AND TURNED RIGHT SOUTH WEST. V1 COLLIDED WITH V2.

181804926
R1: U
R2: U
E 329,696
N 136,838

Monday
16/07/2018
1630hrs
Daylight:street lights present
Wet/Damp
Fine without high winds
30 mph

FRIARN ST, BRIDGWATER

Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Car	Going ahead	W to E				
Veh 2	Car	Turning right	W to S	Dri	M	49	Slight

V1 & V2 TRAVELLING EAST. V1 STOPPED TO TURN RIGHT SOUTH, V2 FAILED TO STOP IN TIME AND COLLIDED WITH REAR OF V1.

181807961
R1: A 39
E 329,406
N 136,997

Tuesday
17/07/2018
1810hrs
Daylight:street lights present
Dry
Fine without high winds
30 mph

A39 NORTH STREET, BRIDGWATER.

Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Car	Going ahead	NW to SE	Ped	M	50	Slight

Causation Factor:		**Participant:**	**Confidence:**
1st:	Failed to look properly	Casualty 001	Very Likely
2nd:	Impaired by drugs (illicit or medicinal)	Casualty 001	Very Likely

V1 TRAVELLING SOUTH EAST, SLOWLY DUE TO THE VOLUME OF TRAFFIC. PEDESTRIAN THEN WALKED OUT INTO THE ROAD IN FRONT OF V1. V1 COLLIDED WITH PEDESTRIAN.

Details of Personal Injury Accidents for Period - **01/04/2018** **to** **31/03/2023** (60) months

Selection:

Notes:

Police Ref. / Road No. / 2nd Road No. / Grid Ref.	Day / Date / Time / D/L / R.S.C / Weather / Speed / Account of Accident	Location Description	Vehicles: Veh No / Type / Manv / Dir / Class	Casualties: Sex / Age / Sev

Causation Factor:

181900599
R1: A 39
E 329,583
N 138,245

Tuesday
07/08/2018
1340hrs
Daylight:street lights present
Dry
Fine without high winds
30 mph

A39 WESTERN WAY, BRIDGWATER.

Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Car	Turning left	E to S	Dri	M	50	Slight

V1 TRAVELLING WEST LOOKING TO TURN LEFT SOUTH. V1 SWERVED AND COLLIDED WITH A HEDGE.

181900633
R1: A 38
R2: A 38
E 330,424
N 135,274

Friday
10/08/2018
1410hrs
Daylight:street lights present
Dry
Fine without high winds
30 mph

A38 TAUNTON ROAD, AT JUNCTION WITH STOCKMOOR DRIVE, NORTH PETHERTON.

Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Car	Going ahead	W to E				
Veh 2	Bus/coach	Going ahead	W to E	Seat	F	75	Slight
Veh 2	Bus/coach	Going ahead	W to E	Seat	F	36	Slight
Veh 2	Bus/coach	Going ahead	W to E	Seat	F	54	Slight

Causation Factor:		Participant:	Confidence:
1st:	Failed to look properly	Vehicle 002	Very Likely
2nd:	Failed to judge other persons path or speed	Vehicle 002	Very Likely

V1 & V2 (BUS) TRAVELLING EAST. V1 STOPPED AT JUNCTION, V2 FAILED TO STOP IN TIME AND COLLIDED WITH REAR OF V1.

181805636
R1: A 38
R2: U
E 330,284
N 134,267

Wednesday
15/08/2018
1942hrs
Daylight:street lights present
Dry
Fine without high winds
30 mph

A38 BRIDGWATER ROAD, AT JUNCTION WITH MARKET WAY, NORTH PETHERTON.

Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Car	Going ahead	SE to NW				
Veh 2	M/C < 125 cc	Going ahead	SE to NW	Dri	M	24	Slight

V1 & V2 (M/CYCLE) TRAVELLING NORTH WEST. V1 BRAKED ON JOINING A QUEUE OF VEHICLES AS LIGHTS WERE ON RED V2 COLLIDED WITH V1.

Details of Personal Injury Accidents for Period - **01/04/2018** **to** **31/03/2023** (60) months

Selection:

Notes:

Police Ref. / Road No. / 2nd Road No. / Grid Ref.	Day / Date / Time / D/L / R.S.C / Weather / Speed / Account of Accident	Location Description	Vehicles: Veh No / Type / Manv / Dir / Class	Casualties: Sex / Age / Sev

Causation Factor:

181806060
R1: A 38
R2: A 39
E 330,937
N 141,110

Friday
17/08/2018
2154hrs
Darkness: street lights present
Dry
Fine without high winds
50 mph

A38 BRISTOL ROAD JUNCTION WITH A39 DUNBALL ROUNDABOUT, PURITON.

Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Car	Going ahead	NW to SE	RSP	F	17	Slight
Veh 1	Car	Going ahead	NW to SE	RSP	F	28	Slight
Veh 1	Car	Going ahead	NW to SE	Dri	M	49	Serious
Veh 1	Car	Going ahead	NW to SE	FSP	F	22	Slight

Causation Factor:		**Participant:**	**Confidence:**
1st:	Swerved	Vehicle 001	Very Likely
2nd:	Loss of control	Vehicle 001	Possible
3rd:	Careless/Reckless/In a hurry	Vehicle 001	

V1, TRAVELLING SOUTH EAST, FAILED TO NEGOTIATE THE ROUNDABOUT AND STRUCK THE CENTRAL KERB. V1 THEN HIT THE KERB AND THEN COLLIDED WITH A TREE IN THE CENTRE OF THE ROUNDABOUT.

181806211
R1: A 38
R2: U
E 330,360
N 135,584

Tuesday
28/08/2018
1527hrs
Darkness: street lights present
Dry
Fine without high winds
30 mph

A38 TAUNTON ROAD, AT JUNCTION WITH WILLS ROAD, BRIDGWATER.

Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Car	Turning right	W to S				
Veh 2	M/C > 500 cc	Going ahead	S to N	Dri	M	45	Slight
Veh 3	Bus/coach	Going ahead	S to N				

V1 TRAVELLING EAST, V2 (M/CYCLE) & V3 (BUS) TRAVELLING NORTH. V2 OVERTOOK V3. V1 PULLED OUT TO TURN RIGHT SOUTH AND COLLIDED WITH V2. V3 WAS NOT HIT.

181806040
R1: A 38
E 331,134
N 140,729

Wednesday
05/09/2018
0645hrs
Daylight:street lights present
Dry
Fine without high winds
50 mph

A38 BRISTOL ROAD, PURITON.

Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Car	Parked	0 to 0	Dri	F	43	Slight
Veh 2	Car	Going ahead	N to S				

V2 TRAVELLING SOUTH, V1 PARKED FACING SAME DIRECTION. V2 FAILED TO STOP IN TIME AND COLLIDED WITH REAR OF V1.

Details of Personal Injury Accidents for Period - **01/04/2018** **to** **31/03/2023** (60) months

Selection:

Notes:

Police Ref. / Road No. / 2nd Road No. / Grid Ref.	Day / Date / Time / D/L / R.S.C / Weather / Speed	Location Description	Vehicles: Veh No / Type / Manv / Dir / Class	Casualties: Sex / Age / Sev

Account of Accident

Causation Factor:

181807421
R1: U
R2: A 38
E 329,991
N 136,793

Friday
02/11/2018
1630hrs
Daylight:street lights present
Dry
Fine without high winds
30 mph

TAUNTON ROAD, BRIDGWATER.

Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Car	Going ahead	N to S				
Veh 2	M/C > 125 cc	O/take s/veh o/side	N to S	Dri	M	30	Slight

V1 & V2 (M/CYCLE) TRAVELLING SOUTH. V1 WAS WAITING IN STATIONARY TRAFFIC ON A38, AND CHANGED LANES. V2 WAS OVERTAKING QUEUING TRAFFIC BEHIND V1, WHEN V1 PULLED OUT AND COLLIDED WITH V2.

181807494
R1: A 38
R2: U
E 330,761
N 139,087

Friday
02/11/2018
1330hrs
Daylight:street lights present
Dry
Fine without high winds
30 mph

A38 BRISTOL ROAD, AT JUNCTION WITH EXPRESS PARK, BRIDGWATER

Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Bus/coach	Going ahead	W to E				
Veh 2	Car	Going ahead	W to E	Dri	F	25	Slight

V1 (BUS) & V2 TRAVELLING EAST. BOTH VEHICLES WERE STATIONARY AT THE ROUNDABOUT. V2 STARTED TO MOVE BUT V1 REMAINED STILL AND V2 COLLIDED WITH REAR OF V1.

181902092
R1: A 39
R2: U
E 329,616
N 136,816

Friday
09/11/2018
1205hrs
Daylight:street lights present
Dry
Fine without high winds
30 mph

A39 BROADWAY, AT JUNCTION WITH FRIARN STREET, BRIDGWATER

Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Goods 3.5 - 7.5t	Going ahead	NW to SE				
Veh 2	M/C > 125 cc	Turning left	N to SE	Dri	M	20	Slight

Causation Factor:		**Participant:**	**Confidence:**
1st:	Failed to look properly	Vehicle 002	Very Likely
2nd:	Junction overshoot	Vehicle 002	Very Likely

V1 TRAVELLING SOUTH EAST, V2 (M/CYCLE) TRAVELLING SOUTH. V2 PULLED OUT FROM JUNCTION WITHOUT LOOKING AND COLLIDED WITH V1.

Details of Personal Injury Accidents for Period - **01/04/2018** **to** **31/03/2023** (60) months

Selection:

Notes:

Police Ref. / Road No. / 2nd Road No. / Grid Ref.	Day / Date / Time / D/L / R.S.C / Weather / Speed	Location Description	Vehicles: Veh No / Type / Manv / Dir / Class	Casualties: Sex / Age / Sev
	Account of Accident			
Causation Factor:				

181807800	Tuesday	A38 DUNBALL ROUNDABOUT, AT JUNCTION WITH A39, PURITON.	Veh 1	Car	Wait to turn right	SE to NW	Dri	M	59	Slight
	20/11/2018		Veh 2	Car	Going ahead	SE to NW				
R1: A 38	1830hrs									
R2: A 39	Darkness: street lighting									
E 330,931	Dry									
N 141,035	Unknown									
	50 mph									

V1 & V2 TRAVELLING NORTH WEST. V1 WAS STOPPED AT THE ROUNDABOUT WHEN V2 COLLIDED WITH REAR OF V1. V2 FAILED T STOP.

181900230	Friday	A38 TAUNTON ROAD, NORTH PETHERTON.	Veh 1	Car	Going ahead	E to N	Dri	F	23	Slight
	07/12/2018		Veh 2	Car	Going ahead	S to N	Dri	F	24	Slight
R1: A 38	0912hrs		Veh 2	Car	Going ahead	S to N	FSP	F	44	Slight
R2: U	Daylight:street lights present									
E 330,387	Wet/Damp									
N 135,439	Raining without high winds									
	30 mph									

Causation Factor:		**Participant:**	**Confidence:**
1st:	Failed to signal/Misleading signal	Vehicle 001	Very Likely
2nd:	Failed to look properly	Vehicle 001	Very Likely
3rd:	Failed to judge other persons path or speed	Vehicle 001	

V1 TRAVELLING WEST, V2 TRAVELLING NORTH. V2 TURNED RIGHT NORTH AND COLLIDED WITH V2.

181902538	Tuesday	A39 BROADWAY, AT JUNCTION WITH ALBERT STREET, BRIDGWATER.	Veh 1	Car	Turning right	SW to SE				
	11/12/2018		Veh 2	Car	Going ahead	SE to NW	Dri	F	24	Slight
R1: A 39	1740hrs									
R2: U	Darkness: street lights present									
E 329,581	Wet/Damp									
N 136,836	Fine without high winds									
	30 mph									

V1 TRAVELLING NORTH EAST, V2 TRAVELLING NORTH WEST. V1 PULLED OUT TO TURN RIGHT SOUTH EAST AND COLLIDED WITH V2.

Details of Personal Injury Accidents for Period - 01/04/2018 to 31/03/2023 (60) months

Selection: **Notes:**

Police Ref. / Road No. / 2nd Road No. / Grid Ref.	Day / Date / Time / D/L / R.S.C / Weather / Speed / Account of Accident	Location Description	Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
191900065	Thursday	A39 HOMBERG WAY, BRIDGWATER.	Veh 1	Car	Wait go ahead held up	NE to SW	Dri	F	27	Slight
	03/01/2019		Veh 2	Car	Going ahead	NE to SW				
R1: A 39	0912hrs									
	Daylight:street lights present									
E 329,146	Dry									
N 137,889	Fine without high winds									
	30 mph									

V1 & V2 TRAVELING SOUTH WEST. V2 WAS TAILGATING V1 AND V2 COLLIDED WITH REAR OF V1.

Police Ref.	Day / Date	Location Description	Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
191902758	Monday	A38 BRISTOL ROAD, PURITON.	Veh 1	Car	Going ahead	SE to NW				
	07/01/2019		Veh 2	Pedal cycle	Going ahead	NW to SE	Dri	M	49	Slight
R1: A 38	0748hrs									
	Daylight:street lights present									
E 330,898	Wet/Damp									
N 141,170	Fine without high winds									
	60 mph									

Causation Factor:		**Participant:**	**Confidence:**
1st:	Failed to look properly	Vehicle 002	Very Likely
2nd:	Failed to judge other persons path or speed	Vehicle 002	Very Likely

V1 TRAVELLING NORTH WEST, V2 (P/CYCLE) TRAVELLING OPPOSITE DIRECTION. V2 DRIFTED INTO OPPOSITE CARRIAGEWAY ANI COLLIDED WITH V1.

Police Ref.	Day / Date	Location Description	Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
191900178	Thursday	A39 BROADWAY, BRIDGWATER.	Veh 1	Car	Going ahead	SE to NW	Dri	F	37	Slight
	10/01/2019		Veh 2	Car	Going ahead	SE to NW				
R1: A 39	0825hrs									
	Daylight:street lights present									
E 329,648	Dry									
N 136,768	Fine without high winds									
	30 mph									

V1 & V2 TRAVELLING NORTH WEST. V2 COLLIDED WITH REAR OF V1.

Details of Personal Injury Accidents for Period - **01/04/2018** **to** **31/03/2023** (60) months

Selection:

Notes:

Police Ref. / Road No. / 2nd Road No. / Grid Ref.	Day / Date / Time / D/L / R.S.C / Weather / Speed / Account of Accident	Location Description	Vehicles: Veh No / Type / Manv / Dir / Class	Casualties: Sex / Age / Sev

Causation Factor:

191903020
R1: A 38
R2: U
E 330,219
N 136,031

Thursday
24/01/2019
1718hrs
Darkness: street lights present
Dry
Fine without high winds
30 mph

A38 TAUNTON ROAD AT JUNCTION WITH UNNAMED ROAD, BRIDGWATER

Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Car	Turning left	NW to NE				
Veh 2	M/C > 125 cc	Going ahead	NW to SE	Dri	M	46	Slight

Causation Factor:		**Participant:**	**Confidence:**
1st:	Failed to look properly	Vehicle 001	Very Likely
2nd:	Failed to judge other persons path or speed	Vehicle 002	Very Likely

V1 & V2 TRAVELLING SOUTH EAST. V1 TURNED LEFT NORTH EAST AND COLLIDED WITH V2. RIDER OF V2 FELL FROM MACHINE.

191903317
R1: A 39
R2: U
E 329,803
N 136,742

Saturday
16/02/2019
2208hrs
Darkness: street lights present
Dry
Fine without high winds
30 mph

A39 BROADWAY, BY JUNCTION TURNING INTO MORRISONS CAR PARK, BRIDGWATER

Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Car	Turning right	W to S				
Veh 2	Car	Turning right	E to W	Dri	M	73	Slight

Causation Factor:		**Participant:**	**Confidence:**
1st:	Poor turn or manoevre	Vehicle 001	Very Likely

V1 TRAVELLING EAST, V2 TRAVELLING OPPOSITE DIRECTION. V1 TURNED RIGHT SOUTH AND COLLIDED WITH V2.

191903349
R1: A 39
R2: A 39
E 328,429
N 137,066

Sunday
17/02/2019
1240hrs
Daylight:street lights present
Dry
Fine without high winds
30 mph

A39 QUANTOCK ROAD, AT JUNCTION WITH HOMBERG WAY, BRIDGWATER.

Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Car	Going ahead	NE to SW				
Veh 2	M/C > 500 cc	Going ahead	NE to SW	Dri	M	40	Slight

Causation Factor:		**Participant:**	**Confidence:**
1st:	Failed to look properly	Vehicle 001	Very Likely

V1 & V2 (M/CYCLE) TRAVELLING SOUTH WEST. V1 MOVED FORWARD BUT V2 REMAINED STATIONARY. V1 COLLIDED WITH REAR OF V2.

Details of Personal Injury Accidents for Period - **01/04/2018** **to** **31/03/2023** (60) months

Selection:

Notes:

Police Ref. / Road No. / 2nd Road No. / Grid Ref.	Day / Date / Time / D/L / R.S.C / Weather / Speed	Location Description	Vehicles: Veh No / Type / Manv / Dir / Class	Casualties: Sex / Age / Sev

Account of Accident

Causation Factor:

191901228	Wednesday	FRIARN STREET, BRIDGWATER.	Veh 1	Car	Going ahead	W to E	Ped	F 41 Slight
	20/02/2019							
R1: U	0925hrs							
	Daylight:street lights present							
E 329,687	Dry							
N 136,838	Fine without high winds							
	30 mph							

V1 TRAVELLING EAST, PEDESTRIAN WAS WALKING SAME DIRECTION WITH A POST TROLLEY. V1 COLLIDED WITH PEDESTRIAN.

191903464	Tuesday	A38 TAUNTON ROAD, AT JUNCTION WITH MARSH LANE, NORTH PETHERTON.	Veh 1	Car	Turning right	SE to NE	Dri	M 30 Slight
	26/02/2019		Veh 2	M/C > 500 cc	O/take m/veh o/side	SE to NW		
R1: A 38	1625hrs							
R2: U	Daylight:street lights present							
E 330,509	Dry							
N 134,933	Fine without high winds							
	40 mph							

V1 & V2 (M/CYCLE) TRAVELLING NORTH WEST. V2 WAS OVERTAKING V1. V1 TURNED RIGHT NORTH EAST AND COLLIDED WITH V2.

191903563	Monday	A39 NORTH STREET, AT JUNCTION WITH CAMDEN ROAD, BRIDGWATER.	Veh 1	Car	Turning right	SE to NE		
	04/03/2019		Veh 2	Pedal cycle	Going ahead	NW to SE	Dri	M 41 Slight
R1: A 39	1020hrs							
R2: U	Daylight:street lights present							
E 329,367	Dry							
N 137,028	Fine without high winds							
	30 mph							

Causation Factor:		**Participant:**	**Confidence:**
1st:	Poor turn or manoevre	Vehicle 001	Very Likely
2nd:	Failed to look properly	Vehicle 001	Very Likely
3rd:	Failed to judge other persons path or speed	Vehicle 001	Possible
4th:	Passing too close to cyclist, horse rider or pedestrian	Vehicle 001	Possible

V1 TRAVELLING NORTH WEST, V2 (P/CYCLE) TRAVELLING OPPOSITE DIRECTION. V1 TURNED RIGHT NORTH EAST AND COLLIDED WITH V2.

Details of Personal Injury Accidents for Period - **01/04/2018** **to** **31/03/2023** (60) months

Selection:

Notes:

Police Ref. / Road No. / 2nd Road No. / Grid Ref.	Day / Date / Time / D/L / R.S.C / Weather / Speed	Location Description	Vehicles: Veh No	Type	Manv	Dir	Class	Casualties: Sex / Age / Sev
191901663 R1: A 39 R2: U E 329,359 N 138,185	Friday 08/03/2019 1510 hrs Daylight:street lights present Dry Fine without high winds 30 mph	A39 HOMBERG WAY, AT JUNCTION WITH REEDMOOR GARDENS, BRIDGWATER.	Veh 1	Pedal cycle	Going ahead	SW to NE	Dri	M 13 Slight
			Veh 2	Car	Wait go ahead held up	NW to SE		

Account of Accident: V1 (P/CYCLE) TRAVELLING NORTH EAST, V2 TRAVELLING SOUTH EAST. V2 EMERGED FROM SIDE ROAD TO TURN RIGHT SOUTH WEST AND COLLIDED WITH V1.

Police Ref. / Road No. / Grid Ref.	Day / Date / Time / D/L / R.S.C / Weather / Speed	Location Description	Veh No	Type	Manv	Dir	Class	Sex / Age / Sev
191906630 R1: A 38 E 330,702 N 138,494	Saturday 23/03/2019 1101 hrs Daylight:street lights present Dry Fine without high winds 30 mph	A38 BRISTOL ROAD, BRIDGWATER.	Veh 1	Car	Going ahead	NE to SW	FSP	M 59 Slight
			Veh 2	Car	Going ahead	NE to SW	Dri	F 60 Slight

Causation Factor:		Participant:	Confidence:
1st:	Sudden braking	Vehicle 002	Possible

V1 & V2 TRAVELLING SOUTH WEST. V1 STOPPED DUE TO TRAFFIC AHEAD, V2 FAILED TO STOP IN TIME AND COLLIDED WITH REA OF V1.

Police Ref. / Road No. / 2nd Road No. / Grid Ref.	Day / Date / Time / D/L / R.S.C / Weather / Speed	Location Description	Veh No	Type	Manv	Dir	Class	Sex / Age / Sev
191902040 R1: A 39 R2: U E 329,491 N 136,929	Monday 25/03/2019 1540 hrs Daylight:street lights present Dry Fine without high winds 30 mph	A39 NORTH STREET, AT JUNCTION WITH PENEL ORLIEU, BRIDGWATER.	Veh 1	Car	Turning left	NW to NE		
			Veh 2	Pedal cycle	Going ahead	NW to SE	Dri	M 30 Slight

V1 & V2 (P/CYCLE) TRAVELLING SOUTH EAST. V1 TURNED LEFT NORTH EAST AND COLLIDED WITH V2.

Details of Personal Injury Accidents for Period - **01/04/2018** **to** **31/03/2023** (60) months

Selection:

Notes:

Police Ref. / Road No. / 2nd Road No. / Grid Ref.	Day / Date / Time / D/L / R.S.C / Weather / Speed / Account of Accident	Location Description	Vehicles: Veh No / Type / Manv / Dir / Class	Casualties: Sex / Age / Sev

Causation Factor:

191902768
R1: A 38
R2: U
E 330,769
N 139,099

Thursday
25/04/2019
0950hrs
Daylight:street lights present
Dry
Fine without high winds
30 mph

A38 BRISTOL ROAD, AT JUNCTION WITH EXPRESS PARK, BRIDGWATER

Veh	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Car	Turning left	W to N				
Veh 2	Pedal cycle	Going ahead	S to N	Dri	M	42	Slight

Causation Factor:		**Participant:**	**Confidence:**
1st:	Failed to look properly	Vehicle 001	Possible
2nd:	Dazzling sun	Vehicle 001	Very Likely

V1 (UNMARKED POLICE VEHICLE) TRAVELLING EAST, V2 (P/CYCLE) TRAVELLING NORTH. V1 ENTERED ROUNDABOUT TO TURN LEFT AND COLLIDED WITH V2.

191905574
R1: A 38
R2: U
E 330,588
N 137,968

Monday
29/04/2019
1649hrs
Daylight:street lights present
Dry
Fine without high winds
30 mph

A38 BRISTOL ROAD, NEAR JUNCTION WITH KIMBERLEY TERRACE, BRIDGWATER.

Veh	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Goods > 7.5t	Going ahead	NE to SW				
Veh 2	Pedal cycle	Going ahead	NE to SW	Dri	M	44	Serious

Causation Factor:		**Participant:**	**Confidence:**
1st:	Failed to look properly	Vehicle 002	Possible
2nd:	Failed to judge other persons path or speed	Vehicle 002	Possible
3rd:	Impaired by alcohol	Vehicle 002	Possible
4th:	Impaired by drugs (illicit or medicinal)	Vehicle 002	Possible
5th:	Careless/Reckless/In a hurry	Vehicle 002	Possible
6th:	Illness or disability, mental or physical	Vehicle 002	Possible

V1 & V2 (P/CYCLE) TRAVELLING SOUTH WEST. RIDER OF V2 FELL FROM MACHINE WHILE TRYING TO REMOUNT AND COLLIDED WITH V1.

191907225
R1: A 38
R2: U
E 330,021
N 136,719

Wednesday
01/05/2019
1820hrs
Dry
Fine without high winds
30 mph

A38 TAUNTON ROAD, OUTSIDE ESSO SERVICE STATION, BRIDGWATER.

Veh	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Car	Turning right	E to N				
Veh 2	Pedal cycle	Going ahead	N to S	Dri	F	40	Slight

V1 TRAVELLING WEST, V2 (P/CYCLE) TRAVELLING SOUTH. V1 TURNED RIGHT TO JOIN THE MAIN ROAD. BUT COLLIDED WITH V2 WHICH WAS ON THE FOOTPATH.

Details of Personal Injury Accidents for Period - **01/04/2018** **to** **31/03/2023** (60) months

Selection:

Notes:

Police Ref. / Road No. / 2nd Road No. / Grid Ref.	Day / Date / Time / D/L / R.S.C / Weather / Speed / Account of Accident	Location Description	Vehicles: Veh No / Type / Manv / Dir / Class	Casualties: Sex / Age / Sev

Causation Factor:

191905694

R1: A 38
R2: A 39
E 330,002
N 136,769

Monday
13/05/2019
0851hrs
Daylight:street lights present
Dry
Fine without high winds
30 mph

A38 TAUNTON ROAD, AT JUNCTION WITH A39 BROADWAY, BRIDGWATER.

Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Car	Turning right	S to NE	Dri	M	81	Serious

Causation Factor:		Participant:	Confidence:
1st:	Illness or disability, mental or physical	Vehicle 001	Very Likely
2nd:	Road layout (eg bend, hill etc.)	Vehicle 001	Possible
3rd:	Poor turn or manoevre	Vehicle 001	

V1 TRAVELLING NORTH, DRIVER STOPPED AT THE TRAFFIC LIGHTS. WHEN THE LIGHTS CHANGED TO GREEN V1 STARTED TO TURN RIGHT NORTH EAST BUT THE DRIVER SUFFERED A MEDICAL EPISODE AND COLLIDED WITH A LAMP POST.

191905726

R1: A 39
E 326,783
N 138,258

Tuesday
14/05/2019
1832hrs
Daylight:street lights present
Dry
Fine without high winds
50 mph

A39 NEW ROAD, CANNINGTON.

Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Car	Wait go ahead held up	SE to NW				
Veh 2	Car	Wait go ahead held up	SE to NW	Dri	M	49	Slight
Veh 2	Car	Wait go ahead held up	SE to NW	FSP	M	57	Slight
Veh 3	Car	Wait go ahead held up	SE to NW	Dri	F	36	Slight
Veh 4	Car	Wait go ahead held up	SE to NW				

Causation Factor:		Participant:	Confidence:
1st:	Failed to judge other persons path or speed	Vehicle 001	Very Likely
2nd:	Dazzling sun	Vehicle 001	Very Likely

V1, V2, V3 & V4 TRAVELLING NORTH WEST. V2, V3 & V4 WERE ALL STATIONARY. V1 FAILED TO STOP IN TIME AND COLLIDED WIT REAR OF V2, WHICH COLLIDED WITH V3, WHICH COLLIDED WITH V4.

191905725

R1: A 38
R2: U
E 330,245
N 135,962

Thursday
16/05/2019
1705hrs
Daylight:street lights present
Dry
Fine without high winds
30 mph

A38 TAUNTON ROAD, AT JUNCTION WITH PARKSTONE AVENUE, BRIDGWATER.

Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Car	Going ahead	NW to SE				
Veh 2	Car	Going ahead	NW to SE	Dri	F	23	Slight
Veh 3	Car	Going ahead	NW to SE				

Causation Factor:		Participant:	Confidence:
1st:	Careless/Reckless/In a hurry	Vehicle 003	Very Likely

V1, V2 & V3 TRAVELLING SOUTH EAST. V1 STOPPED TO ALLOW A VEHICLE TO EXIT FROM PARKSTONE AVENUE. V2 STOPPED BEHIND V1. V3 COLLIDED WITH THE REAR OF V2, PUSHING V2 INTO THE REAR OF V1

Details of Personal Injury Accidents for Period - **01/04/2018** **to** **31/03/2023** (60) months

Selection:

Notes:

Police Ref. / Road No. / 2nd Road No. / Grid Ref.	Day / Date / Time / D/L / R.S.C / Weather / Speed	Location Description	Veh No	Type	Manv	Dir	Class	Sex / Age / Sev (Casualties)
191905978 **R1: A 39** **R2: U** **E 326,206** **N 138,566**	Wednesday 12/06/2019 1610hrs Daylight:street lights present Dry Fine without high winds 50 mph	A39 MAIN ROAD, AT JUNCTION WITH BLACKMORE LANE, CANNINGTON.	Veh 1 Veh 2	Goods < 3.5t Car	Going ahead Wait to turn right	NW to SE NW to W	 Dri	 F 55 Serious

Account of Accident: V1 & V2 TRAVELLING SOUTH EAST. V2 STOPPED TO TURN RIGHT WEST. V1 FAILED TO STOP IN TIME AND COLLIDED WITH REAR C V2.

Police Ref. / Road No. / 2nd Road No. / Grid Ref.	Day / Date / Time / D/L / R.S.C / Weather / Speed	Location Description	Veh No	Type	Manv	Dir	Class	Sex / Age / Sev (Casualties)
191906091 **R1: A 39** **R2: U** **E 329,936** **N 138,241**	Monday 24/06/2019 1521hrs Daylight:street lights present Dry Fine without high winds 30 mph	A39 WESTERN WAY, AT JUNCTION WITH STANDISH STREET, BRIDGWATER.	Veh 1 Veh 2	Car Pedal cycle	Turning left Going ahead	NW to NE NW to SE	 Dri	 M 13 Slight

Account of Accident: V1 & V2 (P/CYCLE) TRAVELLING SOUTH EAST. V1 TURNED LEFT NORTH EAST, FAILED TO LOOK PROPERLY AND COLLIDED WITH V2.

Police Ref. / Road No. / 2nd Road No. / Grid Ref.	Day / Date / Time / D/L / R.S.C / Weather / Speed	Location Description	Veh No	Type	Manv	Dir	Class	Sex / Age / Sev (Casualties)
191904509 **R1: A 38** **R2: A 38** **E 330,279** **N 134,298**	Friday 19/07/2019 1125hrs Daylight:street lights present Wet/Damp Unknown 40 mph	A38 AT JUNCTION WITH M5, NORTH PETHERTON.	Veh 1 Veh 2	Car Goods > 7.5t	Going ahead Going ahead	NE to SE NE to SE	RSP 	F 7 Slight

Account of Accident: V1 & V2 TRAVELLING SOUTH WEST, TURNING SOUTH EAST AT ROUNDABOUT. ON EXITING ROUNDABOUT, V2 COLLIDED WITH V1 AND FAILED TO STOP.

Causation Factor:

Details of Personal Injury Accidents for Period - **01/04/2018** **to** **31/03/2023** (60) months

Selection:

Notes:

Police Ref. / Road No. / 2nd Road No. / Grid Ref.	Day / Date / Time / D/L / R.S.C / Weather / Speed / Account of Accident	Location Description	Vehicles: Veh No / Type / Manv / Dir / Class	Casualties: Sex / Age / Sev
Causation Factor:				

191906377
R1: A 39
R2: U
E 326,356
N 138,432

Tuesday
23/07/2019
1224hrs
Daylight:street lights present
Dry
Fine without high winds
50 mph

A39, AT JUNCTION WITH LIMESTONE HILL, CANNINGTON.

Veh	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Car	Going ahead	SE to NW				
Veh 2	Car	Going ahead	SE to NW	Dri	F	75	Slight

V1 & V2 TRAVELLING NORTH WEST. A VEHICLE IN FRONT OF V2 STOPPED SUDDENLY TO TURN LEFT INTO LIMESTONE HILL. V2 BRAKED HARD, V1 FAILED TO STOP IN TIME AND COLLIDED WITH REAR OF V2.

191906518
R1: A 39
R2: U
E 329,805
N 136,742

Thursday
08/08/2019
2105hrs
Darkness: street lights present
Wet/Damp
Raining with high winds
30 mph

A39 BROADWAY, AT JUNCTION WITH SUPERMARKET, BRIDGWATER.

Veh	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Bus/coach	Going ahead	E to W	Dri	M	33	Slight
Veh 2	Car	Turning right	W to S	Dri	M	22	Slight

Causation Factor:		**Participant:**	**Confidence:**
1st:	Inadequate/Masked signs or road markings	Vehicle 002	Very Likely
2nd:	Failed to judge other persons path or speed	Vehicle 001	Very Likely
3rd:	Failed to judge other persons path or speed	Vehicle 002	Very Likely
4th:	Rain, sleet, snow, or fog	Vehicle 001	Very Likely
5th:	Rain, sleet, snow, or fog	Vehicle 002	Very Likely

V1 TRAVELLING WEST, V2 TRAVELLING OPPOSITE DIRECTION. V2 TURNED RIGHT SOUTH AND COLLIDED WITH V1.

191906553
R1: A 38
R2: U
E 330,428
N 135,227

Friday
09/08/2019
1832hrs
Daylight:street lights present
Wet/Damp
Raining without high winds
30 mph

A38 TAUNTON ROAD, AT JUNCTION WITH SHOWGROUND ROAD, NORTH PETHERTON.

Veh	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Car	Wait go ahead held up	S to N				
Veh 2	M/C < 125 cc	Going ahead	S to N	Dri	F	23	Slight

V1 & V2 TRAVELLING NORTH. ON APPROACH TO ROUNDABOUT V1 SLOWED FOR STANDING TRAFFIC. V2 FAILED TO STOP IN TIM AND COLLIDED WITH REAR OF V1.

Details of Personal Injury Accidents for Period - **01/04/2018** **to** **31/03/2023** (60) months

Selection:

Notes:

Police Ref. / Road No. / 2nd Road No. / Grid Ref.	Day / Date / Time / D/L / R.S.C / Weather / Speed / Account of Accident	Location Description	Vehicles: Veh No / Type / Manv / Dir / Class					Casualties: Sex / Age / Sev		
Causation Factor:										
191906781	Thursday	A39 HOMBERG WAY, AT JUNCTION WITH BONITA DRIVE, WEMBDON.	Veh 1	Car	Stopping	SW to NE	FSP	F	52	Slight
	15/08/2019		Veh 2	Car	Stopping	SW to NE				
R1: A 39	1757hrs									
R2: U	Daylight:street lights present									
E 328,777	Dry									
N 137,277	Fine without high winds									
	30 mph									

Causation Factor: | **Participant:** | **Confidence:**

1st: Failed to look properly | Vehicle 002 | Very Likely

V1 & V2 TRAVELLING NORTH EAST. BOTH VEHICLES SLOWED DUE TO VEHICLE IN FRONT TURNING RIGHT. V2 FAILED TO STOP IN TIME AND COLLIDED WITH REAR OF V1.

191905137	Monday	A38 TAUNTON ROAD,, BRIDGWATER.	Veh 1	Car	Wait go ahead held up	NW to SE	RSP	M	10	Slight
	19/08/2019		Veh 2	Car	Wait go ahead held up	NW to SE				
R1: A 38	0955hrs									
E 330,204	Dry									
N 136,071	Fine without high winds									
	30 mph									

V1 & V2 TRAVELLING SOUTH EAST. V1 WAS STOPPED AT TEMPORARY TRAFFIC LIGHTS. V2 FAILED TO STOP IN TIME AND COLLIDED WITH REAR OF V1.

191905553	Tuesday	A38 TAUNTON ROAD, AT JUNCTION WITH SOUTHGATE AVENUE, BRIDGWATER	Veh 1	Pedal cycle	Going ahead	E to W	Dri	M	31	Slight
	10/09/2019		Veh 2	Car	Stopping	S to N				
R1: A 38	1700hrs									
R2: U										
E 330,138	Dry									
N 136,336	Fine without high winds									
	30 mph									

V1 (P/CYCLE) TRAVELLING WEST, V2 TRAVELLING NORTH. V1 COLLIDED WITH V2 CAUSING RIDER OF V1 TO FALL FROM MACHIN

Details of Personal Injury Accidents for Period - **01/04/2018** **to** **31/03/2023** (60) months

Selection:

Notes:

Police Ref. / Road No. / 2nd Road No. / Grid Ref.	Day / Date / Time / D/L / R.S.C / Weather / Speed	Location Description	Vehicles: Veh No / Type / Manv / Dir / Class					Casualties: Sex / Age / Sev		
192000795 **R1: A 39** **E 328,767** **N 136,944**	Wednesday 25/09/2019 1620hrs Dry Fine without high winds 40 mph	A39 QUANTOCK ROAD, BRIDGWATER	Veh 1 Veh 2	Goods < 3.5t Pedal cycle	Going ahead Going ahead	NW to SE NW to SE	 Dri	 M	 14	 Serious

V1 & V2 (P/CYCLE) TRAVELLING SOUTH EAST. V2 EMERGED ONTO MAIN ROAD FROM PAVEMENT AND COLLIDED WITH V1.

Police Ref. / Road No. / 2nd Road No. / Grid Ref.	Day / Date / Time / D/L / R.S.C / Weather / Speed	Location Description	Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
191906440 **R1: A 38** **R2: U** **E 330,194** **N 136,099**	Thursday 17/10/2019 1625hrs Wet/Damp Raining without high winds 30 mph	A38 TAUNTON ROAD, AT JUNCTION WITH RHODE LANE, BRIDGWATER.	Veh 1 Veh 2	Car Pedal cycle	Turning right Going ahead	N to W N to S	 Dri	 F	 12	 Slight

V1 & V2 (P/CYCLE) TURNING SOUTH EAST. V1 TURNED RIGHT SOUTH WEST AND COLLIDED WITH V2.

Police Ref. / Road No. / 2nd Road No. / Grid Ref.	Day / Date / Time / D/L / R.S.C / Weather / Speed	Location Description	Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
191906688 **R1: A 38** **E 330,390** **N 135,437**	Tuesday 22/10/2019 1645hrs Daylight:street lights present Dry Fine without high winds 30 mph	A38 TAUNTON ROAD, NORTH PETHERTON.	Veh 1 Veh 2 Veh 3	Car Car Goods > 7.5t	Going ahead Stopping Turning right	SE to NW SE to NW E to NW	Dri Dri	F F	42 44	Slight Slight

Causation Factor:		Participant:	Confidence:
1st:	Failed to judge other persons path or speed	Vehicle 001	Very Likely
2nd:	Careless/Reckless/In a hurry	Vehicle 001	Possible

V1 & V2 TRAVELLING NORTH WEST. V2 SLOWED TO LET V3 OUT OF THE GARAGE. V1 FAILED TO NOTICE THIS AND COLLIDED WITH REAR OF V2, WHICH COLLIDED WITH TRAILER OF V3.

Details of Personal Injury Accidents for Period - 01/04/2018 to 31/03/2023 (60) months

Selection:

Notes:

Police Ref. / Road No. / 2nd Road No. / Grid Ref.	Day / Date / Time / D/L / R.S.C / Weather / Speed / Account of Accident	Location Description	Vehicles: Veh No / Type / Manv / Dir / Class	Casualties: Sex / Age / Sev
Causation Factor:				

192000655
R1: A 38
E 330,603
N 138,039

Friday
08/11/2019
1740hrs
Darkness: street lights present
Dry
Fine without high winds
40 mph

A38 BRISTOL ROAD, BRIDGWATER.

Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Car	Going ahead	S to N				
Veh 2	Pedal cycle	Going ahead	S to N	Dri	M	46	Slight

Causation Factor:		Participant:	Confidence:
1st:	Impaired by alcohol	Vehicle 002	Very Likely
2nd:	Cyclist wearing dark clothing at night	Vehicle 002	Very Likely
3rd:	Cyclist entering road from pavement	Vehicle 002	Possible
4th:	Failed to judge other persons path or speed	Vehicle 002	Possible

V1 & V2 (P/CYCLE) TRAVELLING NORTH. V2 ENTERED CARRIAGEWAY FROM THE SIDE OF ROAD AND COLLIDED WITH V1.

192001246
R1: A 39
R2: U
E 330,171
N 137,998

Thursday
21/11/2019
1653hrs
Darkness: street lights present
Wet/Damp
Raining without high winds
30 mph

A39 WESTERN WAY, AT JUNCTION WITH WYLDS ROAD, BRIDGWATER

Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Car	Turning right	SW to SE				
Veh 2	Car	Going ahead	NE to SW	Dri	F	47	Slight

V1 TRAVELLING NORTH EAST, V2 TRAVELLING OPPOSITE DIRECTION. V1 TURNED RIGHT SOUTH EAST AND COLLIDED WITH V2.

191907150
R1: A 39
R2: U
E 328,502
N 137,006

Wednesday
27/11/2019
2000hrs
Darkness: street lighting
Dry
Fine without high winds
30 mph

A39 QUANTOCK ROAD, AT JUNCTION WITH DANESBOROUGH ROAD, WEMBDON.

Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Pedal cycle	Wait to turn right	S to E	Dri	M	63	Slight
Veh 2	Car	Turning right	W to S				

V1 (P/CYCLE) TRAVELLING NORTH, V2 TRAVELLING EAST. V1 WAS WAITING TO TURN RIGHT EAST AND V2 WAS WAITING TO TUR RIGHT SOUTH. V2 COMMENCED TURN AND COLLIDED WITH V1.

Details of Personal Injury Accidents for Period - **01/04/2018** **to** **31/03/2023** (60) months

Selection:

Notes:

Police Ref. / Road No. / 2nd Road No. / Grid Ref.	Day / Date / Time / D/L / R.S.C / Weather / Speed / Account of Accident	Location Description	Vehicles: Veh No / Type / Manv / Dir / Class	Casualties: Sex / Age / Sev
Causation Factor:				

191907208	Sunday	PENEL ORLIEU, BRIDGWATER.	Veh 1	Car	Wait go ahead held up	NE to SW	Dri	F 32	Slight
	01/12/2019		Veh 2	Car	Stopping	NE to SW			
R1: U	1945hrs								
R2: U	Darkness: street lights present								
E 329,513	Dry								
N 136,945	Fine without high winds								
	30 mph								

V1 & V2 TRAVELLING SOUTH WEST. V1 SLOWED DOWN DUE TO TRAFFIC LIGHTS, V2 FAILED TO STOP IN TIME AND COLLIDED WITH REAR OF V1.

192000371	Monday	A38 TAUNTON ROAD, AT JUNCTION WITH RHODE LANE, BRIDGWATER	Veh 1	Car	Turning right	NW to SW	Ped	M 42	Serious
	02/12/2019								
R1: U	1132hrs								
R2: A 38									
E 330,191	Dry								
N 136,097	Fine without high winds								
	30 mph								

V1 TRAVELLING SOUTH EAST, PEDESTRIAN WALKING ALONG PAVEMENT. V1 TURNED RIGHT SOUTH WEST AND COLLIDED WITH PEDESTRIAN, WHO WAS CROSSING JUNCTION. PEDESTIAN FELL TO THE FLOOR.

192001332	Thursday	A38 TAUNTON ROAD, AT JUNCTION WITH HAMP GREEN RISE, BRIDGWATER.	Veh 1	Car	Going ahead	S to N			
	05/12/2019		Veh 2	Goods < 3.5t	Going ahead	S to N	Dri	M 59	Slight
R1: A 38	1319hrs		Veh 3	Car	Going ahead	S to N			
R2: U									
E 330,153	Dry								
N 136,283	Fine without high winds								
	30 mph								

Causation Factor:		**Participant:**	**Confidence:**
1st:	Poor turn or manoevre	Vehicle 001	Possible
2nd:	Failed to judge other persons path or speed	Vehicle 001	Possible

V1, V2 & V3 TRAVELLING NORTH. V1 & V2 STOPPED DUE TO TRAFFIC AHEAD. V3 FAILED TO STOP IN TIME AND COLLIDED WITH REAR OF V2, WHICH IN TURN COLLIDED WITH REAR OF V1.

Details of Personal Injury Accidents for Period - **01/04/2018** **to** **31/03/2023** (60) months

Selection:

Notes:

Police Ref. / Road No. / 2nd Road No. / Grid Ref.	Day / Date / Time / D/L / R.S.C / Weather / Speed	Location Description	Vehicles: Veh No / Type / Manv / Dir / Class	Casualties: Sex / Age / Sev

Account of Accident

Causation Factor:

Police Ref.	Day / Date / Time / Conditions	Location Description	Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
192001534	Monday	A39 QUANTOCK ROAD, AT JUNCTION WITH SKIMMERTON LANE, WEMBDON.	Veh 1	Car	Going ahead	SE to NW	Dri	M	78	Slight
	23/12/2019		Veh 2	Car	Going ahead	SE to NW	Dri	M	57	Slight
R1: A 39	1645hrs									
R2: U	Darkness: street lights present									
E 327,212	Dry									
N 137,471	Fine without high winds									
	60 mph									

Causation Factor:		**Participant:**	**Confidence:**
1st:	Illness or disability, mental or physical	Vehicle 001	Very Likely

V1 & V2 TRAVELLING NORTH WEST. V1 SPED UP DUE TO MEDICAL EPISODE AND COLLIDED WITH REAR OF V2.

Police Ref.	Day / Date / Time / Conditions	Location Description	Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
202000454	Friday	A38 BRISTOL ROAD, BRIDGWATER,.	Veh 1	Car	Going ahead	SW to NE	Dri	F	19	Slight
	10/01/2020		Veh 1	Car	Going ahead	SW to NE	RSP	F	17	Slight
R1: A 38	1315hrs		Veh 1	Car	Going ahead	SW to NE	FSP	F	17	Slight
R2: U			Veh 2	Goods < 3.5t	Going ahead	SW to NE	Dri	M	48	Slight
E 330,709	Dry		Veh 3	Car	Wait to turn right	SW to SE	Dri	M	46	Serious
N 138,530	Fine without high winds									
	30 mph									

Causation Factor:		**Participant:**	**Confidence:**
1st:	Careless/Reckless/In a hurry	Vehicle 001	Possible
2nd:	Inexperience of driving on the left	Vehicle 001	Possible

V1, V2 & V3 TRAVELLING NORTH EAST. V3 WAS WAITING TO TURN RIGHT SOUTH EAST. V1 WAS DISTRACTED AND COLLIDED WITH REAR OF V2, WHICH COLLIDED WITH REAR OF V3.

Police Ref.	Day / Date / Time / Conditions	Location Description	Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
202002095	Tuesday	A39 WESTERN WAY, AT JUNCTION WITH WYLDS ROAD, BRIDGWATER.	Veh 1	Car	Turning right	SE to NE	Dri	F	19	Slight
	04/02/2020		Veh 1	Car	Turning right	SE to NE	FSP	F	38	Slight
R1: A 39	1945hrs		Veh 2	Car	Going ahead	SW to NE	Dri	M	21	Slight
R2: U	Darkness: street lights present		Veh 2	Car	Going ahead	SW to NE	FSP	F	24	Slight
E 330,176	Dry									
N 137,996	Fine without high winds									
	30 mph									

Causation Factor:		**Participant:**	**Confidence:**
1st:	Failed to judge other persons path or speed	Vehicle 001	Very Likely
2nd:	Failed to judge other persons path or speed	Vehicle 002	Very Likely
3rd:	Inexperienced or learner driver/rider	Vehicle 001	

V1 TRAVELLING NORTH WEST, V2 TRAVELLING NORTH EAST. V1 TURNED RIGHT NORTH EAST AND COLLIDED WITH V2.

Details of Personal Injury Accidents for Period - **01/04/2018** **to** **31/03/2023** (60) months

Selection:

Notes:

Police Ref. / Road No. / 2nd Road No. / Grid Ref.	Day / Date / Time / D/L / R.S.C / Weather / Speed	Location Description	Vehicles: Veh No / Type / Manv / Dir / Class	Casualties: Sex / Age / Sev

Account of Accident

Causation Factor:

202000722
R1: A 39
R2: U
E 329,587
N 136,843

Wednesday
05/02/2020
1100hrs
Dry
Fine without high winds
30 mph

A39 BROADWAY, AT JUNCTION WITH ALBERT STREET, BRIDGWATER.

Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Pedal cycle	Going ahead	NW to SE	Dri	F	52	Slight
Veh 2	Car	Turning right	SW to SE				

Causation Factor:		**Participant:**	**Confidence:**
1st:	Poor turn or manoevre	Vehicle 002	Very Likely
2nd:	Failed to look properly	Vehicle 002	Very Likely
3rd:	Careless/Reckless/In a hurry	Vehicle 002	

V1 (P/CYCLE) TRAVELLING SOUTH EAST, V2 TRAVELLING NORTH EAST. V2 TURNED RIGHT SOUTH EAST AND COLLIDED WITH V1.

202001387
R1: A 39
R2: U
E 329,491
N 136,930

Sunday
01/03/2020
0116hrs
Darkness: street lights present
Wet/Damp
Raining without high winds
30 mph

A39 BROADWAY, AT JUNCTION WITH PENEL ORLIEU, BRIDGWATER.

Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Car	Turning right	SE to NE				
Veh 2	Car	Going ahead	NW to SE	Dri	M	49	Slight

Causation Factor:		**Participant:**	**Confidence:**
1st:	Poor turn or manoevre	Vehicle 001	Very Likely
2nd:	Failed to judge other persons path or speed	Vehicle 001	Very Likely

V1 TRAVELLING NORTH WEST, V2 TRAVELLING OPPOSITE DIRECTION. V1 TURNED RIGHT NORTH EAST AND COLLIDED WITH V2.

202001500
R1: A 38
R2: U
E 330,447
N 135,200

Tuesday
10/03/2020
1845hrs
Darkness: street lights present
Wet/Damp
Raining without high winds
30 mph

A38 TAUNTON ROAD, NORTH PETHERTON.

Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	M/C > 125 cc	Going ahead	N to S	Dri	M	32	Slight

Causation Factor:		**Participant:**	**Confidence:**
1st:	Sudden braking	Vehicle 001	Very Likely
2nd:	Slippery road (due to weather)	Vehicle 001	Very Likely
3rd:	Nervous/Uncertain/Panic	Vehicle 001	

V1 TRAVELLING SOUTH. SOME PEDESTRIANS HAD ALIGHTED FROM TWO BUSES. V1 BRAKED ON SEEING PEDESTRIANS AND RIDE OF V1 FELL FROM MACHINE.

Details of Personal Injury Accidents for Period - **01/04/2018** **to** **31/03/2023** (60) months

Selection:

Notes:

Police Ref. / Road No. / 2nd Road No. / Grid Ref.	Day / Date / Time / D/L / R.S.C / Weather / Speed / Account of Accident	Location Description	Vehicles: Veh No / Type / Manv / Dir / Class	Casualties: Sex / Age / Sev

Causation Factor:

202004736	Sunday	MAIN ROAD, CANNINGTON.	Veh 1	M/C > 125 cc	Going ahead	S to N	Dri	M 23 Slight
	22/03/2020		Veh 2	M/C > 125 cc	Going ahead	S to N		
R1: U	1439hrs							
E 326,012	Dry							
N 139,066	Fine without high winds							
	30 mph							

Causation Factor:		**Participant:**	**Confidence:**
1st:	Following too close	Vehicle 001	Possible
2nd:	Failed to look properly	Vehicle 001	Possible
3rd:	Failed to judge other persons path or speed	Vehicle 001	Very Likely
4th:	Sudden braking	Vehicle 002	Very Likely
5th:	Loss of control	Vehicle 001	Possible

V1 & V2 (M/CYCLES) TRAVELLING NORTH. V2 BRAKED DUE TO VEHICLE AHEAD. V1 FAILED TO STOP IN TIME AND COLLIDED WIT REAR OF V2.

202004905	Wednesday	A39 THE DROVE, AT JUNCTION WITH WYLDS ROAD, BRIDGWATER.	Veh 1	Goods 3.5 - 7.5t	Turning right	NE to NW		
	29/04/2020		Veh 2	Car	Turning left	NW to NE	Dri	M 42 Slight
R1: A 39	0856hrs							
R2: U								
E 330,174	Wet/Damp							
N 138,003	Raining without high winds							
	30 mph							

Causation Factor:		**Participant:**	**Confidence:**
1st:	Junction restart	Vehicle 001	Very Likely
2nd:	Exceeding speed limit	Vehicle 002	Possible
3rd:	Slippery road (due to weather)	Vehicle 002	

V1 TRAVELLING SOUTH WEST, V2 TRAVELLING SOUTH EAST. V1 TURNED RIGHT NORTH WEST AND V2 TURNED LEFT NORTH EAS' V1 COLLIDED WITH V2.

202002275	Tuesday	A38 TAUNTON ROAD, AT JUNCTION WITH A39 BROADWAY, BRIDGWATER.	Veh 1	Car	Going ahead	NW to SE		
	12/05/2020		Veh 2	Car	Going ahead	W to E	Dri	M 36 Serious
R1: A 38	2034hrs							
R2: A 39								
E 330,000	Dry							
N 136,774	Fine without high winds							
	30 mph							

V1 TRAVELLING SOUTH EAST, V2 TRAVELLING EAST. V1 PULLED AWAY FROM LIGHTS AND COLLIDED WITH V2.

Details of Personal Injury Accidents for Period - **01/04/2018** **to** **31/03/2023** (60) months

Selection:

Notes:

Police Ref. / Road No. / 2nd Road No. / Grid Ref.	Day / Date / Time / D/L / R.S.C / Weather / Speed / Account of Accident	Location Description	Vehicles: Veh No / Type / Manv / Dir / Class	Casualties: Sex / Age / Sev

Causation Factor:

202002325
R1: U
R2: A 38
E 330,399
N 135,250

Monday
01/06/2020
1815hrs
Dry
Fine without high winds
30 mph

A38 TAUNTON ROAD, AT JUNCTION WITH STOCKMOOR DRIVE, NORTH PETHERTON.

Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Car	Stopping	W to E	Dri	F	46	Slight
Veh 2	Car	Stopping	W to E				

V1 & V2 TRAVELLING EAST. V1 WAS STOPPED AT ROUNDABOUT. V2 FAILED TO STOP IN TIME AND COLLIDED WITH REAR OF V1.

202100304
R1: A 38
R2: U
E 330,245
N 135,962

Friday
03/07/2020
1030hrs
Dry
Fine without high winds
30 mph

A38 TAUNTON ROAD, AT JUNCTION WITH PARKSTONE AVENUE, BRIDGWATER

Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Car	Turning right	SW to SE				
Veh 2	Car	Going ahead	SE to NW	Dri	F	57	Slight

Causation Factor:

	Causation Factor	Participant:	Confidence:
1st:	Poor turn or manoevre	Vehicle 001	Very Likely
2nd:	Failed to look properly	Vehicle 001	Possible
3rd:	Failed to judge other persons path or speed	Vehicle 001	

V1 TRAVELLING NORTH EAST, V2 TRAVELLING NORTH WEST. V1 TURNED RIGHT SOUTH EAST AND COLLIDED WITH V2.

202002903
R1: A 39
R2: U
E 326,357
N 138,432

Sunday
19/07/2020
2015hrs
Dry
Fine without high winds
50 mph

A39 NEW ROAD, AT JUNCTION WITH LIMESTONE HILL, CANNINGTON.

Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Car	Going ahead	NW to SE	Dri	M	32	Slight

V1 TRAVELLIING SOUTH EAST. DRIVER LOST CONTROL AND V1 COLLIDED WITH A VERGE.

Details of Personal Injury Accidents for Period - **01/04/2018** **to** **31/03/2023** (60) months

Selection:

Notes:

Police Ref. / Road No. / 2nd Road No. / Grid Ref.	Day / Date / Time / D/L / R.S.C / Weather / Speed	Location Description	Vehicles: Veh No / Type / Manv / Dir / Class	Casualties: Sex / Age / Sev
202002970 **R1: A 38** **R2: A 38** E **330,239** N **134,284**	Wednesday 29/07/2020 1023hrs Dry Fine without high winds 40 mph	A38 HUNTWORTH ROUNDABOUT, NORTH PETHERTON.	Veh 1 Car Turning left SE to SW Dri Veh 2 Car Wait to turn left SE to SW	M 55 Slight

V1 & V2 TRAVELLING NORTH WEST BOTH TURNING LEFT SOUTH WEST. V1 WAS IN WRONG LANE AND COLLIDED WITH V2.

Police Ref. / Road No. / 2nd Road No. / Grid Ref.	Day / Date / Time / D/L / R.S.C / Weather / Speed	Location Description	Vehicles: Veh No / Type / Manv / Dir / Class	Casualties: Sex / Age / Sev
202003325 **R1: U** **R2: A 38** E **330,546** N **137,753**	Tuesday 25/08/2020 1850hrs Dry Fine with high winds 30 mph	A38 BRITOL ROAD, AT JUNCTION WITH UNION STREET, BRIDGWATER	Veh 1 Car Turning left E to S Ped	M 29 Slight

V1 TRAVELLING WEST, PEDESTRIAN WALKING NORTHBOUND. V1 WAS TURNING LEFT SOUTH AND COLLIDED WITH PEDESTRIAN V1 FAILED TO STOP.

Police Ref. / Road No. / 2nd Road No. / Grid Ref.	Day / Date / Time / D/L / R.S.C / Weather / Speed	Location Description	Vehicles: Veh No / Type / Manv / Dir / Class	Casualties: Sex / Age / Sev
202004006 **R1: A 39** **R2: U** E **329,805** N **136,741**	Monday 21/09/2020 1549hrs Dry Fine without high winds 30 mph	A38 BROADWAY, AT JUNCTION WITH SUPERMARKET, BRIDGWATER.	Veh 1 Car Going ahead E to W Veh 2 Car Turning right W to S Dri	F 19 Slight

V1 TRAVELLING WEST, V2 TRAVELLING OPPOSITE DIRECTION. V2 TURNED RIGHT SOUTH AND COLLIDED WITH V1.

Details of Personal Injury Accidents for Period - **01/04/2018** **to** **31/03/2023** (60) months

Selection:

Notes:

Police Ref. / Road No. / 2nd Road No. / Grid Ref.	Day / Date / Time / D/L / R.S.C / Weather / Speed / Account of Accident	Location Description	Vehicles: Veh No / Type / Manv / Dir / Class	Casualties: Sex / Age / Sev
Causation Factor:				

202101170	Sunday	A39 BROADWAY, AT JUNCTION WITH A38 TAUNTON ROAD, BRIDGWATER.	Veh 1	Car	Going ahead	W to E	Dri	F 31 Slight
R1: A 39	27/09/2020		Veh 2	Car	Going ahead	W to E	Dri	M 35 Slight
R2: A 38	1237hrs							
E 329,981	Dry							
N 136,771	Fine without high winds							
	30 mph							

Causation Factor: | **Participant:** | **Confidence:**

		Participant	Confidence
1st:	Following too close	Vehicle 001	Very Likely
2nd:	Sudden braking	Vehicle 002	Possible

V1 & V2 TRAVELLING EAST IN DIFFERENT LANES. V2 CHANGED LANES AFTER OVERTAKING. V1 COLLIDED WITH REAR OF V2.

202004568	Wednesday	A39 QUANTOCK ROAD, AT JUNCTION WITH FILLING STATION, WEMBDON.	Veh 1	Car	Wait to turn right	SE to NE		
R1: A 39	28/10/2020		Veh 2	M/C > 125 cc	Going ahead	NW to SE	Dri	M 32 Serious
R2: U	1800hrs							
E 327,238	Darkness: no street lighting							
N 137,443	Wet/Damp							
	Raining with high winds							
	40 mph							

Causation Factor:

		Participant	Confidence
1st:	Careless/Reckless/In a hurry	Vehicle 001	Possible
2nd:	Poor turn or manoevre	Vehicle 001	Very Likely
3rd:	Failed to look properly	Vehicle 001	

V1 TRAVELLING NORTH WEST, V2 (M/CYCLE) TRAVELLING OPPOSITE DIRECTION. V1 TURNED RIGHT NORTH EAST AND COLLIDEI WITH V2.

202101141	Monday	A38 TAUNTON ROAD, NORTH PETHERTON.	Veh 1	Car	Going ahead	N to S	Dri	M 32 Slight
R1: A 38	16/11/2020		Veh 1	Car	Going ahead	N to S	Ped	F 34 Slight
R2: U	1700hrs							
E 330,445	Darkness: street lights present							
N 135,235	Wet/Damp							
	Fine without high winds							
	30 mph							

V1 TRAVELLING SOUTH, PEDESTRIAN WALKING EAST. V1 COLLIDED WITH PEDESTRIAN.

Details of Personal Injury Accidents for Period - **01/04/2018** **to** **31/03/2023** (60) months

Selection:

Notes:

Police Ref. / Road No. / 2nd Road No. / Grid Ref.	Day / Date / Time / D/L / R.S.C / Weather / Speed	Location Description	Vehicles: Veh No / Type / Manv / Dir / Class	Casualties: Sex / Age / Sev

Account of Accident

Causation Factor:

202101149
R1: A 39
E 326,697
N 138,294

Tuesday
17/11/2020
1655hrs
Darkness: no street lighting
Wet/Damp
Fine without high winds
50 mph

A39 NEW ROAD, CANNINGTON.

Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Car	Wait go ahead held up	NW to SE				
Veh 2	Car	Stopping	NW to SE	Dri	F	36	Slight
Veh 3	Car	Stopping	NW to SE				

Causation Factor:		Participant:	Confidence:
1st:	Failed to look properly	Vehicle 003	Very Likely
2nd:	Failed to judge other persons path or speed	Vehicle 003	Possible

V1, V2 & V3 TRAVELLING SOUTH EAST. V1 STOPPED DUE TO TRAFFIC, V2 ALSO STOPPED BUT V3 FAILED TO STOP IN TIME AND COLLIDED WITH REAR OF V2, WHICH IN TURN COLLIDED WITH REAR OF V1.

202101153
R1: A 38
E 330,601
N 138,028

Thursday
19/11/2020
1724hrs
Darkness: street lights present
Dry
Fine without high winds
30 mph

A38 BRISTOL ROAD, BRIDGWATER.

Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Goods 3.5 - 7.5t	Going ahead	SW to NE				
Veh 2	Car	Going ahead	NE to SW				
Veh 3	Car	O/take s/veh o/side	NE to SW	Ped	F	51	Slight

Causation Factor:		Participant:	Confidence:
1st:	Inadequate/Masked signs or road markings	Vehicle 001	Very Likely
2nd:	Swerved	Vehicle 003	Very Likely
3rd:	Dazzling headlights	Vehicle 003	

V1 TRAVELLING NORTH EAST, V2 & V3 TRAVELLING OPPOSITE DIRECTION, PEDESTRIAN WALKING NORTH WEST. V1 COLLIDED WITH V2. V3 THEN TRIED TO OVERTAKE V1 & V2 AND COLLIDED WITH PEDESTRIAN.

202101155
R1: A 38
R2: U
E 330,175
N 136,170

Thursday
19/11/2020
0630hrs
Darkness: street lights present
Dry
Fine without high winds
30 mph

A38 TAUNTON ROAD, AT JUNCTION WITH ASHLEIGH AVENUE, BRIDGWATER.

Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	M/C < 125 cc	Going ahead	NW to SE	Dri	F	47	Slight
Veh 2	Car	Parked	0 to 0				

V1 (M/CYCLE) TRAVELLING SOUTH WEST, V2 PARKED. V1 FAILED TO NOTICE V2 AND A COLLISION OCCURRED.

Details of Personal Injury Accidents for Period - **01/04/2018** **to** **31/03/2023** (60) months

Selection:

Notes:

Police Ref. / Road No. / 2nd Road No. / Grid Ref.	Day / Date / Time / D/L / R.S.C / Weather / Speed	Location Description	Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
202004699	Wednesday	A38 TAUNTON ROAD, AT JUNCTION WITH WILLS ROAD, NORTH PETHERTON.	Veh 1	Car	Stopping	N to S	Dri	M	58	Slight
R1: A 38	02/12/2020		Veh 2	Car	Turning right	W to S				
R2: U	0900hrs		Veh 3	Car	Going ahead	N to S				
E 330,362	Dry									
N 135,583	Fine without high winds									
	30 mph									

V1 & V3 TRAVELLING SOUTH, V2 TRAVELLING EAST. V1 SLOWED TO ALLOW V2 TO TURN RIGHT SOUTH. V3 FAILED TO STOP IN TIME AND COLLIDED WITH V1, WHICH IN TURN COLLIDED WITH V2.

Police Ref. / Road No. / 2nd Road No. / Grid Ref.	Day / Date / Time / D/L / R.S.C / Weather / Speed	Location Description	Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
202100156	Friday	A38 BRISTOL ROAD, AT JUNCTION WITH UNION STREET, BRIDGWATER.	Veh 1	Car	Going ahead	SW to NE	Dri	F	37	Slight
R1: A 38	18/12/2020		Veh 2	Goods < 3.5t	Turning right	E to NE				
R2: U	1345hrs									
E 330,548	Wet/Damp									
N 137,753	Raining without high winds									
	30 mph									

Causation Factor:		**Participant:**	**Confidence:**
1st:	Illegal turn or direction of travel	Vehicle 002	Very Likely
2nd:	Exceeding speed limit	Vehicle 001	Possible
3rd:	Failed to look properly	Vehicle 002	Possible
4th:	Swerved	Vehicle 001	Possible

V1 TRAVELLING NORTH EAST, V2 TRAVELLING WEST. V2 TURNED RIGHT NORTH EAST. V1 SKIDDED AND A COLLISION OCCURREI

Police Ref. / Road No. / 2nd Road No. / Grid Ref.	Day / Date / Time / D/L / R.S.C / Weather / Speed	Location Description	Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
202100246	Thursday	A38 TAUNTON ROAD, NORTH PETHERTON.	Veh 1	Car	Going ahead	SW to NE	Dri	F	58	Serious
R1: A 38	31/12/2020		Veh 1	Car	Going ahead	SW to NE	RSP	M	32	Slight
	1650hrs		Veh 2	Car	Going ahead	NE to SW				
	Darkness: street lights present		Veh 3	Car	Going ahead	SW to NE	Dri	M	41	Slight
E 330,318	Wet/Damp		Veh 4	Car	Going ahead	SW to NE				
N 134,465	Fine without high winds									
	40 mph									

V1, V3 & V4 TRAVELLING NORTH EAST, V2 TRAVELLING OPPOSITE DIRECTION. V3 WENT TO OVERTAKE V4 AND COLLIDED WITH V1. V3 THEN SPUN AND COLLIDED WITH V2.

Details of Personal Injury Accidents for Period - **01/04/2018** **to** **31/03/2023** (60) months

Selection:

Notes:

Police Ref. / Road No. / 2nd Road No. / Grid Ref.	Day / Date / Time / D/L / R.S.C / Weather / Speed	Location Description	Veh No	Type	Manv	Dir	Class	Casualties Sex / Age / Sev
212102938	Friday	A39 QUANTOCK ROAD, BRIDGWATER	Veh 1	Car	Going ahead	SE to NW	Ped	M 18 Serious
R1: A 39	22/01/2021							
E 327,189	0117hrs							
N 137,502	Darkness: no street lighting							
	Wet/Damp							
	Raining without high winds							
	50 mph							

Causation Factor:

	Causation Factor	Participant:	Confidence:
1st:	Pedestrian wearing dark clothing at night	Casualty 001	Very Likely
2nd:	Impaired by alcohol	Casualty 001	Very Likely
3rd:	Careless/Reckless/In a hurry	Casualty 001	Very Likely
4th:	Rain, sleet, snow, or fog	Vehicle 001	Very Likely
5th:	Road layout (eg bend, hill crest)	Vehicle 001	Very Likely

V1 TRAVELLING NW TOWARDS CANNINGTON WHEN IT HAS COME INTO CONTACT WITH A PEDESTRIAN WALKING ON ROAD, ON THE WRONG SIDE OF ROAD TO PAVEMENT, DRESSED ALL IN BLACK, INTOXICATED AND DURING HEAVY RAIN.

Police Ref. / Road No. / 2nd Road No. / Grid Ref.	Day / Date / Time / D/L / R.S.C / Weather / Speed	Location Description	Veh No	Type	Manv	Dir	Class	Casualties Sex / Age / Sev
212101614	Thursday	WYLDS ROAD, EAST QUAY, BRIDGWATER	Veh 1	Car	Going ahead	W to E	Dri	M 29 Slight
R1: U	28/01/2021		Veh 2	Car	Going ahead	N to S		
R2: A 39	0720hrs							
E 330,170	Darkness: street lights present							
N 138,000	Wet/Damp							
	Fine without high winds							
	30 mph							

V1 TRAVELLING FROM BRIDGWATER TOWARDS TRAFFIC LIGHTS JUNCTION OF NDR, WYLDS ROAD ALONG EAST QUAY. LIGHTS ARE ON GREEN SO TRAVELLED ACROSS LIGHTS FROM EAST QUAY TO WYLDS ROAD. V2 HAS PULLED OUT OF WYLDS ROAD AGAINST THE LIGHTS AND HAS COLLIDED WITH V1.

Police Ref. / Road No. / 2nd Road No. / Grid Ref.	Day / Date / Time / D/L / R.S.C / Weather / Speed	Location Description	Veh No	Type	Manv	Dir	Class	Casualties Sex / Age / Sev
212101657	Wednesday	A39 BROADWAY OUTSIDE/BY MORRISONS TRAFFIC LIGHTS, BRIDGWATER	Veh 1	Car	Turning right	N to E		
R1: A 39	03/02/2021		Veh 2	Car	Going ahead	N to S	Dri	F 59 Slight
R2: U	1649hrs							
E 329,801	Dry							
N 136,742	Fine without high winds							
	30 mph							

Causation Factor:

	Causation Factor	Participant:	Confidence:
1st:	Disobeyed automatic traffic signal	Vehicle 001	Very Likely

V1 WAS TRAVELLING E AND INTENDING TO TURN RIGHT, INTO MORRISONS. V2 WAS TRAVELLING WEST AND STATIONARY AT THE MORRISONS T /LIGHTS ON BROADWAY INTENDING TO GO STRAIGHT ON. AS THE TRAFFIC LIGHTS CHANGED TO GREEN IN V2 FAVOUR, V2 PROCEEDED FORWARD BUT WAS H
IT BY V1 THAT HAD TURNED AGAINST THE LIGHTS.

Details of Personal Injury Accidents for Period - **01/04/2018** **to** **31/03/2023** (60) months

Selection:

Notes:

Police Ref. / Road No. / 2nd Road No. / Grid Ref.	Day / Date / Time / D/L / R.S.C / Weather / Speed / Account of Accident	Location Description	Vehicles: Veh No / Type / Manv / Dir / Class	Casualties: Sex / Age / Sev

Causation Factor:

212100487
R1: A 38
R2: A 38
E 330,227
N 134,350

Tuesday
09/02/2021
1214hrs
Dry
Fine without high winds
40 mph

A38 TAUNTON ROAD AT JUNCTION WITH A38 J24, LINK ROAD, BRIDGWATER

Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Car	Going ahead	S to E	Dri	F	22	Slight
Veh 2	Car	Going ahead	S to N				

Causation Factor:		Participant:	Confidence:
1st:	Poor turn or manoevre	Vehicle 001	Very Likely
2nd:	Illness or disability, mental or physical	Vehicle 001	Very Likely

V1 WAS TRAVELLING NORTH ON RBT A38 TAUNTON ROAD IN THE SAME DIRECTOIN AS V2. AT THE EXIT FOR BRIDGWATER V1 HA SLOWED AND TURNED SHARPLY RIGHT ACROSS THE PATH OF V2. COLLISION OCCURS.

212102410
R1: A 38
R2: A 39
E 330,544
N 137,777

Wednesday
10/03/2021
1330hrs
Dry
Fine without high winds
30 mph

A38 BRIDGEWATER ROAD AT JUNCTION WITH A39 THE DROVE, BRIDGEWATER

Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Car	Going ahead	S to N				
Veh 2	Car	Going ahead	W to E	Dri	M	61	Serious

V1 TRAVELLING N ON A38 WHEN V2 IS ALLEGED TO HAVE PULLED OUT INTO ITS PATH FROM THE DROVE AND COLLISION OCCURED.

212101882
R1: A 38
R2: U
E 330,504
N 134,757

Monday
15/03/2021
1435hrs
Dry
Fine without high winds
40 mph

A38 TAUNTON ROAD AT JUNCTION WITH TAUNTON ROAD (MINOR), HUNTWORTH, BRIDGWATER

Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Car	Turning right	NE to N				
Veh 2	M/C > 500 cc	O/take s/veh o/side	N to SW	Dri	M	37	Slight

2nd:	Stationary or parked vehicle	Vehicle 001	Very Likely
3rd:	Other	Vehicle 002	Possible
4th:	Exceeding speed limit	Vehicle 001	Possible
5th:	Travelling too fast for conditions	Vehicle 002	Possible

V001 WAS WAITING TO TURN RIGHT FROM THE MINOR TAUNTON ROAD JUNCTION ONTO THE A38 MAJOR TAUNTON ROAD. JUST BEYOND THE JUNCTION IS A PEDESTRIAN CROSSING, THE LIGHTS FOR WHICH WERE ON RED. THIS LED TO A QUEUE OF VEHICLES STRETCHING BACK TOWARDS BRIDGWATER.
V001 STARTED TO PULL OUT BETWEEN A GAP IN THE STATIONARY TRAFFIC AT THE SAME TIME AS V002 WAS TRAVELLING SOUT OVERTAKING THE QUEUE ON THE OFFSIDE OF THE STATIONARY VEHICLES. V001 COLLIDED WITH V002.

Details of Personal Injury Accidents for Period - 01/04/2018 to 31/03/2023 (60) months

Selection:

Notes:

Police Ref. / **Road No.** / **2nd Road No.** / **Grid Ref.**	Day / Date / Time / D/L / R.S.C / Weather / Speed / Account of Accident	Location Description	Vehicles: Veh No / Type / Manv / Dir / Class					Casualties: Sex / Age / Sev		
Causation Factor:										

212101920	Tuesday	A38 TAUNTON ROAD AT JUNCTION WITH WILLS ROAD, BRIDGWATER	Veh 1	Taxi	Turning right	W to S				
R1: A 38	23/03/2021		Veh 2	M/C < 125 cc	Going ahead	N to S	Dri	M	44	Slight
R2: U	1703hrs									
E 330,364	Dry									
N 135,581	Fine without high winds									
	30 mph									

Causation Factor:		**Participant:**	**Confidence:**
1st:	Failed to look properly	Vehicle 001	Very Likely
2nd:	Failed to judge other persons path or speed	Vehicle 001	Very Likely

V001 HAS PULLED OUT OF WILLS ROAD TURNING RIGHT, ON TO TAUNTON ROAD. THE VISION OF THE DRIVER WAS OBSTRUCTED BY A BUS ON THE OTHER SIDE OF THE ROAD. V002 HAS TRAVELLED SOUTH ALONG THE ROAD AND V001 COULD NOT SEE V002 AND HAS THEN COLLIDED WITH V002 AT LO
W SPEED

212102148	Tuesday	A39 WESTERN WAY, BRIDGWATER AT JUNCTION WITH CHILTON STREET	Veh 1	Car	Going ahead	W to E				
R1: A 39	06/04/2021		Veh 2	Car	Going ahead	N to S	Dri	M	38	Slight
R2: U	0758hrs		Veh 2	Car	Going ahead	N to S	FSP	F	38	Slight
E 329,711	Dry									
N 138,250	Fine without high winds									
	30 mph									

Causation Factor:		**Participant:**	**Confidence:**
1st:	Disobeyed automatic traffic signal	Vehicle 001	Very Likely
2nd:	Defective traffic signals	Vehicle 001	Possible

VEHICLE 002 TRAVELLING EAST HAS PROCEEDED ACROSS THE JUNCTION ON A CONFIRMED GREEN LIGHT WHEN V001 HAS ENTERED THE JUNCTION TRAVELLING SOUTH COLLIDING WITH V002.

212101998	Monday	A38 APPROACH TO DUNBALL ROUNDABOUT, BRIDGWATER	Veh 1	Car	Wait go ahead held up	SE to NW	Dri	F	22	Slight
R1: A 38	19/04/2021		Veh 2	Car	Stopping	SE to NW				
R2: A 39	0520hrs									
E 330,945	Dry									
N 141,021	Fine without high winds									
	40 mph									

Causation Factor:		**Participant:**	**Confidence:**
1st:	Exceeding speed limit	Vehicle 002	Very Likely
2nd:	Failed to look properly	Vehicle 002	Very Likely

V01 WAS WAITING IN A LINE OF NW BOUND TRAFFIC GOING ON TO THE ROUNDABOUT WHEN IT WAS STRUCK AT SPEED FROM BEHIND BY V02 WHICH HAS FAILED TO SLOW DOWN

Details of Personal Injury Accidents for Period - **01/04/2018** **to** **31/03/2023** (60) months

Selection:

Notes:

Police Ref. / **Road No.** / **2nd Road No.** / **Grid Ref.**	Day / Date / Time / D/L / R.S.C / Weather / Speed	Location Description	Vehicles: Veh No / Type / Manv / Dir / Class	Casualties: Sex / Age / Sev

Account of Accident

Causation Factor:

212102486

R1: A 39
R2: U
E 330,170
N 138,003

Thursday
22/04/2021
1508hrs

Dry
Fine without high winds
30 mph

WYLDS ROAD AT JUNCTION WITH A39 WESTERN WAY, BRIDGWATER

Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Car	Going ahead	SW to NE				
Veh 2	Pedal cycle	Going ahead	NW to SE	Dri	M	15	Slight

Causation Factor:		**Participant:**	**Confidence:**
1st:	Failed to look properly	Vehicle 002	Very Likely
2nd:	Failed to judge other persons path or speed	Vehicle 002	Very Likely
3rd:	Dazzling sun	Vehicle 002	

V001 TRAVELLING NE TOWARDS WYLDS ROAD WAS MID JUNCTION, V002 PROCEEDED INTO THE JUNCTION, DIDN'T LOOK PROPERLY AND COLLIDED WITH THE SIDE OF V001.

212102472

R1: A 39
R2: U
E 330,171
N 137,995

Thursday
29/04/2021
1049hrs

Dry
Unknown
30 mph

A39 THE DROVE AT JUNCTION WITH WYLDS ROAD, BRIDGWATER

Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Car	Turning right	SE to NE				
Veh 2	M/C > 125 cc	Going ahead	NW to SE	Dri	M	81	Serious

Causation Factor:		**Participant:**	**Confidence:**
1st:	Failed to judge other persons path or speed	Vehicle 002	Very Likely
2nd:	Road layout (eg bend, hill crest)	Vehicle 002	Very Likely
3rd:	Buildings, road signs, street furniture	Vehicle 002	Possible
4th:	Dazzling sun	Vehicle 002	Possible
5th:	Distraction outside vehicle	Vehicle 002	Possible

V001 WAS INDICATING TO TURN RIGHT ONTO WYLDS ROAD AT THE TRAFFIC LIGHTS ON A GREEN LIGHT. V001 THEN TURNED AN
V002 HAS COME OVER THE BRIDGE ON WESTERN WAY AND THROUGH THE TRAFFIC LIGHTS. V002 HAS THEN HIT V001 TRAILER A
THE NEARSIDE FRONT CORNER AS IT
WAS TURNING.

Details of Personal Injury Accidents for Period - **01/04/2018** **to** **31/03/2023** (60) months

Selection:

Notes:

Police Ref. / **Road No.** / **2nd Road No.** / **Grid Ref.**	Day / Date / Time / D/L / R.S.C / Weather / Speed	Location Description	Vehicles: Veh No / Type / Manv / Dir / Class	Casualties: Sex / Age / Sev
Account of Accident				
Causation Factor:				

212104035
R1: A 39
R2: B 3339
E 328,692
N 137,206

Thursday 13/05/2021 1605hrs
Darkness: street lights present
Wet/Damp
Fine without high winds
30 mph

B3339 WEMBDON RISE AT JUNCTION WITH A39

Veh	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Car	Going ahead	SW to NE				
Veh 2	Car	Turning left	NW to NE	Dri	F	40	Slight

V001 HAS BEEN TRAVELLING NE ON THE A39. AS V001 HAS APPROACHED THE TRAFFIC LIGHTS AT THE JUNCTION OF WEMBDON RISE THE DRIVER WAS SPEAKING TO HER SON. V001 HAS FAILED TO STOP AS THE LIGHTS TURNED RED HITTING V002 THAT WAS PULLING OUT OF WEMBDON RISE.

212103795
R1: A 38
E 330,231
N 135,999

Saturday 15/05/2021 1425hrs
Wet/Damp
Raining without high winds
30 mph

A38 TAUNTON ROAD 42M N OF PARKSTONE AVENUE, BRIDGWATER

Veh	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Car	Going ahead	N to S	Dri	M	85	Slight

Causation Factor:		**Participant:**	**Confidence:**
1st:	Illness or disability, mental or physical	Vehicle 001	Very Likely

V001 TRAVELLING SOUTH ON THE A38 WHEN ITS ELDERLY DRIVER APPEARS TO HAVE SUFFERED A MEDICAL EPISOPE WHICH RESULTED IN THE LOSS OF CONTROL OF THE VEHICLE. THE CAR DRIFTED OFF THE ROAD HITTING A LOW WALL.

212104195
R1: A 38
R2: U
E 330,812
N 139,108

Tuesday 08/06/2021 1400hrs
Dry
Fine without high winds
40 mph

A38 BRISTOL ROAD OUTSIDE/BY BUDGENS AT JUNCTION WITH EXPRESS PARK, BRIDGWATER

Veh	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Car	Stopping	N to S	Dri	F	25	Slight
Veh 2	Car	Going ahead	N to S				

Causation Factor:		**Participant:**	**Confidence:**
1st:	Junction restart	Vehicle 001	Very Likely
2nd:	Failed to look properly	Vehicle 002	Possible
3rd:	Following too close	Vehicle 002	Possible
4th:	Sudden braking	Vehicle 001	Possible

V001 HAS BEEN TRAVELLING DOWN DUNBALL STRAIGHT ON THE A38 TOWARDS THE EXPRESS PARK ROUNDABOUT. V002 HAS BEEN TRAVELLING BEHIND V001 IN CRAWLING TRAFFIC. V002 HAS BELIEVED THAT V001 WAS PULLING OFF FROM THE JUNCTION BUT V001 HAS BRAKED AND V002 HAS DRIVE
N INTO THE BACK OF IT

Details of Personal Injury Accidents for Period - **01/04/2018** **to** **31/03/2023** (60) months

Selection:

Notes:

Police Ref. / Road No. / 2nd Road No. / Grid Ref.	Day / Date / Time / D/L / R.S.C / Weather / Speed / Account of Accident	Location Description	Vehicles: Veh No / Type / Manv / Dir / Class	Casualties: Sex / Age / Sev

Causation Factor:

212105615
R1: A 38
E 331,011
N 139,933

Wednesday 14/07/2021 0738hrs — A38 BRISTOL ROAD, BRIDGWATER.

Dry
Fine without high winds
50 mph

Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Goods > 7.5t	Change lane to right	S to N				
Veh 2	M/C > 500 cc	Going ahead	S to N	Dri	M	58	Slight

Causation Factor:		Participant:	Confidence:
1st:	Failed to look properly	Vehicle 001	Very Likely
2nd:	Failed to signal/Misleading signal	Vehicle 001	Very Likely

V1 & V2 (M/CYCLE) TRAVELLING NORTHBOUND. V2 BEGAN TO OVERTAKE V1 BUT V1 SWERVED. V2 LOST CONTROL AND RIDER FELL FROM MACHINE.

212103736
R1: A 38
R2: U
E 330,189
N 136,105

Sunday 18/07/2021 1539hrs — A38 TAUNTON ROAD, AT JUNCTION WITH RHODE LANE, BRIDGWATER.

Dry
Fine without high winds
30 mph

Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Car	Turning left	SW to NW	Dri	M	38	Slight
Veh 1	Car	Turning left	SW to NW	FSP	F	40	Slight

Causation Factor:		Participant:	Confidence:
1st:	Impaired by alcohol	Vehicle 001	Very Likely
2nd:	Careless/Reckless/In a hurry	Vehicle 001	Possible
3rd:	Poor turn or manoevre	Vehicle 001	

V1, TRAVELLING NORTH EAST, TURNED LEFT NORTH WEST AND COLLIDED WITH A POST..

212200068
R1: A 38
E 330,228
N 136,006

Wednesday 21/07/2021 1410hrs — A38 TAUNTON ROAD, BRIDGWATER.

Dry
Fine without high winds
30 mph

Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Car	Turning right	NW to SW	Dri	F	46	Slight
Veh 1	Car	Turning right	NW to SW	FSP	F	17	Slight
Veh 1	Car	Turning right	NW to SW	RSP	M	11	Slight
Veh 1	Car	Turning right	NW to SW	RSP	F	14	Slight
Veh 2	Car	Going ahead	SE to NW				

Causation Factor:		Participant:	Confidence:
1st:	Failed to look properly	Vehicle 002	Possible
2nd:	Failed to judge other persons path or speed	Vehicle 002	Possible
3rd:	Failed to judge other persons path or speed	Vehicle 001	Possible
4th:	Dazzling sun	Vehicle 002	Possible
5th:	Dazzling sun	Vehicle 001	Possible

V1 TRAVELLING SOUTH EAST, V2 TRAVELLING OPPOSITE DIRECTION. V1 TURNED RIGHT SOUTH WEST AND COLLIDED WITH V2.

Details of Personal Injury Accidents for Period - 01/04/2018 to 31/03/2023 (60) months

Selection:

Notes:

Police Ref. / Road No. / 2nd Road No. / Grid Ref.	Day / Date / Time / D/L / R.S.C / Weather / Speed	Location Description	Vehicles: Veh No / Type / Manv / Dir / Class	Casualties: Sex / Age / Sev
212103800 **R1: A 39** **R2: U** **E 326,551** **N 138,353**	Friday 23/07/2021 1027hrs Dry Fine without high winds 50 mph	A39 MAIN ROAD, CANNINGTON, BRIDGWATER	Veh 1 Car Going ahead S to N FSP Veh 2 Car Stopping S to N	F 20 Slight

Causation Factor:

	Causation Factor	Participant:	Confidence:
1st:	Failed to look properly	Vehicle 001	Possible

V001 HAS FAILED TO SEE V002 BRAKING SHARPLY FOR STATIONARY TRAFFIC AND HAS GONE INTO THE BACK OF V002.

Police Ref. / Road No. / Grid Ref.	Day / Date / Time / R.S.C / Weather / Speed	Location Description	Vehicles	Casualties
212104283 **R1: A 38** **E 330,232** **N 135,991**	Monday 02/08/2021 1001hrs Dry Fine without high winds 30 mph	A38 TAUNTON ROAD, BRIDGWATER	Veh 1 Car Going ahead SE to NW Veh 2 Goods < 3.5t Going ahead SE to NW Dri Veh 3 Goods < 3.5t Going ahead NW to SE	M 25 Slight

Causation Factor:

	Causation Factor	Participant:	Confidence:
1st:	Tyres illegal, defective or under inflated	Vehicle 002	Very Likely
2nd:	Failed to look properly	Vehicle 002	Very Likely

V1 & V2 TRAVELLING NORTH WEST, V3 TRAVELLING OPPOSITE DIRECTION. V1 STOPPED TO TURN INTO A LAYBY. V2 FAILED TO STOP IN TIME AND COLLIDED WITH REAR OF V1, WHICH THEN COLLIDED WITH V3.

Police Ref. / Road No. / 2nd Road No. / Grid Ref.	Day / Date / Time / R.S.C / Weather / Speed	Location Description	Vehicles	Casualties
212200440 **R1: U** **R2: U** **E 330,114** **N 136,388**	Monday 23/08/2021 1615hrs Dry Fine without high winds 30 mph	A38 TAUNTON ROAD AT N0. 56, BRIDGWATER.	Veh 1 Car Going ahead NW to SE Ped	M 15 Serious

V1 TRAVELLING SOUTH EAST, PEDESTRIAN CROSSING ROAD. V1 COLLIDED WITH PEDESTRIAN.

Details of Personal Injury Accidents for Period - **01/04/2018** **to** **31/03/2023** (60) months

Selection:

Notes:

Police Ref. / Road No. / 2nd Road No. / Grid Ref.	Day / Date / Time / D/L / R.S.C / Weather / Speed	Location Description	Vehicles: Veh No / Type / Manv / Dir / Class					Casualties: Sex / Age / Sev		
212200489	Sunday	A39 QUANTOCK ROAD, BRIDGWATER	Veh 1	Car	Going ahead	W to E	Dri	M	35	Slight
	29/08/2021									
R1: U	0917hrs									
	Darkness: no street lighting									
E 327,706	Dry									
N 137,222	Fine without high winds									
	40 mph									

V1 TRAVELLING EAST. DRIVER LOST CONTROL AND V1 ENDED UP IN A DITCH.

Police Ref. / Road No. / 2nd Road No. / Grid Ref.	Day / Date / Time / D/L / R.S.C / Weather / Speed	Location Description	Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
212104401	Monday	A39 BROADWAY, BRIDGWATER	Veh 1	Car	Wait go ahead held up	W to E	Dri	F	26	Slight
	06/09/2021		Veh 1	Car	Wait go ahead held up	W to E	FSP	M		Slight
R1: A 39	1735hrs		Veh 2	Car	Stopping	W to E				
E 329,932	Dry									
N 136,766	Fine without high winds									
	30 mph									

V001 TRAVELLING EAST ON BROADWAY AND STARTED TO REDUCE SPEED ON THE APPROACH TO TRAFFIC LIGHTS. V002 FOLLOWING BEHIND HAS FAILED TO REDUCE SPEED IMPACTING WITH THE REAR OF V001. V002 HAS FAILED TO STOP.

Police Ref. / Road No. / 2nd Road No. / Grid Ref.	Day / Date / Time / D/L / R.S.C / Weather / Speed	Location Description	Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
212104917	Tuesday	A38 DUNBALL RBT AT JUNCTION WITH A38 BRISTOL ROAD, BRIDGWATER	Veh 1	Car	Going ahead	E to W	Dri	M	38	Serious
	14/09/2021									
R1: A 38	2300hrs									
R2: A 39										
E 330,902	Dry									
N 141,091	Fine without high winds									
	50 mph									

Causation Factor:		**Participant:**	**Confidence:**
1st:	Junction overshoot	Vehicle 001	Very Likely

V001 HAS TRAVELLING ALONG THE A39 TOWARDS THE DUNBALL ROUNDABOUT, V001 HAS FAILED TO NEGOTIATE THE ROUNDABOUT TRAVELLING THOUGH IT AND TOWARDS THE SERVICE STATION. V001 HAS FLIPPED ON TO ITS ROOF AND COLLIDED WITH THE CARWASH AT THE SERVICE STATION.

Details of Personal Injury Accidents for Period - **01/04/2018** **to** **31/03/2023** (60) months

Selection:

Notes:

Police Ref. / **Road No.** / **2nd Road No.** / **Grid Ref.**	Day / Date / Time / D/L / R.S.C / Weather / Speed / Account of Accident	Location Description	Vehicles: Veh No / Type / Manv / Dir / Class	Casualties: Sex / Age / Sev

Causation Factor:

212200713 | Friday | A39 BRISTOL ROAD AT JUNCTION WITH A38 DUNBALL , BRIDGWATER
17/09/2021
0741hrs

R1: A 39
R2: A 38
E 330,976
N 141,080

Dry
Fine without high winds
50 mph

Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Car	Wait go ahead held up	E to W				
Veh 2	Car	Going ahead	E to W	Dri	M	25	Slight

Causation Factor:		**Participant:**	**Confidence:**
1st:	Failed to look properly	Vehicle 001	Very Likely
2nd:	Failed to judge other persons path or speed	Vehicle 001	Very Likely
3rd:	Following too close	Vehicle 001	Very Likely
4th:	Sudden braking	Vehicle 002	Very Likely

V001 HAS BEEN TRAVELLING ALONG A39 BRISTOL ROAD OUTBOUND V002 HAS BEEN IN THE LEFT LANE. WHILST AT THE ROUNDABOUT V002 HAS GONE AND THEN STOPPED. V002 HAS THEN HIT THE BACK OF V002.

212104760 | Friday | REEDMOOR GARDENS, BRIDGWATER
24/09/2021
1830hrs

R1: U
R2: U
E 329,333
N 138,221

Dry
Fine without high winds
30 mph

Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Car	Starting	NE to SW	Dri	M	34	Slight
Veh 1	Car	Starting	NE to SW	FSP	F	30	Slight
Veh 2	Car	Stopping	SW to NE				

V1 WAS DRIVING IN REEDMOOR GARDENS, V2 WAS COMING FROM SAVIANO WAY WHEN V1 STOPPED AND V2 ACCELERATED INSTEAD OF BRAKING AND HIT V1

212104976 | Monday | ASHLEIGH AVENUE AT JUNCTION WITH A38 TAUNTON ROAD, BRIDGWATER
27/09/2021
1450hrs

R1: U
R2: A 38
E 330,162
N 136,166

Dry
Fine with high winds
30 mph

Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Car	Going ahead	E to W	Dri	M	33	Slight
Veh 2	Car	Reversing	W to E				

Causation Factor:		**Participant:**	**Confidence:**
1st:	Vehicle in course of crime	Vehicle 002	Very Likely

V2 PULLED IN TO A CAR PARK AT THE BED HOUSE, TAUNTON RD, BRIDGWATER. V1 (UNMARKED POLICE VEHICLE) HAS PULLED U
BEHIND V2 AND ACTIVATED LIGHTS AND BEACONS. V2 MADE OFF TURNING INTO ASHLEIGH AVE. V1 FOLLOWED BUT V2 HAS SUDDENLY REVERSED INTO V1. ITS DRIVE
R MADE OFF FROM SCENE.

Details of Personal Injury Accidents for Period - **01/04/2018** **to** **31/03/2023** (60) months

Selection:

Notes:

Police Ref. / Road No. / 2nd Road No. / Grid Ref.	Day / Date / Time / D/L / R.S.C / Weather / Speed	Location Description	Vehicles: Veh No / Type / Manv / Dir / Class	Casualties: Sex / Age / Sev

Account of Accident

Causation Factor:

212200954
R1: A 39
R2: U
E 326,035
N 138,932

Friday
15/10/2021
1910hrs
Darkness: street lighting
Dry
Fine without high winds
50 mph

A39 CANNINGTON AT JUNCTION WITH MAIN ROAD, BRIDGWATER

Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Car	Going ahead	N to W	Dri	M	66	Slight

Causation Factor:		**Participant:**	**Confidence:**
1st:	Illness or disability, mental or physical	Vehicle 001	Very Likely

V001 TRAVELLING NORTH APPROACHING ROUNDABOUT. DRIVER HAS LOST CONTROL OF THE CAR RESULTING IN AN IMPACT WITH A STREET LIGHT.

212200984
R1: A 38
R2: U
E 330,896
N 139,444

Monday
18/10/2021
0134hrs
Darkness: street lights present
Dry
Other
40 mph

A38 BRISTOL ROAD AT JUNCTION WITH KINGS DRIVE, BRIDGWATER

Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Car	Going ahead	S to N	Dri	M	33	Slight

Causation Factor:		**Participant:**	**Confidence:**
1st:	Sudden braking	Vehicle 001	Very Likely
2nd:	Swerved	Vehicle 001	Very Likely
3rd:	Distraction outside vehicle	Vehicle 001	

V001 TRAVELLING NORTH . AS IT WAS ENTERING THE RBT THE DRIVER SWERVED TO AVOID HITTING AN ANIMAL HE SAW IN THE ROAD. THE DRIVER LOST CONTROL AND THE VEHICLE HIT A STREET LAMP.

212105228
R1: A 39
R2: U
E 329,434
N 136,974

Wednesday
20/10/2021
2100hrs
Darkness: street lights present
Wet/Damp
Raining without high winds
30 mph

A39 NORTH STREET OUTSIDE FORD GARAGE, NORTH STREET, BRIDGWATER

Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	M/C < 125 cc	Going ahead	SE to NW	Dri	M	36	Slight
Veh 2	Goods < 3.5t	Going ahead	NE to SW				

V1 WAS DRIVING NW ALONG NORTH STREET WHEN V2 EMERGED FROM THE DRIVEWAY OF THE FORD GARAGE KNOCKING V1 OVER.

Details of Personal Injury Accidents for Period - 01/04/2018 to 31/03/2023 (60) months

Selection:

Notes:

Police Ref. / Road No. / 2nd Road No. / Grid Ref.	Day / Date / Time / D/L / R.S.C / Weather / Speed	Location Description	Veh No	Type	Manv	Dir	Class	Casualties Sex / Age / Sev
212201201	Saturday	A38 TAUNTON ROAD, AT JUNCTION WITH WILLS ROAD, BRIDGWATER	Veh 1	Car	Turning right	W to S		
R1: A 38	13/11/2021		Veh 2	M/C < 125 cc	Going ahead	S to N	Dri	M 18 Slight
R2: U	2020hrs							
E 330,357	Darkness: street lights present							
N 135,589	Dry							
	Fine without high winds							
	30 mph							

Causation Factor:

	Causation Factor	Participant:	Confidence:
1st:	Failed to look properly	Vehicle 001	Very Likely
2nd:	Failed to judge other persons path or speed	Vehicle 001	Very Likely
3rd:	Inexperienced or learner driver/rider	Vehicle 002	

V1 TRAVELLING EAST, V2 (M//CYCLE) TRAVELLING NORTH. V1 TURNED RIGHT SOUTH AND COLLIDED WITH V2.

Police Ref. / Road No. / Grid Ref.	Day / Date / Time / D/L / R.S.C / Weather / Speed	Location Description	Veh No	Type	Manv	Dir	Class	Casualties Sex / Age / Sev
212105902	Thursday	A38 BRISTOL ROAD OUTSIDE MORRISONS MANUFACTURING, BRIDGWATER	Veh 1	Car	Going ahead	N to S	Dri	M 28 Slight
R1: A 38	02/12/2021		Veh 2	Car	Change lane to left	N to S		
	1711hrs							
E 330,804	Darkness: street lighting							
N 138,979	Wet/Damp							
	Raining with high winds							
	40 mph							

V2 TRAVELLING SOUTH PUSHED INTO LINE OF TRAFFIC, COLLIDING WITH V1. V2 FAILED TO STOP AND DROVE OFF WITHOUT LEAVING DETAILS AT THE SCENE.

Police Ref. / Road No. / Grid Ref.	Day / Date / Time / D/L / R.S.C / Weather / Speed	Location Description	Veh No	Type	Manv	Dir	Class	Casualties Sex / Age / Sev
212200134	Tuesday	A38 TAUNTON ROAD (OUTSIDE TAUNTON ROAD CAR CENTRE), BRIDGWATER	Veh 1	Car	Starting	S to N		
R1: A 38	07/12/2021		Veh 2	M/C > 500 cc	O/take s/veh o/side	S to N	Dri	M 59 Serious
	2115hrs							
E 330,407	Darkness: street lights present							
N 135,360	Wet/Damp							
	Raining with high winds							
	30 mph							

Causation Factor:

	Causation Factor	Participant:	Confidence:
1st:	Slippery road (due to weather)	Vehicle 002	Possible
2nd:	Illegal turn or direction of travel	Vehicle 001	Possible
3rd:	Exceeding speed limit	Vehicle 002	Possible
4th:	Travelling too fast for conditions	Vehicle 002	Possible
5th:	Poor turn or manoevre	Vehicle 001	Possible

V1 TRAVELLING NORTH HAS STOPPED AT THE SIDE OF THE ROAD TO PICK UP A PASSENGER. V1 STARTED TO PULL AWAY JUSTAS V2 WAS IN THE PROCESS OF PASSING IN THE SAME DIRECTION, CAUSING A COLLISION.

Details of Personal Injury Accidents for Period - **01/04/2018** **to** **31/03/2023** (60) months

Selection:

Notes:

Police Ref. / Road No. / 2nd Road No. / Grid Ref.	Day / Date / Time / D/L / R.S.C / Weather / Speed / Account of Accident	Location Description	Vehicles: Veh No / Type / Manv / Dir / Class	Casualties: Sex / Age / Sev

Causation Factor:

212201482
R1: A 39
R2: U
E 329,581
N 136,834

Monday
13/12/2021
0856hrs
Dry
Fine without high winds
30 mph

A39 BROADWAY AT JUNCTION WITH ALBERT STREET, BRIDGWATER

Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Car	Turning left	SW to NW				
Veh 2	Car	Going ahead	SE to NW	Dri	M	63	Slight
Veh 3	Goods 3.5 - 7.5t	Going ahead	NW to SE				

Causation Factor:		Participant:	Confidence:
1st:	Poor turn or manoevre	Vehicle 001	Very Likely
2nd:	Failed to look properly	Vehicle 001	Very Likely

V001 HAS PULLED OUT OF ALBERT STREET TURNING LEFT ONTO BROADWAY. IT HAS STRUCK THE REAR OF V002 TRAVELLING N\ ON BROADWAY CAUSING IT TO SPIN ACROSS THE CARRIAGEWAY ONTO THE OPPOSITE SIDE OF THE ROAD WHERE IT WAS STRUC BY V003 (HGV). V003 DID NOT REMAIN
AT THE SCENE.

22SE021
R1: A 39
R2: A 39
E 329,584
N 136,838

Friday
07/01/2022
0830hrs
Daylight:street lights present
Wet/Damp
Raining without high winds
30 mph

A39 BROADWAY CROSSOVER JNC FROM ALBERT STREET

Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Car	Turning right	SW to SE	Dri	F	50	Slight
Veh 2	Car	Going ahead	NW to SE				

Causation Factor:		Participant:	Confidence:
1st:	Failed to look properly	Vehicle 1	Very Likely

V1 WAS DRIVING ON ALBERT STREET WHERE IT HAS APPROACHED THE JUNCTION OF BROADWAY IT HAS PULLED AWAY ONTO BROADWAY IN ORDER TO TURN RIGHT TOWARDS MORRISONS AT THIS TIME V2 WAS TRAVELLING ON BROADWAY OUTBOUND TOWARDS WEST STREET V1 HAS COLLIDED WITH THE RE
AR END OF V2 CAUSING IT TO SPIN AROUND RESULTING IN THE FRONT END COLLIDING WITH A PAVEMENT ROLLING AND COMING TO A REST

222200238
R1: U
E 326,039
N 139,013

Friday
14/01/2022
0915hrs
Dry
Fine without high winds
30 mph

MAIN ROAD, CANNINGTON

Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Pedal cycle	Going ahead	N to S	Ped	M	56	Slight
Veh 1	Pedal cycle	Going ahead	N to S	Ped	M	40	Slight

WHILST WALKING ALONG A FOOTPATH IN A GROUP OF 5 PEDESTRIANS, TWO OF THE GROUP WERE STRUCK FROM BEHIND BY A BICYCLE TRAVELLING SOUTH ON THE FOOTPATH.

Details of Personal Injury Accidents for Period - **01/04/2018** **to** **31/03/2023** (60) months

Selection:

Notes:

Police Ref. / Road No. / 2nd Road No. / Grid Ref.	Day / Date / Time / D/L / R.S.C / Weather / Speed / Account of Accident	Location Description	Vehicles: Veh No / Type / Manv / Dir / Class	Casualties: Sex / Age / Sev

Causation Factor:

22SE083
R1: A 38
E 330,599
N 138,026

Friday
21/01/2022
0807hrs
Darkness: no street lighting
Wet/Damp
Fine without high winds
30 mph

A38 BRISTOL ROAD, BRIDGWATER

Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Car	Going ahead	S to N	Dri	M	33	Slight
Veh 2	Goods < 3.5t	Parked	0 to 0				

Causation Factor:		Participant:	Confidence:
1st:	Failed to look properly	Vehicle 1	Very Likely
2nd:	Stationary or parked vehicle	Vehicle 1	Very Likely

VEH 1 TRAVELLING NORTHBOUND ALONG BRISTOL ROAD. VEH 2 PARKED ON THE SAME SIDE OF THE ROAD. VEH 1 HAS COLLIDE INTO THE REAR AND RIGHT SIDE OF VEH 2.

222202036
R1: A 38
E 330,738
N 138,659

Thursday
03/02/2022
2150hrs
Darkness: street lights present
Dry
Fine without high winds
30 mph

A38 BRISTOL ROAD OUTSIDE/BY NO.354, BRIDGWATER

Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Car	Going ahead	S to N	Dri	F	21	Slight
Veh 2	Car	Going ahead	N to S				

Causation Factor:		Participant:	Confidence:
1st:	Impaired by alcohol	Vehicle 002	Very Likely

V001 HAS BEEN DRIVING NORTH ALONG BRISTOL ROAD TOWARDS THE EXPRESS PARK ROUNDABOUT. V002 HAS BEEN TRAVELLING IN THE OPPOSITE DIRECTION AT SPEED, WEAVING IN AND OUT OF TRAFFIC. V002 HAS LOST CONTROL AND SPUN, COLLIDING WITH V001.

222202513
R1: A 38
E 331,107
N 140,576

Wednesday
09/03/2022
0639hrs
Dry
Fine without high winds
50 mph

A38 BRISTOL ROAD, BRIDGWATER

Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Car	Going ahead	SE to NW				
Veh 2	Car	Going ahead	SE to NW	Dri	F	43	Slight

Causation Factor:		Participant:	Confidence:
1st:	Junction overshoot	Vehicle 001	Very Likely
2nd:	Poor turn or manoevre	Vehicle 001	Very Likely
3rd:	Failed to look properly	Vehicle 001	Very Likely
4th:	Swerved	Vehicle 001	Very Likely

V001 AND V002 TRAVELLING ALONG DUAL CARRIAGEWAY FROM BRIDGWATER TOWARDS DUNBALL. V001 IN LANE 1. V002 IN LANE 2. V001 HAS CROSSED IN TO V002'S PATH TO USE TURN-AROUND POINT BUT IMPACTED WITH THE SIDE OF V002 CAUSING IT TO OVERTURN.

Details of Personal Injury Accidents for Period - 01/04/2018 to 31/03/2023 (60) months

Selection:

Notes:

Police Ref. / Road No. / 2nd Road No. / Grid Ref.	Day / Date / Time / D/L / R.S.C / Weather / Speed / Account of Accident	Location Description	Vehicles: Veh No / Type / Manv / Dir / Class	Casualties: Sex / Age / Sev
Causation Factor:				

222204221	Friday	A39 NEW ROAD, CANNINGTON	Veh 1	Car	Going ahead	SE to NW	Dri	F	50	Serious
	01/04/2022		Veh 2	Car	Going ahead	NW to SE				
R1: A 39	1709hrs		Veh 3	Car	Going ahead	NW to SE				
E 326,606	Dry									
N 138,331	Fine without high winds									
	60 mph									

Causation Factor:		**Participant:**	**Confidence:**
1st:	Illness or disability, mental or physical	Vehicle 001	Very Likely

V1 TRAVELLING NORTH WEST, V2 TRAVELLING OPPOSITE DIRECTION. DRIVER OF V1 BECAME UNWELL V1 HIT A BARRIER THEN COLLIDED WITH V2 & V3.

22SE371	Tuesday	A38 BRISTOL ROAD, BRIDGWATER	Veh 1	Car	Turning right	W to S				
	12/04/2022		Veh 2	M/C < 125 cc	Turning right	N to W	Dri	M	19	Slight
R1: A 38	2034hrs									
R2: A 39	Darkness: street lights present									
E 330,545	Dry									
N 137,777	Fine without high winds									
	30 mph									

Causation Factor:		**Participant:**	**Confidence:**
1st:	Poor turn or manoeuvre	Vehicle 1	Possible
2nd:	Failed to judge other persons path or speed	Vehicle 1	Possible
3rd:	Failed to look properly	Vehicle 1	

VEH 2 TRAVELLING ALONG BRISTOL ROAD TOWARDS DROVE JUNCTION. VEH 1 AT JUNCTION PULLED OUT IN FRONT OF VEH 2 COLLIDING WITH IT.

222204410	Friday	A39 HOMBERG WAY NEAR CHURCH MEADOW.	Veh 1	Car	Going ahead	S to N	Dri	F	42	Slight
	22/04/2022		Veh 1	Car	Going ahead	S to N	FSP	M	14	Slight
R1: A 39	1145hrs									
E 329,060	Dry									
N 137,760	Fine without high winds									
	30 mph									

Causation Factor:		**Participant:**	**Confidence:**
1st:	Fatigue	Vehicle 001	Very Likely

V1 TRAVELLING ON HOMBERG WAY, NORTH, TOWARDS BRISTOL. DRIVER OF V1 MOMENTARILY FELL ASLEEP AT THE WHEEL. V1 WENT ACROSS THE ROAD INTO LAMP POST, CAUSING INJURY TO CASUALTY 001 AND 002.

Details of Personal Injury Accidents for Period - **01/04/2018** **to** **31/03/2023** (60) months

Selection:

Notes:

Police Ref. / Road No. / 2nd Road No. / Grid Ref.	Day / Date / Time / D/L / R.S.C / Weather / Speed / Account of Accident	Location Description	Vehicles: Veh No / Type / Manv / Dir / Class	Casualties: Sex / Age / Sev

Causation Factor:

22SE204
R1: A 39
E 331,033
N 141,107

Sunday
01/05/2022
1956hrs
Daylight:street lights present
Wet/Damp
Raining without high winds
70 mph

A39 DOWN END, PURITON

Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Car	Going ahead	W to E	FSP	M	34	Slight
Veh 2	Car	Going ahead	E to W	Dri	M	73	Serious
Veh 2	Car	Going ahead	E to W	FSP	F	41	Serious

Causation Factor:		Participant:	Confidence:
1st:	Impaired by alcohol	Vehicle 1	Very Likely
2nd:	Impaired by drugs (illicit or medicinal)	Vehicle 1	Very Likely
3rd:	Careless/Reckless/In a hurry	Vehicle 1	Very Likely
4th:	Slippery road (due to weather)	Vehicle 1	Very Likely
5th:	Road layout (eg bend, hill etc.)	Vehicle 1	Very Likely
6th:	Travelling too fast for conditions	Vehicle 1	Very Likely

VEH 1 TRAVELLING ON A39 TOWARDS BRIDGWATER. AFTER EXITING EXIT ON JUNCTION 23 FOR BRIDGWATER CROSSES THE CENTRAL RESERVATON COLLIDES HEAD ON WITH VEH 2

22SE217
R1: A 38
R2: U
E 330,920
N 139,394

Saturday
07/05/2022
1240hrs
Daylight:street lights present
Dry
Fine without high winds
40 mph

A38 BRISTOL ROAD, BRIDGWATER

Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Car	Turning right	S to E				
Veh 2	M/C > 125 cc	Going ahead	S to N	Dri	M	29	Serious

Causation Factor:		Participant:	Confidence:
1st:	Failed to look properly	Vehicle 1	Very Likely
2nd:	Failed to judge other persons path or speed	Vehicle 1	Very Likely

VEH 1 IN DEDICATED OUTBOUND LANE ON A38 ROUNDABOUT ON BRISTOL ROAD. VEH 2 BESIDE VEH 1 IN OFFSIDE LANE. VEH 1 TURNED ACROSS PATH OF VEH 2 COLLIDING WITH IT CAUSING THE RIDER TO FALL OFF.

222204570
R1: A 38
R2: M 5
E 330,212
N 134,324

Sunday
08/05/2022
2036hrs
Darkness: street lights present
Dry
Fine without high winds
40 mph

A38 NORTH PETHERTON JUNCTION WITH M5 JUNCTION 24, BRIDGWATER

Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Car	Going ahead	SE to NW				
Veh 2	Car	Going ahead	SE to NW	Dri	F	30	Slight

Causation Factor:		Participant:	Confidence:
1st:	Travelling too fast for conditions	Vehicle 001	Very Likely
2nd:	Failed to look properly	Vehicle 001	Very Likely
3rd:	Failed to judge other persons path or speed	Vehicle 001	

V1 HAS EXITED THE MOTORWAY BEHIND V2 WHERE V1 HAS CONTINUED TO TRAVEL ONTO THE TOP OF THE SLIP AND INTO THE REAR OF V2.

Details of Personal Injury Accidents for Period - **01/04/2018** **to** **31/03/2023** (60) months

Selection:

Notes:

Police Ref. / Road No. / 2nd Road No. / Grid Ref.	Day / Date / Time / D/L / R.S.C / Weather / Speed / Account of Accident	Location Description	Vehicles: Veh No / Type / Manv / Dir / Class	Casualties: Sex / Age / Sev

Causation Factor:

22SE322

R1: A 39

E 328,570
N 136,991

Thursday
12/05/2022
0720hrs
Darkness: no street lighting
Dry
Fine without high winds
40 mph

A39 QUANTOCK ROAD, BRIDGWATER

Veh	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Car	Going ahead	E to W	Dri	M	18	Slight
Veh 2	Goods < 3.5t	Going ahead	W to E	Dri	M	51	Slight

Causation Factor:		Participant:	Confidence:
1st:	Impaired by alcohol	Vehicle 1	Very Likely
2nd:	Impaired by drugs (illicit or medicinal)	Vehicle 1	Possible
3rd:	Fatigue	Vehicle 1	Very Likely
4th:	Careless/Reckless/In a hurry	Vehicle 1	Very Likely

VEH 1 CROSSED THE WHITE LINE ON TO ANOTHER CARRIAGE WAY AND COLLIEDE WITH VEH 2.

222204880

R1: U

E 329,898
N 138,177

Thursday
02/06/2022
0920hrs
Dry
Fine without high winds
30 mph

RIVERSIDE CLOSE (OUTSIDE NO.109), BRIDGWATER

Veh	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Car	Going ahead	NW to SE	Ped	F	47	Serious

Causation Factor:		Participant:	Confidence:
1st:	Loss of control	Vehicle 001	Very Likely
2nd:	Distraction in vehicle	Vehicle 001	Very Likely

DRIVER OF V1 WAS MOVING VEHICLE SLOWLY WITH THE CASUALTY STOOD IN THE ROAD DIRECTLY IN FRONT DIRECTING THE DRIVER. DRIVERS FOOT SLIPPED OFF OF THE BRAKE CAUSING V1 TO MOVE FORWARD PINNING THE CASUALTIES LEGS TO A PARKED VEHICLE.

222202926

R1: A 38

E 331,005
N 140,896

Friday
24/06/2022
1415hrs
Dry
Unknown
50 mph

A38 BRISTOL ROAD, DUNBALL, BRIDGWATER

Veh	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Pedal cycle	Going ahead	S to N	Dri	M	48	Slight
Veh 2	Pedal cycle	Going ahead	S to N				

V2 (PEDAL CYCLE) TRAVELLING NORTH ON A38 WHEN IT WAS HIT BY V1 (PEDAL CYCLE). AFTER THE COLLISION THE RIDER OF V PICKED UP THEIR BIKE AND THEN CONTINUED TO WALK AWAYWITHOUT GIVING ANY DETAILS.

Details of Personal Injury Accidents for Period - **01/04/2018** **to** **31/03/2023** (60) months

Selection:

Notes:

Police Ref. / **Road No.** / **2nd Road No.** / **Grid Ref.**	Day / Date / Time / D/L / R.S.C / Weather / Speed	Location Description	Vehicles: Veh No / Type / Manv / Dir / Class	Casualties: Sex / Age / Sev

Account of Accident

Causation Factor:

2300006
R1: A 39
R2: U
E 325,997
N 138,943

Monday
29/08/2022
0744hrs
Daylight:street lights present
Dry
Fine without high winds
50 mph

A39 CANNINGTON BYPASS

Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Car	Going ahead	W to E	Dri	F	35	Slight

Causation Factor:		**Participant:**	**Confidence:**
1st:	Exceeding speed limit	Vehicle 1	Very Likely
2nd:	Dazzling sun	Vehicle 1	Very Likely
3rd:	Loss of control	Vehicle 1	

V001 HAS BEEN APPROACHING THE ROUNDABOUT FROM THE DIRECTION OF THE HPC PARK AND RIDE . AS SHE HAS APPROACHEI THE ROUNDABOUT SHE HAS VEERED OVER THE PEDESTRIAN ISLAND STRIKING A ROAD SIGN BEFORE SWERVING AROUND THE ROUNDABOUT THE WRONG WAY.

222300087
R1: A 38
E 330,168
N 136,195

Thursday
15/09/2022
1813hrs
Dry
Fine without high winds
30 mph

A38 TAUNTON ROAD (OUTSIDE OPPOSITE RADSTOCK CO-OPERATIVE) JUNCTION WITH,

Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	M/C > 500 cc	Going ahead	S to N	Dri	M	51	Serious
Veh 1	M/C > 500 cc	Going ahead	S to N	Ped	M	49	Slight

Causation Factor:		**Participant:**	**Confidence:**
1st:	Failed to look properly	Casualty 002	Very Likely
2nd:	Failed to judge vehicles path or speed	Casualty 002	Possible

PEDESTRIAN HAS GONE TO CROSS THE ROAD JUST BEFORE THE CROSSING, V1 HAS BEEN COMING TOWARDS HIM IN THE DIRECTION OF BRIDGWATER. PEDESTRIAN HAS NOT BEEN ABLE TO GET TO THE OTHER SIDE IN TIME AND (V1) A MOTORCYCLIST HAS COLLIDED WITH PEDESTRIAN.

222204001
R1: U
E 330,333
N 137,848

Sunday
18/09/2022
1300hrs
Dry
Fine without high winds
30 mph

THE DROVE, BRIDGWATER

Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Car	Going ahead	S to N	Dri	M	54	Slight
Veh 2	Horse	Going ahead	N to S				

V1 WAS DRIVING WHEN V2 (HORSE AND CART) WAS COMING THE OTHER SIDE OF THE ROAD ON THE WRONG SIDE COLLIDED WITH V1 AND CONTINUED TO DRIVE OFF.

Details of Personal Injury Accidents for Period - **01/04/2018** **to** **31/03/2023** (60) months

Selection:

Notes:

Police Ref. / Road No. / 2nd Road No. / Grid Ref.	Day / Date / Time / D/L / R.S.C / Weather / Speed / Account of Accident	Location Description	Vehicles: Veh No / Type / Manv / Dir / Class	Casualties: Sex / Age / Sev

Causation Factor:

222300177

R1: A 38

E 331,031
N 140,059

Thursday
13/10/2022
1616hrs
Dry
Fine without high winds
50 mph

A38 BRISTOL ROAD (OUTSIDE TRIZO LTD), CHILTON TRINITY, BRIDGWATER, SOMERSET

Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Car	Going ahead	S to N	FSP	M	19	Slight
Veh 2	Car	Going ahead	S to N	Dri	M	27	Slight
Veh 2	Car	Going ahead	S to N	FSP	F	28	Slight

Causation Factor:		Participant:	Confidence:
1st:	Exceeding speed limit	Vehicle 001	Very Likely
2nd:	Failed to look properly	Vehicle 002	Very Likely

POLICE WITNESSED COLLISION. V1 HAS BEEN TRAVELLING IN LANE 2 OF A38 USING EXCESS SPEED. V2 HAS BEEN IN LANE 1 AND HAS PULLED OUT INTO LANE 2. V1 HAS CRASHED INTO THE REAR OF V2 AND V1 HAS ENDED UP ON HIS ROOF. FAULT ON BOTH SIDES.

2300165

R1: U

E 329,200
N 136,993

Monday
07/11/2022
1200hrs
Daylight:street lights present
Wet/Damp
Other
30 mph

A39 WEMBDON ROAD, BRIDGWATER

Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Car	Going ahead	SW to NE				
Veh 2	Pedal cycle	Starting	SW to NE	Dri	F	51	Slight

Causation Factor:		Participant:	Confidence:
1st:	Cyclist entering road from pavement	Vehicle 2	Possible
2nd:	Loss of control	Vehicle 2	Possible

VEHICLE 001 WAS TRAVELLING ALONG WEBDON ROAD BRIDGWATER FROM THE ROUNDABOUT WITH NORTH ST TOWARDS QUANTOCK RD. VEHICLE 001 WAS A GREY RANGE ROVER. A FEMALE ON A PUSHBIKE LEFT HER HOUSE ON WEMBDON RD AND ONCE OUTSIDE 16 WEMBDON RD THE FEMALE PAUSED ON THE
PAVEMENT. SHE LOST HER BALANCE ON THE BIKE AND LEANT LEFT SO THE TOP HALF OF HER BODY WAS IN THE ROAD. AT THIS POINT VEH 001 COLLIDED WITH THE FEMALE KNOCKING HER UNCONCIOUS AND CAUSING A CUT TO HER LIP AND HEAD.

222204940

R1: A 38

E 330,017
N 136,741

Friday
11/11/2022
1900hrs
Darkness: street lights present
Dry
Fine with high winds
30 mph

TAUNTON ROAD BRIDGWATER

Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Pedal cycle	Going ahead	S to N	Dri	M	16	Slight
Veh 2	Car	Going ahead	N to S				

V1 HAS HIT A SIGN ON THE SIDE OF THE ROAD CAUSING HIM TO FALL INTO THE ROAD WHERE V2 HAS COLLIDED WITH V1

Details of Personal Injury Accidents for Period - **01/04/2018** **to** **31/03/2023** (60) months

Selection:

Notes:

Police Ref. / **Road No.** / **2nd Road No.** / **Grid Ref.**	Day / Date / Time / D/L / R.S.C / Weather / Speed	Location Description	Vehicles: Veh No / Type / Manv / Dir / Class	Casualties: Sex / Age / Sev

Account of Accident

Causation Factor:

222205315 | Thursday | BRISTOL RD, BRIDGWATER
01/12/2022
R1: U | 1705hrs
Darkness: street lighting
E 330,840 | Wet/Damp
N 139,233 | Fog or mist
30 mph

Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Car	Stopping	N to S	Dri	F	34	Slight
Veh 2	Car	Stopping	N to S	Dri	M	48	Slight
Veh 3	Car	Going ahead	N to S				

ONLINE REPORT V1 WAS STOPPED IN TRAFFIC WHEN V3 HAS COLLIDED INTO THE REAR OF V2 CAUSING V2 TO COLLIDE INTO THE REAR OF V1 CAUSING DAMAGE.

222300427 | Thursday | A38 TAUNTON ROAD, BRIDGWATER
15/12/2022
R1: A 38 | 1725hrs
Darkness: street lights present
E 330,283 | Frost/Ice
N 135,858 | Fine without high winds
30 mph

Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Car	Going ahead	S to N				
Veh 2	Car	Going ahead	S to N	Dri	M	36	Slight

Causation Factor:		**Participant:**	**Confidence:**
1st:	Failed to look properly	Vehicle 002	Very Likely
2nd:	Failed to judge other persons path or speed	Vehicle 002	Very Likely
3rd:	Travelling too fast for conditions	Vehicle 002	Possible
4th:	Distraction in vehicle	Vehicle 002	Possible
5th:	Distraction outside vehicle	Vehicle 002	Possible

V001 WAS TRAVELLING N ALONG TAUNTON ROAD WITH V002 TRAVELLING DIRECTLY BEHIND. V001 HAS SLOWED DOWN DUE TO STATIONARY TRAFFIC AHEAD HOWEVER THE DRIVER OF V002 HAS FAILED TO REACT AND HAS DRIVEN INTO THE REAR OF V001.

2300384 | Thursday | A38, TAUNTON ROAD, BRIDGWATER
05/01/2023
R1: A 38 | 1728hrs
Daylight:street lights present
E 330,396 | Wet/Damp
N 135,426 | Raining without high winds
30 mph

Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Car	Turning left	N to E				
Veh 2	Pedal cycle	Going ahead	N to S	Dri	M	56	Slight

Causation Factor:		**Participant:**	**Confidence:**
1st:	Failed to look properly	Vehicle 1	Very Likely
2nd:	Failed to look properly	Vehicle 2	Very Likely

V001 WAS TURNING LEFT INTO PETROL GARAGE. HAS NOT SEEN CYCLIST (V002) THAT WAS PROGRESSING ALONG SIDE STATIONARY VEHICLES. V001 HAS COLLIDED WITH CYCLIST. BICYCLE WAS LIT UP WITH LIGHTS TO REAR AND TO FRONT.

Details of Personal Injury Accidents for Period - **01/04/2018** **to** **31/03/2023** (60) months

Selection:

Notes:

			Vehicles	Casualties
Police Ref.	Day	Location Description	Veh No / Type / Manv / Dir / Class	Sex / Age / Sev
	Date			
Road No. **2nd Road No.**	Time			
Grid Ref.	D/L			
	R.S.C			
	Weather			
	Speed			
	Account of Accident			
Causation Factor:				

Details of Personal Injury Accidents for Period - **01/04/2018** **to** **31/03/2023** (60) months

Selection:

Notes:

Police Ref. / Road No. / 2nd Road No. / Grid Ref. / Causation Factor:	Day / Date / Time / D/L / R.S.C / Weather / Speed / Account of Accident	Location Description	Vehicles: Veh No	Type	Manv	Dir	Class	Casualties: Sex	Age	Sev
2300610	Tuesday	A39 QUANTOCK ROAD, WEMBDON	Veh 1	M/C > 125 cc	Going ahead LH bend	SE to N	Dri	M	39	Slight
	17/01/2023		Veh 2	Bus/coach	Going ahead LH bend	SE to N	Dri	M	58	Slight
R1: A 39	0600hrs		Veh 2	Bus/coach	Going ahead LH bend	SE to N	Seat	M	35	Slight
	Darkness: no street lighting		Veh 2	Bus/coach	Going ahead LH bend	SE to N	Seat	M	35	Serious
E 326,970	Frost/Ice		Veh 2	Bus/coach	Going ahead LH bend	SE to N	Seat	M	30	Serious
N 137,916	Fine without high winds		Veh 2	Bus/coach	Going ahead LH bend	SE to N	Seat	M	41	Slight
	40 mph		Veh 2	Bus/coach	Going ahead LH bend	SE to N	Seat	M	50	Slight
			Veh 2	Bus/coach	Going ahead LH bend	SE to N	Seat	M	27	Serious
			Veh 2	Bus/coach	Going ahead LH bend	SE to N	Seat	M	43	Slight
			Veh 2	Bus/coach	Going ahead LH bend	SE to N	Seat	M	34	Slight
			Veh 2	Bus/coach	Going ahead LH bend	SE to N	Seat	M	39	Slight
			Veh 2	Bus/coach	Going ahead LH bend	SE to N	Seat	M	41	Slight
			Veh 2	Bus/coach	Going ahead LH bend	SE to N	Seat	M	30	Serious
			Veh 2	Bus/coach	Going ahead LH bend	SE to N	Seat	F	25	Serious
			Veh 2	Bus/coach	Going ahead LH bend	SE to N	Seat	M	39	Serious
			Veh 2	Bus/coach	Going ahead LH bend	SE to N	Seat	M	55	Slight
			Veh 2	Bus/coach	Going ahead LH bend	SE to N	Seat	M	45	Slight
			Veh 2	Bus/coach	Going ahead LH bend	SE to N	Seat	M	31	Serious
			Veh 2	Bus/coach	Going ahead LH bend	SE to N	Seat	M	28	Serious
			Veh 2	Bus/coach	Going ahead LH bend	SE to N	Seat	M	40	Slight
			Veh 2	Bus/coach	Going ahead LH bend	SE to N	Seat	M	22	Slight
			Veh 2	Bus/coach	Going ahead LH bend	SE to N	Seat	M	42	Serious
			Veh 2	Bus/coach	Going ahead LH bend	SE to N	Seat	M	25	Slight
			Veh 2	Bus/coach	Going ahead LH bend	SE to N	Seat	M	39	Slight
			Veh 2	Bus/coach	Going ahead LH bend	SE to N	Seat	M	45	Slight
			Veh 2	Bus/coach	Going ahead LH bend	SE to N	Seat	M	57	Serious
			Veh 2	Bus/coach	Going ahead LH bend	SE to N	Seat	M	46	Slight
			Veh 2	Bus/coach	Going ahead LH bend	SE to N	Seat	M	44	Slight
			Veh 2	Bus/coach	Going ahead LH bend	SE to N	Seat	M	43	Slight
			Veh 2	Bus/coach	Going ahead LH bend	SE to N	Seat	M	34	Serious
			Veh 2	Bus/coach	Going ahead LH bend	SE to N	Seat	M	29	Slight
			Veh 2	Bus/coach	Going ahead LH bend	SE to N	Seat	M	28	Slight
			Veh 2	Bus/coach	Going ahead LH bend	SE to N	Seat	M	41	Slight
			Veh 2	Bus/coach	Going ahead LH bend	SE to N	Seat	M	63	Slight
			Veh 2	Bus/coach	Going ahead LH bend	SE to N	Seat	M	54	Slight
			Veh 2	Bus/coach	Going ahead LH bend	SE to N	Seat	M	39	Slight
			Veh 2	Bus/coach	Going ahead LH bend	SE to N	Seat	M	42	Slight
			Veh 2	Bus/coach	Going ahead LH bend	SE to N	Seat	M	31	Slight
			Veh 2	Bus/coach	Going ahead LH bend	SE to N	Seat	M	64	Slight
			Veh 2	Bus/coach	Going ahead LH bend	SE to N	Seat	M	27	Slight
			Veh 2	Bus/coach	Going ahead LH bend	SE to N	Seat	M	38	Serious
			Veh 2	Bus/coach	Going ahead LH bend	SE to N	Seat	M	31	Slight
			Veh 2	Bus/coach	Going ahead LH bend	SE to N	Seat	M	52	Serious

Details of Personal Injury Accidents for Period - **01/04/2018** **to** **31/03/2023** (60) months

Selection:

Notes:

Police Ref. / **Road No.** / **2nd Road No.** / **Grid Ref.**	Day / Date / Time / D/L / R.S.C / Weather / Speed / Account of Accident	Location Description	Vehicles: Veh No / Type / Manv / Dir / Class	Casualties: Sex / Age / Sev

Causation Factor:

Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 2	Bus/coach	Going ahead LH bend	SE to N	Seat	M	25	Slight
Veh 2	Bus/coach	Going ahead LH bend	SE to N	Seat	F	27	Slight
Veh 2	Bus/coach	Going ahead LH bend	SE to N	Seat	M	54	Slight
Veh 2	Bus/coach	Going ahead LH bend	SE to N	Seat	M	30	Serious
Veh 2	Bus/coach	Going ahead LH bend	SE to N	Seat	F	40	Serious
Veh 2	Bus/coach	Going ahead LH bend	SE to N	Seat	M	45	Slight
Veh 2	Bus/coach	Going ahead LH bend	SE to N	Seat	M	42	Slight
Veh 2	Bus/coach	Going ahead LH bend	SE to N	Seat	M	50	Slight
Veh 2	Bus/coach	Going ahead LH bend	SE to N	Seat	M	31	Slight
Veh 2	Bus/coach	Going ahead LH bend	SE to N	Seat	M	34	Slight
Veh 2	Bus/coach	Going ahead LH bend	SE to N	Seat	M	36	Slight
Veh 2	Bus/coach	Going ahead LH bend	SE to N	Seat	M	52	Slight
Veh 2	Bus/coach	Going ahead LH bend	SE to N	Seat	M	55	Slight
Veh 2	Bus/coach	Going ahead LH bend	SE to N	Seat	M	61	Serious
Veh 2	Bus/coach	Going ahead LH bend	SE to N	Seat	M	23	Slight
Veh 2	Bus/coach	Going ahead LH bend	SE to N	Seat	M	35	Slight
Veh 2	Bus/coach	Going ahead LH bend	SE to N	Seat	M	36	Serious
Veh 2	Bus/coach	Going ahead LH bend	SE to N	Seat	M	49	Slight
Veh 2	Bus/coach	Going ahead LH bend	SE to N	Seat	M	25	Slight
Veh 2	Bus/coach	Going ahead LH bend	SE to N	Seat	M	61	Slight
Veh 2	Bus/coach	Going ahead LH bend	SE to N	Seat	M	27	Serious
Veh 2	Bus/coach	Going ahead LH bend	SE to N	Seat	M	24	Slight
Veh 2	Bus/coach	Going ahead LH bend	SE to N	Seat	M	34	Slight
Veh 2	Bus/coach	Going ahead LH bend	SE to N	Seat	M	20	Slight
Veh 2	Bus/coach	Going ahead LH bend	SE to N	Seat	M	31	Slight
Veh 2	Bus/coach	Going ahead LH bend	SE to N	Seat	M	53	Slight
Veh 2	Bus/coach	Going ahead LH bend	SE to N	Seat	M	31	Slight
Veh 3	Bus/coach	Going ahead LH bend	SE to N				

Causation Factor:

	Factor	**Participant:**	**Confidence:**
1st:	Slippery road (due to weather)	Vehicle 1	Very Likely
2nd:	Slippery road (due to weather)	Vehicle 2	Very Likely
3rd:	Animal or object in carriageway	Vehicle 2	Very Likely
4th:	Animal or object in carriageway	Vehicle 3	Very Likely
5th:	Swerved	Vehicle 2	Very Likely
6th:	Loss of control	Vehicle 2	Very Likely

V1 HAS BEEN TRAVELLING OUTBOUND ON THE A39 WHEREBY IT HAS SLID ON ICE. (DASHCAM PRESENT) V2 HAS TRAVELLED THI SAME DIRECTION AND STRUCK THE BIKE ON THE GROUND WHICH AS RESULTED IN THE BUS TURNING 180¦ ON THE ROAD, STRUC THE CURB AND THEN GONE OVER (CCTV PRESENT) V3 HAS THEN TRAVELLED THEN SAME ROUTE AND THEN STRUCK THE BIKE WHILST ON THE GROUND.

Details of Personal Injury Accidents for Period - **01/04/2018** **to** **31/03/2023** (60) months

Selection:

Notes:

Police Ref. / Road No. / 2nd Road No. / Grid Ref.	Day / Date / Time / D/L / R.S.C / Weather / Speed	Location Description	Vehicles: Veh No	Type	Manv	Dir	Class	Casualties: Sex	Age	Sev
2300907	Wednesday	A39 NEW ROAD, CANNINGTON	Veh 1	Car	Going ahead	NW to SE	FSP	F	52	Slight
	15/02/2023		Veh 1	Car	Going ahead	NW to SE	Dri	M	51	Slight
R1: A 39	1448hrs		Veh 2	Goods < 3.5t	Going ahead	SE to NW	Dri	M	55	Slight
	Daylight:street lights present									
E 326,627	Wet/Damp									
N 138,320	Raining without high winds									
	60 mph									

Causation Factor:

	Causation Factor	Participant:	Confidence:
1st:	Swerved	Vehicle 1	Very Likely
2nd:	Illness or disability, mental or physical	Vehicle 1	Very Likely
3rd:	Slippery road (due to weather)	Vehicle 1	Possible
4th:	Road layout (eg bend, hill etc.)	Vehicle 1	Possible

VEHICLE V001 WAS TRAVELLING TOWARDS BRIDGWATER AND VEH 002 WAS TRAVELLING AWAY FROM BRIDGWATER. V001 ENDED UP ON THE INCORRECT SIDE OF THE ROAD AND V002 ENDED UP CRASHING INTO V001. DRIVER OF V001 HAS DIABETES AN THIS IS THOUGHT TO BE THE PROBABLE CAUSE OF THE ACCIDENT.

Police Ref. / Road No. / Grid Ref.	Day / Date / Time / D/L / R.S.C / Weather / Speed	Location Description	Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
2300957	Monday	A39 QUANTOCK ROAD, BRIDGWATER	Veh 1	Car	Going ahead	NW to E	Ped	M	38	Serious
	20/02/2023									
R1: A 39	0622hrs									
	Darkness: no street lighting									
E 327,907	Wet/Damp									
N 137,188	Fine without high winds									
	40 mph									

Causation Factor:

	Causation Factor	Participant:	Confidence:
1st:	Deposit on road (eg oil, mud, chippings)	Vehicle 1	Possible
2nd:	Failed to judge vehicles path or speed	Casualty 1	Very Likely
3rd:	Dangerous action in carriageway	Casualty 1	Very Likely
4th:	Impaired by alcohol	Casualty 1	Very Likely
5th:	Pedestrian wearing dark clothing at night	Casualty 1	Very Likely

V1 WAS TRAVELLING EAST ALONG A39 QUANTOCK ROAD TOWARDS BRIDGWATER WHEN IT STRUCK AN INTOXICATED MALE WALKING IN THE CARRIAGEWAY. WITNESS STATES PEDESTRIAN STUMBLED INTO PATH OF V1.

Details of Personal Injury Accidents for Period - 01/04/2018 to 31/03/2023 (60) months

Selection:

Notes:

Police Ref. / Road No. / 2nd Road No. / Grid Ref.	Day / Date / Time / D/L / R.S.C / Weather / Speed / Account of Accident	Location Description	Vehicles: Veh No / Type / Manv / Dir / Class	Casualties: Sex / Age / Sev

Causation Factor:

2300968
R1: A 39
R2: U
E 328,693
N 136,958

Wednesday 22/02/2023 0900hrs
A39 QUANTOCK ROAD JUNC WITH QUANTOCK AVENUE, BRIDGWATER
Daylight:street lights present
Dry
Fine without high winds
30 mph

Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	M/C < 125 cc	Going ahead	E to W	Dri	M	17	Slight
Veh 2	Car	Stopping	E to W	Dri	F	41	Slight

Causation Factor:		Participant:	Confidence:
1st:	Failed to judge other persons path or speed	Vehicle 1	Possible
2nd:	Inexperienced or learner driver/rider	Vehicle 1	Possible

V1 (PTW) TRAVELLING BEHIND V2 OUTBOUND (WEST) ALONG A39 QUANTOCK. V2 SLOWED TO ALLOW ANOTHER VEHICLE INTO QUANTOCK AVENUE. V1 UNABLE TO SLOW IN TIME SO COLLIDED WITH REAR OF V2 CAUSING RIDER TO FALL OFF HIS MOTORCYCLE.

2301124
R1: U
R2: U
E 330,640
N 138,336

Thursday 16/03/2023 1420hrs
ALLERTON ROAD JUNC WITH WYLDS ROAD, BRIDGWATER
Daylight:street lights present
Wet/Damp
Fine without high winds
30 mph

Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	Car	Starting	SW to NE	Dri	M	83	Slight

Causation Factor:		Participant:	Confidence:
1st:	Junction restart	Vehicle 1	Very Likely
2nd:	Illness or disability, mental or physical	Vehicle 1	Possible

V1 HAS EXITED MATALAN CAR PARK ALONG ALLERTON ROAD . AT WYLDS ROAD A VEH HAS ALLOWED V1 TO PULL OUT. AS IT D SO IT HAS SUDDENLY ACCELLERATED CROSSING THE ROAD WHERE IT WAS DRIVEN ONTO A GARAGE FORECOURT BEFORE HITTING A FENCE.

2301141
R1: A 38
R2: A 38
E 330,004
N 136,754

Friday 17/03/2023 1354hrs
A38 CROSSROAD JUNC OF TAUNTON ROAD AND BROADWAY, BRIDGWATER
Daylight:street lights present
Dry
Fine without high winds
30 mph

Veh No	Type	Manv	Dir	Class	Sex	Age	Sev
Veh 1	M/C < 125 cc	Going ahead	S to NW	Dri	M	57	Slight
Veh 2	Car	Stopping	S to NW				

Causation Factor:		Participant:	Confidence:
1st:	Failed to judge other persons path or speed	Vehicle 1	Possible
2nd:	Sudden braking	Vehicle 2	Very Likely

V2 (PTW) WAS FOLLOWING V1 (CAR). AS BOTH VEHS WERE ENTERING BROADWAY FROM TAUNTON ROAD V1 HAS BRAKED FOR 2 PEDESTRIANS IN THE PROCESS OF CROSSING THE ROAD. V2 RIDER HAS FAILED TO REACT AND V2 HIT THE REAR OF V1.

Details of Personal Injury Accidents for Period - **01/04/2018** **to** **31/03/2023** (60) months

Selection:

Notes:

Police Ref. / **Road No.** / **2nd Road No.** / **Grid Ref.**	Day / Date / Time / D/L / R.S.C / Weather / Speed / Account of Accident	Location Description	Vehicles: Veh No / Type / Manv / Dir / Class	Casualties: Sex / Age / Sev
2301184 / **R1: A 38** / **E 330,371** / **N 135,511**	Sunday / 19/03/2023 / 0556hrs / Darkness: street lights present / Wet/Damp / Fine without high winds / 30 mph	A38 TAUNTON ROAD, TAUNTON	Veh 1 Car Going ahead N to S Ped	M 20 Serious

Causation Factor:

	Causation Factor	**Participant:**	**Confidence:**
1st:	Exceeding speed limit	Vehicle 1	Possible
2nd:	Travelling too fast for conditions	Vehicle 1	Possible
3rd:	Careless/Reckless/In a hurry	Vehicle 1	Very Likely
4th:	Dangerous action in carriageway	Casualty 1	Very Likely
5th:	Impaired by alcohol	Casualty 1	Very Likely
6th:	Pedestrian wearing dark clothing at night	Casualty 1	Possible

PEDESTRIAN WAS INTOXICATED. HE WAS WALKING IN MIDDLE OF ROAD IN THE DARK DESPITE PAVEMENTS AVAILABLE EITHER SIDE WALKING IN LANE AWAY FROM TRAFFIC. CAR TRAVELLING ON ROAD AT SPEED POSSIBLY IN EXCESS OF SPEED LIMIT HAS FAILED TO SEE PEDESTRIAN AND COLLIS
ION OCCURED. PEDESTRIAN HIT FRONT OFFSIDE OF VEHICLE IN A GLANCING MANNER. DAMAGE TO FRONT OFFSIDE WING BONNET WINDSCREEN MIRROR AND DOOR. PEDESTRIAN SUFFERED BRUISES LEFT LEG SLIGHT CONCUSSION AND BRUISING TO HIS LEFT HAND SIDE

Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

181803840 15/04/2018 Sunday Time 0935 Vehicles 1 Casualties 1 Slight
Fine without high winds Road surface Dry Daylight:street lights present
Special Conditions None Road Type Single carriageway
V1 TRAVELLING SOUTH. DRIVER MOMENTARILY BLACKED OUT, LOSING CONTROL OF V1 WHICH MOUNTED THE GRASS VERGE AND COLLIDED WITH A LAMP POST.
Occurred on A38 BRISTOL ROAD, NEAR EXPRESS PARK ROUNDABOUT, BRIDGWATER

Vehicle Reference 1 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 72
Vehicle direction N to S
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 72 Male Driver/rider Severity: Slight

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181803847 18/04/2018 Wednesday Time 1210 Vehicles 2 Casualties 1 Slight
Fine without high winds Road surface Dry Daylight:street lights present
Special Conditions None Road Type Single carriageway
V1 TRAVELLING EAST, V2 (P/CYCLE) TRAVELLING SOUTH. V1 WAS TURNING LEFT NORTH. V2 WAS RIDING ON THE PAVEMENT AND WAS HIT BY V1.
Occurred on A38 BRISTOL ROAD, AT JUNCTION WITH VOLKSWAGEN GARAGE, BRIDGWATER

Vehicle Reference 1 Car Turning left
Footway (pavement) No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 52
Vehicle direction W to N
FRV Not foreign registered vehicle Journey 6

Vehicle Reference 2 Pedal cycle Going ahead
Footway (pavement) No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 69
Vehicle direction N to S
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 69 Female Driver/rider Severity: Slight

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Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

181804370 08/05/2018 Tuesday Time 1851 Vehicles 3 Casualties 3 Slight
Fine without high winds Road surface Dry Daylight:street lights present
Special Conditions None Road Type Single carriageway
V1, V2 & V3 TRAVELLING SOUTH WEST. V1 STOPPED AT ZEBRA CROSSING TO LET PEDESTRIANS CROSS. V2 ALSO STOPPED BUT V3 FAILED TO STOP IN TIME AND COLLIDED WITH REAR OF V2 WHICH IN TURN COLLIDED WITH REAR OF V1.
Occurred on A38 BRISTOL ROAD, BRIDGWATER

Vehicle Reference 1 Car Slowing or Stopping
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Back Age of Driver 44
Vehicle direction NE to SW
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 2 Age: 11 Female Passenger Severity: Slight

Casualty Reference: 3 Age: 10 Female Passenger Severity: Slight

Vehicle Reference 2 Car Slowing or Stopping
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Back Age of Driver 51
Vehicle direction NE to SW
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 51 Male Driver/rider Severity: Slight

Vehicle Reference 3 Car Slowing or Stopping
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 48
Vehicle direction NE to SW
FRV Not foreign registered vehicle Journey 6

Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

181805002 06/06/2018 Wednesday Time 0815 Vehicles 2 Casualties 1 Slight
Fine without high winds Road surface Dry Daylight:street lights present
Special Conditions None Road Type Dual carriageway
V1 TRAVELLING SOUTH EAST, V2 (M/CYCLE) TRAVELLING OPPOSITE DIRECTION. V1 ENTERED RIGHT TURN FILTER LANE AND TURNED RIGHT SOUTH WEST. V1 COLLIDED WITH V2.
Occurred on A38 TAUNTON ROAD, AT JUNCTION WITH ELMWOOD AVENUE, BRIDGWATER

Vehicle Reference 1 Car Turning right
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Nearside Age of Driver 63
Vehicle direction NW to SW
FRV Not foreign registered vehicle Journey 6

Vehicle Reference 2 Motorcycle over 50cc and up to 125cc Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 49
Vehicle direction SE to NW
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 49 Female Driver/rider Severity: Slight

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181804926 16/07/2018 Monday Time 1630 Vehicles 2 Casualties 1 Slight
Fine without high winds Road surface Wet/Damp Daylight:street lights present
Special Conditions None Road Type Unknown
V1 & V2 TRAVELLING EAST. V1 STOPPED TO TURN RIGHT SOUTH, V2 FAILED TO STOP IN TIME AND COLLIDED WITH REAR OF V1.
Occurred on FRIARN ST, BRIDGWATER

Vehicle Reference 1 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 71
Vehicle direction W to E
FRV Not foreign registered vehicle Journey 6

Vehicle Reference 2 Car Turning right
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Nearside Age of Driver 49
Vehicle direction W to S
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 49 Male Driver/rider Severity: Slight

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Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

181807961 17/07/2018 Tuesday Time 1810 Vehicles 1 Casualties 1 Slight
Fine without high winds Road surface Dry Daylight:street lights present
Special Conditions None Road Type Single carriageway
V1 TRAVELLING SOUTH EAST, SLOWLY DUE TO THE VOLUME OF TRAFFIC. PEDESTRIAN THEN WALKED OUT INTO THE ROAD IN FRONT OF V1. V1 COLLIDED WITH PEDESTRIAN.
Occurred on A39 NORTH STREET, BRIDGWATER.

Vehicle Reference 1 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 68
Vehicle direction NW to SE
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 50 Male Pedestrian Severity: Slight
9

181900599 07/08/2018 Tuesday Time 1340 Vehicles 1 Casualties 1 Slight
Fine without high winds Road surface Dry Daylight:street lights present
Special Conditions None Road Type Single carriageway
V1 TRAVELLING WEST LOOKING TO TURN LEFT SOUTH. V1 SWERVED AND COLLIDED WITH A HEDGE.
Occurred on A39 WESTERN WAY, BRIDGWATER.

Vehicle Reference 1 Car Turning left
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 50
Vehicle direction E to S
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 50 Male Driver/rider Severity: Slight

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Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

181900633 10/08/2018 Friday Time 1410 Vehicles 2 Casualties 3 Slight
Fine without high winds Road surface Dry Daylight:street lights present
Special Conditions None Road Type Roundabout
V1 & V2 (BUS) TRAVELLING EAST. V1 STOPPED AT JUNCTION, V2 FAILED TO STOP IN TIME AND COLLIDED WITH REAR OF V1.
Occurred on A38 TAUNTON ROAD, AT JUNCTION WITH STOCKMOOR DRIVE, NORTH PETHERTON.

Vehicle Reference 1 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Back Age of Driver 68
Vehicle direction W to E
FRV Not foreign registered vehicle Journey 6

Vehicle Reference 2 Bus or coach Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 63
Vehicle direction W to E
FRV Not foreign registered vehicle Journey Journey as part of work

Casualty Reference: 1 Age: 75 Female Passenger Severity: Slight

Casualty Reference: 2 Age: 36 Female Passenger Severity: Slight

Casualty Reference: 3 Age: 54 Female Passenger Severity: Slight

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181805636 15/08/2018 Wednesday Time 1942 Vehicles 2 Casualties 1 Slight
Fine without high winds Road surface Dry Daylight:street lights present
Special Conditions None Road Type Single carriageway
V1 & V2 (M/CYCLE) TRAVELLING NORTH WEST. V1 BRAKED ON JOINING A QUEUE OF VEHICLES AS LIGHTS WERE ON RED V2 COLLIDED WITH V1.
Occurred on A38 BRIDGWATER ROAD, AT JUNCTION WITH MARKET WAY, NORTH PETHERTON.

Vehicle Reference 1 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Back Age of Driver 57
Vehicle direction SE to NW
FRV Not foreign registered vehicle Journey 6

Vehicle Reference 2 Motorcycle over 50cc and up to 125cc Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 24
Vehicle direction SE to NW
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 2 Age: 24 Male Driver/rider Severity: Slight

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Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

181806060 17/08/2018 Friday Time 2154 Vehicles 1 Casualties 4 Serious
Fine without high winds Road surface Dry Darkness: street lights present and lit
Special Conditions None Road Type Single carriageway
V1, TRAVELLING SOUTH EAST, FAILED TO NEGOTIATE THE ROUNDABOUT AND STRUCK THE CENTRAL KERB. V1 THEN HIT THE KERB AND THEN COLLIDED WITH A TREE IN THE CENTRE OF THE ROUNDABOUT.
Occurred on A38 BRISTOL ROAD JUNCTION WITH A39 DUNBALL ROUNDABOUT, PURITON.

Vehicle Reference 1 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 49
Vehicle direction NW to SE
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 49 Male Driver/rider Severity: Serious

Casualty Reference: 2 Age: 22 Female Passenger Severity: Slight

Casualty Reference: 3 Age: 17 Female Passenger Severity: Slight

Casualty Reference: 4 Age: 28 Female Passenger Severity: Slight

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181806211 28/08/2018 Tuesday Time 1527 Vehicles 3 Casualties 1 Slight
Fine without high winds Road surface Dry Darkness: street lights present but unlit
Special Conditions None Road Type Single carriageway
V1 TRAVELLING EAST, V2 (M/CYCLE) & V3 (BUS) TRAVELLING NORTH. V2 OVERTOOK V3. V1 PULLED OUT TO TURN RIGHT SOUTH AND COLLIDED WITH V2. V3 WAS NOT HIT.
Occurred on A38 TAUNTON ROAD, AT JUNCTION WITH WILLS ROAD, BRIDGWATER.

Vehicle Reference 1 Car Turning right
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 38
Vehicle direction W to S
FRV Not foreign registered vehicle Journey 6

Vehicle Reference 2 Motorcycle over 500cc Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 45
Vehicle direction S to N
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 45 Male Driver/rider Severity: Slight

Vehicle Reference 3 Bus or coach Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Did not impact Age of Driver 45
Vehicle direction S to N
FRV Not foreign registered vehicle Journey 6

Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

181806040 05/09/2018 Wednesday Time 0645 Vehicles 2 Casualties 1 Slight
Fine without high winds Road surface Dry Daylight:street lights present
Special Conditions None Road Type Dual carriageway
V2 TRAVELLING SOUTH, V1 PARKED FACING SAME DIRECTION. V2 FAILED TO STOP IN TIME AND COLLIDED WITH REAR OF V1.
Occurred on A38 BRISTOL ROAD, PURITON.

Vehicle Reference 1 Car Parked
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Back Age of Driver 43
Vehicle direction Park to Parked
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 43 Female Driver/rider Severity: Slight

Vehicle Reference 2 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver
Vehicle direction N to S
FRV Not foreign registered vehicle Journey 6

181807421 02/11/2018 Friday Time 1630 Vehicles 2 Casualties 1 Slight
Fine without high winds Road surface Dry Daylight:street lights present
Special Conditions None Road Type Dual carriageway
V1 & V2 (M/CYCLE) TRAVELLING SOUTH. V1 WAS WAITING IN STATIONARY TRAFFIC ON A38, AND CHANGED LANES. V2 WAS OVERTAKING QUEUING TRAFFIC BEHIND V1, WHEN V1 PULLED OUT AND COLLIDED WITH V2.
Occurred on TAUNTON ROAD, BRIDGWATER.

Vehicle Reference 1 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Did not impact Age of Driver 45
Vehicle direction N to S
FRV Not foreign registered vehicle Journey 6

Vehicle Reference 2 Motorcycle over 125cc and up to 500cc Overtaking stationary vehicle on its offside
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 30
Vehicle direction N to S
FRV Not foreign registered vehicle Journey Journey as part of work

Casualty Reference: 1 Age: 30 Male Driver/rider Severity: Slight

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Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

181807494 02/11/2018 Friday Time 1330 Vehicles 2 Casualties 1 Slight
Fine without high winds Road surface Dry Daylight:street lights present
Special Conditions None Road Type Roundabout
V1 (BUS) & V2 TRAVELLING EAST. BOTH VEHICLES WERE STATIONARY AT THE ROUNDABOUT. V2 STARTED TO MOVE BUT V1 REMAINED STILL AND V2 COLLIDED WITH REAR OF V1.
Occurred on A38 BRISTOL ROAD, AT JUNCTION WITH EXPRESS PARK, BRIDGWATER

Vehicle Reference 1 Bus or coach Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 50
Vehicle direction W to E
FRV Not foreign registered vehicle Journey 6

Vehicle Reference 2 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Back Age of Driver 25
Vehicle direction W to E
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 25 Female Driver/rider Severity: Slight

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181902092 09/11/2018 Friday Time 1205 Vehicles 2 Casualties 1 Slight
Fine without high winds Road surface Dry Daylight:street lights present
Special Conditions None Road Type One way street
V1 TRAVELLING SOUTH EAST, V2 (M/CYCLE) TRAVELLING SOUTH. V2 PULLED OUT FROM JUNCTION WITHOUT LOOKING AND COLLIDED WITH V1.
Occurred on A39 BROADWAY, AT JUNCTION WITH FRIARN STREET, BRIDGWATER

Vehicle Reference 1 Goods between 3.5 and 7.5 tonnes mgw Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 48
Vehicle direction NW to SE
FRV Not foreign registered vehicle Journey 6

Vehicle Reference 2 Motorcycle over 125cc and up to 500cc Turning left
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Back Age of Driver 20
Vehicle direction N to SE
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 20 Male Driver/rider Severity: Slight

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Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

181807800 20/11/2018 Tuesday Time 1830 Vehicles 2 Casualties 1 Slight
Unknown Road surface Dry Darkness: street lighting unknown
Special Conditions None Road Type Roundabout
V1 & V2 TRAVELLING NORTH WEST. V1 WAS STOPPED AT THE ROUNDABOUT WHEN V2 COLLIDED WITH REAR OF V1. V2 FAILED TO STOP.
Occurred on A38 DUNBALL ROUNDABOUT, AT JUNCTION WITH A39, PURITON.

Vehicle Reference 1 Car Waiting to turn right
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Back Age of Driver 59
Vehicle direction SE to NW
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 59 Male Driver/rider Severity: Slight

Vehicle Reference 2 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver
Vehicle direction SE to NW
FRV Not foreign registered vehicle Journey 6

181900230 07/12/2018 Friday Time 0912 Vehicles 2 Casualties 3 Slight
Raining without high winds Road surface Wet/Damp Daylight:street lights present
Special Conditions None Road Type Single carriageway
V1 TRAVELLING WEST, V2 TRAVELLING NORTH. V2 TURNED RIGHT NORTH AND COLLIDED WITH V2.
Occurred on A38 TAUNTON ROAD, NORTH PETHERTON.

Vehicle Reference 1 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 23
Vehicle direction E to N
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 23 Female Driver/rider Severity: Slight

Vehicle Reference 2 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 24
Vehicle direction S to N
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 2 Age: 24 Female Driver/rider Severity: Slight

Casualty Reference: 3 Age: 44 Female Passenger Severity: Slight

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Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

181902538 11/12/2018 Tuesday Time 1740 Vehicles 2 Casualties 1 Slight
Fine without high winds Road surface Wet/Damp Darkness: street lights present and lit
Special Conditions None Road Type Unknown
V1 TRAVELLING NORTH EAST, V2 TRAVELLING NORTH WEST. V1 PULLED OUT TO TURN RIGHT SOUTH EAST AND COLLIDED WITH V2.
Occurred on A39 BROADWAY, AT JUNCTION WITH ALBERT STREET, BRIDGWATER.

Vehicle Reference 1 Car Turning right
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Offside Age of Driver
Vehicle direction SW to SE
FRV Not foreign registered vehicle Journey 6

Vehicle Reference 2 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 24
Vehicle direction SE to NW
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 24 Female Driver/rider Severity: Slight

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191900065 03/01/2019 Thursday Time 0912 Vehicles 2 Casualties 1 Slight
Fine without high winds Road surface Dry Daylight:street lights present
Special Conditions None Road Type Single carriageway
V1 & V2 TRAVELING SOUTH WEST. V2 WAS TAILGATING V1 AND V2 COLLIDED WITH REAR OF V1.
Occurred on A39 HOMBERG WAY, BRIDGWATER.

Vehicle Reference 1 Car Waiting to go ahead but held up
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Back Age of Driver 27
Vehicle direction NE to SW
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 27 Female Driver/rider Severity: Slight

Vehicle Reference 2 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Back Age of Driver 20
Vehicle direction NE to SW
FRV Not foreign registered vehicle Journey 6

Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

191902758 07/01/2019 Monday Time 0748 Vehicles 2 Casualties 1 Slight
Fine without high winds Road surface Wet/Damp Daylight:street lights present
Special Conditions None Road Type Single carriageway
V1 TRAVELLING NORTH WEST, V2 (P/CYCLE) TRAVELLING OPPOSITE DIRECTION. V2 DRIFTED INTO OPPOSITE CARRIAGEWAY AND COLLIDED WITH V1.
Occurred on A38 BRISTOL ROAD, PURITON.

Vehicle Reference 1 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 22
Vehicle direction SE to NW
FRV Not foreign registered vehicle Journey 6

Vehicle Reference 2 Pedal cycle Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Nearside Age of Driver 49
Vehicle direction NW to SE
FRV Not foreign registered vehicle Journey Commuting to/from work

Casualty Reference: 1 Age: 49 Male Driver/rider Severity: Slight

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191900178 10/01/2019 Thursday Time 0825 Vehicles 2 Casualties 1 Slight
Fine without high winds Road surface Dry Daylight:street lights present
Special Conditions None Road Type Single carriageway
V1 & V2 TRAVELLING NORTH WEST. V2 COLLIDED WITH REAR OF V1.
Occurred on A39 BROADWAY, BRIDGWATER.

Vehicle Reference 1 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Back Age of Driver 37
Vehicle direction SE to NW
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 37 Female Driver/rider Severity: Slight

Vehicle Reference 2 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 23
Vehicle direction SE to NW
FRV Not foreign registered vehicle Journey 6

Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

191903020 24/01/2019 Thursday Time 1718 Vehicles 2 Casualties 1 Slight
Fine without high winds Road surface Dry Darkness: street lights present and lit
Special Conditions None Road Type Unknown
V1 & V2 TRAVELLING SOUTH EAST. V1 TURNED LEFT NORTH EAST AND COLLIDED WITH V2. RIDER OF V2 FELL FROM MACHINE.
Occurred on A38 TAUNTON ROAD AT JUNCTION WITH UNNAMED ROAD, BRIDGWATER

Vehicle Reference 1 Car Turning left
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Back Age of Driver 62
Vehicle direction NW to NE
FRV Not foreign registered vehicle Journey 6

Vehicle Reference 2 Motorcycle over 125cc and up to 500cc Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 46
Vehicle direction NW to SE
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 46 Male Driver/rider Severity: Slight

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191903317 16/02/2019 Saturday Time 2208 Vehicles 2 Casualties 1 Slight
Fine without high winds Road surface Dry Darkness: street lights present and lit
Special Conditions None Road Type Dual carriageway
V1 TRAVELLING EAST, V2 TRAVELLING OPPOSITE DIRECTION. V1 TURNED RIGHT SOUTH AND COLLIDED WITH V2.
Occurred on A39 BROADWAY, BY JUNCTION TURNING INTO MORRISONS CAR PARK, BRIDGWATER

Vehicle Reference 1 Car Turning right
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Offside Age of Driver 43
Vehicle direction W to S
FRV Not foreign registered vehicle Journey 6

Vehicle Reference 2 Car Turning right
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 73
Vehicle direction E to W
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 73 Male Driver/rider Severity: Slight

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Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

191903349 17/02/2019 Sunday Time 1240 Vehicles 2 Casualties 1 Slight
Fine without high winds Road surface Dry Daylight:street lights present
Special Conditions None Road Type Unknown
V1 & V2 (M/CYCLE) TRAVELLING SOUTH WEST. V1 MOVED FORWARD BUT V2 REMAINED STATIONARY. V1 COLLIDED WITH REAR OF V2.
Occurred on A39 QUANTOCK ROAD, AT JUNCTION WITH HOMBERG WAY, BRIDGWATER.

Vehicle Reference 1 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 59
Vehicle direction NE to SW
FRV Not foreign registered vehicle Journey 6

Vehicle Reference 2 Motorcycle over 500cc Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Back Age of Driver 40
Vehicle direction NE to SW
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 40 Male Driver/rider Severity: Slight

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191901228 20/02/2019 Wednesday Time 0925 Vehicles 1 Casualties 1 Slight
Fine without high winds Road surface Dry Daylight:street lights present
Special Conditions None Road Type Single carriageway
V1 TRAVELLING EAST, PEDESTRIAN WAS WALKING SAME DIRECTION WITH A POST TROLLEY. V1 COLLIDED WITH PEDESTRIAN.
Occurred on FRIARN STREET, BRIDGWATER.

Vehicle Reference 1 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Did not impact Age of Driver
Vehicle direction W to E
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 41 Female Pedestrian Severity: Slight
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Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

191903464 26/02/2019 Tuesday Time 1625 Vehicles 2 Casualties 1 Slight
Fine without high winds Road surface Dry Daylight:street lights present
Special Conditions None Road Type Unknown
V1 & V2 (M/CYCLE) TRAVELLING NORTH WEST. V2 WAS OVERTAKING V1. V1 TURNED RIGHT NORTH EAST AND COLLIDED WITH V2.
Occurred on A38 TAUNTON ROAD, AT JUNCTION WITH MARSH LANE, NORTH PETHERTON.

Vehicle Reference 1 Car Turning right
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Offside Age of Driver 30
Vehicle direction SE to NE
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 30 Male Driver/rider Severity: Slight

Vehicle Reference 2 Motorcycle over 500cc Overtaking moving vehicle on its offside
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Nearside Age of Driver 30
Vehicle direction SE to NW
FRV Not foreign registered vehicle Journey 6

191903563 04/03/2019 Monday Time 1020 Vehicles 2 Casualties 1 Slight
Fine without high winds Road surface Dry Daylight:street lights present
Special Conditions None Road Type Single carriageway
V1 TRAVELLING NORTH WEST, V2 (P/CYCLE) TRAVELLING OPPOSITE DIRECTION. V1 TURNED RIGHT NORTH EAST AND COLLIDED WITH V2.
Occurred on A39 NORTH STREET, AT JUNCTION WITH CAMDEN ROAD, BRIDGWATER.

Vehicle Reference 1 Car Turning right
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 23
Vehicle direction SE to NE
FRV Not foreign registered vehicle Journey 6

Vehicle Reference 2 Pedal cycle Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 41
Vehicle direction NW to SE
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 41 Male Driver/rider Severity: Slight

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Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

191901663 08/03/2019 Friday Time 1510 Vehicles 2 Casualties 1 Slight
Fine without high winds Road surface Dry Daylight:street lights present
Special Conditions None Road Type Single carriageway
V1 (P/CYCLE) TRAVELLING NORTH EAST, V2 TRAVELLING SOUTH EAST. V2 EMERGED FROM SIDE ROAD TO TURN RIGHT SOUTH WEST AND COLLIDED WITH V1.
Occurred on A39 HOMBERG WAY, AT JUNCTION WITH REEDMOOR GARDENS, BRIDGWATER.

Vehicle Reference 1 Pedal cycle Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 13
Vehicle direction SW to NE
FRV Not foreign registered vehicle Journey Pupil riding to/from school

Casualty Reference: 1 Age: 13 Male Driver/rider Severity: Slight
School pupil to or from school

Vehicle Reference 2 Car Waiting to go ahead but held up
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 32
Vehicle direction NW to SE
FRV Not foreign registered vehicle Journey 6

191906630 23/03/2019 Saturday Time 1101 Vehicles 2 Casualties 2 Slight
Fine without high winds Road surface Dry Daylight:street lights present
Special Conditions None Road Type Single carriageway
V1 & V2 TRAVELLING SOUTH WEST. V1 STOPPED DUE TO TRAFFIC AHEAD, V2 FAILED TO STOP IN TIME AND COLLIDED WITH REAR OF V1.
Occurred on A38 BRISTOL ROAD, BRIDGWATER.

Vehicle Reference 1 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Back Age of Driver 51
Vehicle direction NE to SW
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 2 Age: 59 Male Passenger Severity: Slight

Vehicle Reference 2 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 60
Vehicle direction NE to SW
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 60 Female Driver/rider Severity: Slight

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Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

191902040 25/03/2019 Monday Time 1540 Vehicles 2 Casualties 1 Slight
Fine without high winds Road surface Dry Daylight:street lights present
Special Conditions None Road Type Single carriageway
V1 & V2 (P/CYCLE) TRAVELLING SOUTH EAST. V1 TURNED LEFT NORTH EAST AND COLLIDED WITH V2.
Occurred on A39 NORTH STREET, AT JUNCTION WITH PENEL ORLIEU, BRIDGWATER.

Vehicle Reference 1 Car Turning left
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Offside Age of Driver 34
Vehicle direction NW to NE
FRV Not foreign registered vehicle Journey 6

Vehicle Reference 2 Pedal cycle Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 30
Vehicle direction NW to SE
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 30 Male Driver/rider Severity: Slight

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191902768 25/04/2019 Thursday Time 0950 Vehicles 2 Casualties 1 Slight
Fine without high winds Road surface Dry Daylight:street lights present
Special Conditions None Road Type Roundabout
V1 (UNMARKED POLICE VEHICLE) TRAVELLING EAST, V2 (P/CYCLE) TRAVELLING NORTH. V1 ENTERED ROUNDABOUT TO TURN LEFT AND COLLIDED WITH V2.
Occurred on A38 BRISTOL ROAD, AT JUNCTION WITH EXPRESS PARK, BRIDGWATER

Vehicle Reference 1 Car Turning left
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 25
Vehicle direction W to N
FRV Not foreign registered vehicle Journey 6

Vehicle Reference 2 Pedal cycle Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 42
Vehicle direction S to N
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 42 Male Driver/rider Severity: Slight

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Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

191905574 29/04/2019 Monday Time 1649 Vehicles 2 Casualties 1 Serious
Fine without high winds Road surface Dry Daylight:street lights present
Special Conditions None Road Type Single carriageway
V1 & V2 (P/CYCLE) TRAVELLING SOUTH WEST. RIDER OF V2 FELL FROM MACHINE WHILE TRYING TO REMOUNT AND COLLIDED WITH V1.
Occurred on A38 BRISTOL ROAD, NEAR JUNCTION WITH KIMBERLEY TERRACE, BRIDGWATER.

Vehicle Reference 1 Goods >= 7.5 tonnes mgw Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 45
Vehicle direction NE to SW
FRV Not foreign registered vehicle Journey 6

Vehicle Reference 2 Pedal cycle Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Offside Age of Driver 44
Vehicle direction NE to SW
FRV Journey 6

Casualty Reference: 1 Age: 44 Male Driver/rider Severity: Serious

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191907225 01/05/2019 Wednesday Time 1820 Vehicles 2 Casualties 1 Slight
Fine without high winds Road surface Dry Daylight: no street lighting
Special Conditions None Road Type Single carriageway
V1 TRAVELLING WEST, V2 (P/CYCLE) TRAVELLING SOUTH. V1 TURNED RIGHT TO JOIN THE MAIN ROAD. BUT COLLIDED WITH V2 WHICH WAS ON THE FOOTPATH.
Occurred on A38 TAUNTON ROAD, OUTSIDE ESSO SERVICE STATION, BRIDGWATER.

Vehicle Reference 1 Car Turning right
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 29
Vehicle direction E to N
FRV Not foreign registered vehicle Journey 6

Vehicle Reference 2 Pedal cycle Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 40
Vehicle direction N to S
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 40 Female Driver/rider Severity: Slight

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Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

191905694 13/05/2019 Monday Time 0851 Vehicles 1 Casualties 1 Serious
Fine without high winds Road surface Dry Daylight:street lights present
Special Conditions ATS out Road Type Single carriageway
V1 TRAVELLING NORTH, DRIVER STOPPED AT THE TRAFFIC LIGHTS. WHEN THE LIGHTS CHANGED TO GREEN V1 STARTED TO TURN RIGHT NORTH EAST BUT THE DRIVER SUFFERED A MEDICAL EPISODE AND COLLIDED WITH A LAMP POST.
Occurred on A38 TAUNTON ROAD, AT JUNCTION WITH A39 BROADWAY, BRIDGWATER.

Vehicle Reference 1 Car Turning right
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 81
Vehicle direction S to NE
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 81 Male Driver/rider Severity: Serious

Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

191905726 14/05/2019 Tuesday Time 1832 Vehicles 4 Casualties 3 Slight
Fine without high winds Road surface Dry Daylight:street lights present
Special Conditions None Road Type Single carriageway
V1, V2, V3 & V4 TRAVELLING NORTH WEST. V2, V3 & V4 WERE ALL STATIONARY. V1 FAILED TO STOP IN TIME AND COLLIDED WITH REAR OF V2, WHICH COLLIDED WITH V3, WHICH COLLIDED WITH V4.
Occurred on A39 NEW ROAD, CANNINGTON.

Vehicle Reference 1 Car Waiting to go ahead but held up
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 43
Vehicle direction SE to NW
FRV Not foreign registered vehicle Journey 6

Vehicle Reference 2 Car Waiting to go ahead but held up
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Back Age of Driver 49
Vehicle direction SE to NW
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 49 Male Driver/rider Severity: Slight

Casualty Reference: 3 Age: 57 Male Passenger Severity: Slight

Vehicle Reference 3 Car Waiting to go ahead but held up
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Back Age of Driver 36
Vehicle direction SE to NW
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 2 Age: 36 Female Driver/rider Severity: Slight

Vehicle Reference 4 Car Waiting to go ahead but held up
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Back Age of Driver 41
Vehicle direction SE to NW
FRV Not foreign registered vehicle Journey 6

Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

191905725 16/05/2019 Thursday Time 1705 Vehicles 3 Casualties 1 Slight
Fine without high winds Road surface Dry Daylight:street lights present
Special Conditions None Road Type Single carriageway
V1, V2 & V3 TRAVELLING SOUTH EAST. V1 STOPPED TO ALLOW A VEHICLE TO EXIT FROM PARKSTONE AVENUE. V2 STOPPED BEHIND V1. V3 COLLIDED WITH THE REAR OF V2, PUSHING V2 INTO THE REAR OF V1
Occurred on A38 TAUNTON ROAD, AT JUNCTION WITH PARKSTONE AVENUE, BRIDGWATER.

Vehicle Reference 1 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Back Age of Driver 48
Vehicle direction NW to SE
FRV Not foreign registered vehicle Journey 6

Vehicle Reference 2 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Did not impact Age of Driver 23
Vehicle direction NW to SE
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 23 Female Driver/rider Severity: Slight

Vehicle Reference 3 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Did not impact Age of Driver 76
Vehicle direction NW to SE
FRV Not foreign registered vehicle Journey 6

191905978 12/06/2019 Wednesday Time 1610 Vehicles 2 Casualties 1 Serious
Fine without high winds Road surface Dry Daylight:street lights present
Special Conditions None Road Type Single carriageway
V1 & V2 TRAVELLING SOUTH EAST. V2 STOPPED TO TURN RIGHT WEST. V1 FAILED TO STOP IN TIME AND COLLIDED WITH REAR OF V2.
Occurred on A39 MAIN ROAD, AT JUNCTION WITH BLACKMORE LANE, CANNINGTON.

Vehicle Reference 1 Goods <= 3.5 tonnes mgw Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 22
Vehicle direction NW to SE
FRV Not foreign registered vehicle Journey 6

Vehicle Reference 2 Car Waiting to turn right
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Back Age of Driver 55
Vehicle direction NW to W
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 55 Female Driver/rider Severity: Serious

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Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

191906091 24/06/2019 Monday Time 1521 Vehicles 2 Casualties 1 Slight
Fine without high winds Road surface Dry Daylight:street lights present
Special Conditions None Road Type Single carriageway
V1 & V2 (P/CYCLE) TRAVELLING SOUTH EAST. V1 TURNED LEFT NORTH EAST, FAILED TO LOOK PROPERLY AND COLLIDED WITH V2.
Occurred on A39 WESTERN WAY, AT JUNCTION WITH STANDISH STREET, BRIDGWATER.

Vehicle Reference 1 Car Turning left
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Nearside Age of Driver 55
Vehicle direction NW to NE
FRV Not foreign registered vehicle Journey 6

Vehicle Reference 2 Pedal cycle Going ahead
Cycleway No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 13
Vehicle direction NW to SE
FRV Not foreign registered vehicle Journey Pupil riding to/from school

Casualty Reference: 1 Age: 13 Male Driver/rider Severity: Slight
School pupil to or from school

191904509 19/07/2019 Friday Time 1125 Vehicles 2 Casualties 1 Slight
Unknown Road surface Wet/Damp Daylight:street lights present
Special Conditions None Road Type Roundabout
V1 & V2 TRAVELLING SOUTH WEST, TURNING SOUTH EAST AT ROUNDABOUT. ON EXITING ROUNDABOUT, V2 COLLIDED WITH V1 AND FAILED TO STOP.
Occurred on A38 AT JUNCTION WITH M5, NORTH PETHERTON.

Vehicle Reference 1 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Back Age of Driver 39
Vehicle direction NE to SE
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 7 Female Passenger Severity: Slight

Vehicle Reference 2 Goods >= 7.5 tonnes mgw Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver
Vehicle direction NE to SE
FRV Not foreign registered vehicle Journey 6

Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

191906377 23/07/2019 Tuesday Time 1224 Vehicles 2 Casualties 1 Slight
Fine without high winds Road surface Dry Daylight:street lights present
Special Conditions None Road Type Single carriageway
V1 & V2 TRAVELLING NORTH WEST. A VEHICLE IN FRONT OF V2 STOPPED SUDDENLY TO TURN LEFT INTO LIMESTONE HILL. V2 BRAKED HARD, V1 FAILED TO STOP IN TIME AND COLLIDED WITH REAR OF V2.
Occurred on A39, AT JUNCTION WITH LIMESTONE HILL, CANNINGTON.

Vehicle Reference 1 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 60
Vehicle direction SE to NW
FRV Not foreign registered vehicle Journey 6

Vehicle Reference 2 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Back Age of Driver 75
Vehicle direction SE to NW
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 75 Female Driver/rider Severity: Slight

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191906518 08/08/2019 Thursday Time 2105 Vehicles 2 Casualties 2 Slight
Raining with high winds Road surface Wet/Damp Darkness: street lights present and lit
Special Conditions None Road Type Dual carriageway
V1 TRAVELLING WEST, V2 TRAVELLING OPPOSITE DIRECTION. V2 TURNED RIGHT SOUTH AND COLLIDED WITH V1.
Occurred on A39 BROADWAY, AT JUNCTION WITH SUPERMARKET, BRIDGWATER.

Vehicle Reference 1 Bus or coach Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 33
Vehicle direction E to W
FRV Not foreign registered vehicle Journey Journey as part of work

Casualty Reference: 1 Age: 33 Male Driver/rider Severity: Slight

Vehicle Reference 2 Car Turning right
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Nearside Age of Driver 22
Vehicle direction W to S
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 2 Age: 22 Male Driver/rider Severity: Slight

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Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

191906553 09/08/2019 Friday Time 1832 Vehicles 2 Casualties 1 Slight
Raining without high winds Road surface Wet/Damp Daylight:street lights present
Special Conditions None Road Type Roundabout
V1 & V2 TRAVELLING NORTH. ON APPROACH TO ROUNDABOUT V1 SLOWED FOR STANDING TRAFFIC. V2 FAILED TO STOP IN TIME AND COLLIDED WITH REAR OF V1.
Occurred on A38 TAUNTON ROAD, AT JUNCTION WITH SHOWGROUND ROAD, NORTH PETHERTON.

Vehicle Reference 1 Car Waiting to go ahead but held up
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Back Age of Driver 19
Vehicle direction S to N
FRV Not foreign registered vehicle Journey 6

Vehicle Reference 2 Motorcycle over 50cc and up to 125cc Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 23
Vehicle direction S to N
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 23 Female Driver/rider Severity: Slight

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191906781 15/08/2019 Thursday Time 1757 Vehicles 2 Casualties 1 Slight
Fine without high winds Road surface Dry Daylight:street lights present
Special Conditions None Road Type Single carriageway
V1 & V2 TRAVELLING NORTH EAST. BOTH VEHICLES SLOWED DUE TO VEHICLE IN FRONT TURNING RIGHT. V2 FAILED TO STOP IN TIME AND COLLIDED WITH REAR OF V1.
Occurred on A39 HOMBERG WAY, AT JUNCTION WITH BONITA DRIVE, WEMBDON.

Vehicle Reference 1 Car Slowing or Stopping
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Back Age of Driver 47
Vehicle direction SW to NE
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 52 Female Passenger Severity: Slight

Vehicle Reference 2 Car Slowing or Stopping
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 21
Vehicle direction SW to NE
FRV Not foreign registered vehicle Journey 6

Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

191905137 19/08/2019 Monday Time 0955 Vehicles 2 Casualties 1 Slight
Fine without high winds Road surface Dry Daylight:street lights present
Special Conditions ATS out Road Type Single carriageway
V1 & V2 TRAVELLING SOUTH EAST. V1 WAS STOPPED AT TEMPORARY TRAFFIC LIGHTS. V2 FAILED TO STOP IN TIME AND COLLIDED WITH REAR OF V1.
Occurred on A38 TAUNTON ROAD,, BRIDGWATER.

Vehicle Reference 1 Car Waiting to go ahead but held up
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Back Age of Driver 35
Vehicle direction NW to SE
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 10 Male Passenger Severity: Slight

Vehicle Reference 2 Car Waiting to go ahead but held up
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 51
Vehicle direction NW to SE
FRV Not foreign registered vehicle Journey 6

191905553 10/09/2019 Tuesday Time 1700 Vehicles 2 Casualties 1 Slight
Fine without high winds Road surface Dry Daylight: no street lighting
Special Conditions None Road Type Single carriageway
V1 (P/CYCLE) TRAVELLING WEST, V2 TRAVELLING NORTH. V1 COLLIDED WITH V2 CAUSING RIDER OF V1 TO FALL FROM MACHINE.
Occurred on A38 TAUNTON ROAD, AT JUNCTION WITH SOUTHGATE AVENUE, BRIDGWATER

Vehicle Reference 1 Pedal cycle Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Did not impact Age of Driver 31
Vehicle direction E to W
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 31 Male Driver/rider Severity: Slight

Vehicle Reference 2 Car Slowing or Stopping
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Did not impact Age of Driver 30
Vehicle direction S to N
FRV Not foreign registered vehicle Journey 6

Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

192000795 25/09/2019 Wednesday Time 1620 Vehicles 2 Casualties 1 Serious
Fine without high winds Road surface Dry Daylight: no street lighting
Special Conditions None Road Type Single carriageway
V1 & V2 (P/CYCLE) TRAVELLING SOUTH EAST. V2 EMERGED ONTO MAIN ROAD FROM PAVEMENT AND COLLIDED WITH V1.
Occurred on A39 QUANTOCK ROAD, BRIDGWATER

Vehicle Reference 1 Goods <= 3.5 tonnes mgw Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 68
Vehicle direction NW to SE
FRV Not foreign registered vehicle Journey 6

Vehicle Reference 2 Pedal cycle Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Did not impact Age of Driver 14
Vehicle direction NW to SE
FRV Not foreign registered vehicle Journey Pupil riding to/from school

Casualty Reference: 1 Age: 14 Male Driver/rider Severity: Serious
School pupil to or from school

191906440 17/10/2019 Thursday Time 1625 Vehicles 2 Casualties 1 Slight
Raining without high winds Road surface Wet/Damp Daylight: street lighting unknown
Special Conditions None Road Type Unknown
V1 & V2 (P/CYCLE) TURNING SOUTH EAST. V1 TURNED RIGHT SOUTH WEST AND COLLIDED WITH V2.
Occurred on A38 TAUNTON ROAD, AT JUNCTION WITH RHODE LANE, BRIDGWATER.

Vehicle Reference 1 Car Turning right
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Did not impact Age of Driver 51
Vehicle direction N to W
FRV Not foreign registered vehicle Journey 6

Vehicle Reference 2 Pedal cycle Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 12
Vehicle direction N to S
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 12 Female Driver/rider Severity: Slight

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Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

191906688 22/10/2019 Tuesday Time 1645 Vehicles 3 Casualties 2 Slight
Fine without high winds Road surface Dry Daylight:street lights present
Special Conditions None Road Type Single carriageway
V1 & V2 TRAVELLING NORTH WEST. V2 SLOWED TO LET V3 OUT OF THE GARAGE. V1 FAILED TO NOTICE THIS AND COLLIDED WITH REAR OF V2, WHICH COLLIDED WITH TRAILER OF V3.
Occurred on A38 TAUNTON ROAD, NORTH PETHERTON.

Vehicle Reference 1 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 42
Vehicle direction SE to NW
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 42 Female Driver/rider Severity: Slight

Vehicle Reference 2 Car Slowing or Stopping
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Back Age of Driver 44
Vehicle direction SE to NW
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 2 Age: 44 Female Driver/rider Severity: Slight

Vehicle Reference 3 Goods >= 7.5 tonnes mgw Turning right
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Back Age of Driver 49
Vehicle direction E to NW
FRV Not foreign registered vehicle Journey 6

192000655 08/11/2019 Friday Time 1740 Vehicles 2 Casualties 1 Slight
Fine without high winds Road surface Dry Darkness: street lights present and lit
Special Conditions None Road Type Unknown
V1 & V2 (P/CYCLE) TRAVELLING NORTH. V2 ENTERED CARRIAGEWAY FROM THE SIDE OF ROAD AND COLLIDED WITH V1.
Occurred on A38 BRISTOL ROAD, BRIDGWATER.

Vehicle Reference 1 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 61
Vehicle direction S to N
FRV Not foreign registered vehicle Journey 6

Vehicle Reference 2 Pedal cycle Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Nearside Age of Driver 46
Vehicle direction S to N
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 46 Male Driver/rider Severity: Slight

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Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

192001246 21/11/2019 Thursday Time 1653 Vehicles 2 Casualties 1 Slight
Raining without high winds Road surface Wet/Damp Darkness: street lights present and lit
Special Conditions None Road Type Single carriageway
V1 TRAVELLING NORTH EAST, V2 TRAVELLING OPPOSITE DIRECTION. V1 TURNED RIGHT SOUTH EAST AND COLLIDED WITH V2.
Occurred on A39 WESTERN WAY, AT JUNCTION WITH WYLDS ROAD, BRIDGWATER

Vehicle Reference 1 Car Turning right
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 48
Vehicle direction SW to SE
FRV Not foreign registered vehicle Journey 6

Vehicle Reference 2 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 47
Vehicle direction NE to SW
FRV Not foreign registered vehicle Journey Journey as part of work

Casualty Reference: 1 Age: 47 Female Driver/rider Severity: Slight

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191907150 27/11/2019 Wednesday Time 2000 Vehicles 2 Casualties 1 Slight
Fine without high winds Road surface Dry Darkness: street lighting unknown
Special Conditions None Road Type Unknown
V1 (P/CYCLE) TRAVELLING NORTH, V2 TRAVELLING EAST. V1 WAS WAITING TO TURN RIGHT EAST AND V2 WAS WAITING TO TURN RIGHT SOUTH. V2 COMMENCED TURN AND COLLIDED WITH V1.
Occurred on A39 QUANTOCK ROAD, AT JUNCTION WITH DANESBOROUGH ROAD, WEMBDON.

Vehicle Reference 1 Pedal cycle Waiting to turn right
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 63
Vehicle direction S to E
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 63 Male Driver/rider Severity: Slight

Vehicle Reference 2 Car Turning right
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 80
Vehicle direction W to S
FRV Not foreign registered vehicle Journey 6

Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

191907208 01/12/2019 Sunday Time 1945 Vehicles 2 Casualties 1 Slight
Fine without high winds Road surface Dry Darkness: street lights present and lit
Special Conditions None Road Type Single carriageway
V1 & V2 TRAVELLING SOUTH WEST. V1 SLOWED DOWN DUE TO TRAFFIC LIGHTS, V2 FAILED TO STOP IN TIME AND COLLIDED WITH REAR OF V1.
Occurred on PENEL ORLIEU, BRIDGWATER.

Vehicle Reference 1 Car Waiting to go ahead but held up
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Did not impact Age of Driver 32
Vehicle direction NE to SW
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 32 Female Driver/rider Severity: Slight

Vehicle Reference 2 Car Slowing or Stopping
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Did not impact Age of Driver 30
Vehicle direction NE to SW
FRV Not foreign registered vehicle Journey 6

192000371 02/12/2019 Monday Time 1132 Vehicles 1 Casualties 1 Serious
Fine without high winds Road surface Dry Daylight: no street lighting
Special Conditions None Road Type Single carriageway
V1 TRAVELLING SOUTH EAST, PEDESTRIAN WALKING ALONG PAVEMENT. V1 TURNED RIGHT SOUTH WEST AND COLLIDED WITH PEDESTRIAN, WHO WAS CROSSING JUNCTION. PEDESTIAN FELL TO THE FLOOR.
Occurred on A38 TAUNTON ROAD, AT JUNCTION WITH RHODE LANE, BRIDGWATER

Vehicle Reference 1 Car Turning right
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 29
Vehicle direction NW to SW
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 42 Male Pedestrian Severity: Serious
9

Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

192001332 05/12/2019 Thursday Time 1319 Vehicles 3 Casualties 1 Slight
Fine without high winds Road surface Dry Daylight: no street lighting
Special Conditions None Road Type Single carriageway
V1, V2 & V3 TRAVELLING NORTH. V1 & V2 STOPPED DUE TO TRAFFIC AHEAD. V3 FAILED TO STOP IN TIME AND COLLIDED WITH REAR OF V2, WHICH IN TURN COLLIDED WITH REAR OF V1.
Occurred on A38 TAUNTON ROAD, AT JUNCTION WITH HAMP GREEN RISE, BRIDGWATER.

Vehicle Reference 1 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 61
Vehicle direction S to N
FRV Not foreign registered vehicle Journey 6

Vehicle Reference 2 Goods <= 3.5 tonnes mgw Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 59
Vehicle direction S to N
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 59 Male Driver/rider Severity: Slight

Vehicle Reference 3 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 31
Vehicle direction S to N
FRV Not foreign registered vehicle Journey 6

192001534 23/12/2019 Monday Time 1645 Vehicles 2 Casualties 2 Slight
Fine without high winds Road surface Dry Darkness: street lights present but unlit
Special Conditions None Road Type Single carriageway
V1 & V2 TRAVELLING NORTH WEST. V1 SPED UP DUE TO MEDICAL EPISODE AND COLLIDED WITH REAR OF V2.
Occurred on A39 QUANTOCK ROAD, AT JUNCTION WITH SKIMMERTON LANE, WEMBDON.

Vehicle Reference 1 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 78
Vehicle direction SE to NW
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 78 Male Driver/rider Severity: Slight

Vehicle Reference 2 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 57
Vehicle direction SE to NW
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 2 Age: 57 Male Driver/rider Severity: Slight

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Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

202000454 10/01/2020 Friday Time 1315 Vehicles 3 Casualties 5 Serious
Fine without high winds Road surface Dry Daylight: no street lighting
Special Conditions None Road Type Single carriageway
V1, V2 & V3 TRAVELLING NORTH EAST. V3 WAS WAITING TO TURN RIGHT SOUTH EAST. V1 WAS DISTRACTED AND COLLIDED WITH REAR OF V2, WHICH COLLIDED WITH REAR OF V3.
Occurred on A38 BRISTOL ROAD, BRIDGWATER,.

Vehicle Reference 1 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 19
Vehicle direction SW to NE
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 19 Female Driver/rider Severity: Slight

Casualty Reference: 4 Age: 17 Female Passenger Severity: Slight

Casualty Reference: 5 Age: 17 Female Passenger Severity: Slight

Vehicle Reference 2 Goods <= 3.5 tonnes mgw Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Back Age of Driver 48
Vehicle direction SW to NE
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 2 Age: 48 Male Driver/rider Severity: Slight

Vehicle Reference 3 Car Waiting to turn right
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Back Age of Driver 46
Vehicle direction SW to SE
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 3 Age: 46 Male Driver/rider Severity: Serious

Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

202002095 04/02/2020 Tuesday Time 1945 Vehicles 2 Casualties 4 Slight
Fine without high winds Road surface Dry Darkness: street lights present and lit
Special Conditions None Road Type Single carriageway
V1 TRAVELLING NORTH WEST, V2 TRAVELLING NORTH EAST. V1 TURNED RIGHT NORTH EAST AND COLLIDED WITH V2.
Occurred on A39 WESTERN WAY, AT JUNCTION WITH WYLDS ROAD, BRIDGWATER.

Vehicle Reference 1 Car Turning right
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 19
Vehicle direction SE to NE
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 19 Female Driver/rider Severity: Slight

Casualty Reference: 3 Age: 38 Female Passenger Severity: Slight

Vehicle Reference 2 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 21
Vehicle direction SW to NE
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 2 Age: 21 Male Driver/rider Severity: Slight

Casualty Reference: 4 Age: 24 Female Passenger Severity: Slight

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202000722 05/02/2020 Wednesday Time 1100 Vehicles 2 Casualties 1 Slight
Fine without high winds Road surface Dry Daylight:street lights present
Special Conditions None Road Type Dual carriageway
V1 (P/CYCLE) TRAVELLING SOUTH EAST, V2 TRAVELLING NORTH EAST. V2 TURNED RIGHT SOUTH EAST AND COLLIDED WITH V1.
Occurred on A39 BROADWAY, AT JUNCTION WITH ALBERT STREET, BRIDGWATER.

Vehicle Reference 1 Pedal cycle Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 52
Vehicle direction NW to SE
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 52 Female Driver/rider Severity: Slight

Vehicle Reference 2 Car Turning right
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 38
Vehicle direction SW to SE
FRV Not foreign registered vehicle Journey 6

Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

202001387 01/03/2020 Sunday Time 0116 Vehicles 2 Casualties 1 Slight
Raining without high winds Road surface Wet/Damp Darkness: street lights present and lit
Special Conditions None Road Type Single carriageway
V1 TRAVELLING NORTH WEST, V2 TRAVELLING OPPOSITE DIRECTION. V1 TURNED RIGHT NORTH EAST AND COLLIDED WITH V2.
Occurred on A39 BROADWAY, AT JUNCTION WITH PENEL ORLIEU, BRIDGWATER.

Vehicle Reference 1 Car Turning right
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 21
Vehicle direction SE to NE
FRV Not foreign registered vehicle Journey 6

Vehicle Reference 2 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 49
Vehicle direction NW to SE
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 49 Male Driver/rider Severity: Slight

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202001500 10/03/2020 Tuesday Time 1845 Vehicles 1 Casualties 1 Slight
Raining without high winds Road surface Wet/Damp Darkness: street lights present and lit
Special Conditions None Road Type Unknown
V1 TRAVELLING SOUTH. SOME PEDESTRIANS HAD ALIGHTED FROM TWO BUSES. V1 BRAKED ON SEEING PEDESTRIANS AND RIDER OF V1 FELL FROM MACHINE.
Occurred on A38 TAUNTON ROAD, NORTH PETHERTON.

Vehicle Reference 1 Motorcycle over 125cc and up to 500cc Going ahead
Not in restricted lane Skidded
First point of impact Did not impact Age of Driver 32
Vehicle direction N to S
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 32 Male Driver/rider Severity: Slight

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Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

202004736 22/03/2020 Sunday Time 1439 Vehicles 2 Casualties 1 Slight
Fine without high winds Road surface Dry Daylight:street lights present
Special Conditions None Road Type Single carriageway
V1 & V2 (M/CYCLES) TRAVELLING NORTH. V2 BRAKED DUE TO VEHICLE AHEAD. V1 FAILED TO STOP IN TIME AND COLLIDED WITH REAR OF V2.
Occurred on MAIN ROAD, CANNINGTON.

Vehicle Reference 1 Motorcycle over 125cc and up to 500cc Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 23
Vehicle direction S to N
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 23 Male Driver/rider Severity: Slight

Vehicle Reference 2 Motorcycle over 125cc and up to 500cc Going ahead
Not in restricted lane Skidded
First point of impact Back Age of Driver 18
Vehicle direction S to N
FRV Not foreign registered vehicle Journey 6

202004905 29/04/2020 Wednesday Time 0856 Vehicles 2 Casualties 1 Slight
Raining without high winds Road surface Wet/Damp Daylight: no street lighting
Special Conditions None Road Type Single carriageway
V1 TRAVELLING SOUTH WEST, V2 TRAVELLING SOUTH EAST. V1 TURNED RIGHT NORTH WEST AND V2 TURNED LEFT NORTH EAST. V1 COLLIDED WITH V2.
Occurred on A39 THE DROVE, AT JUNCTION WITH WYLDS ROAD, BRIDGWATER.

Vehicle Reference 1 Goods between 3.5 and 7.5 tonnes mgw Turning right
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Nearside Age of Driver 24
Vehicle direction NE to NW
FRV Not foreign registered vehicle Journey 6

Vehicle Reference 2 Car Turning left
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Offside Age of Driver 42
Vehicle direction NW to NE
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 42 Male Driver/rider Severity: Slight

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Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

202002275 12/05/2020 Tuesday Time 2034 Vehicles 2 Casualties 1 Serious
Fine without high winds Road surface Dry Daylight:street lights present
Special Conditions None Road Type Single carriageway
V1 TRAVELLING SOUTH EAST, V2 TRAVELLING EAST. V1 PULLED AWAY FROM LIGHTS AND COLLIDED WITH V2.
Occurred on A38 TAUNTON ROAD, AT JUNCTION WITH A39 BROADWAY, BRIDGWATER.

Vehicle Reference 1 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 58
Vehicle direction NW to SE
FRV Not foreign registered vehicle Journey 6

Vehicle Reference 2 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 36
Vehicle direction W to E
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 36 Male Driver/rider Severity: Serious

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202002325 01/06/2020 Monday Time 1815 Vehicles 2 Casualties 1 Slight
Fine without high winds Road surface Dry Daylight: street lighting unknown
Special Conditions None Road Type Roundabout
V1 & V2 TRAVELLING EAST. V1 WAS STOPPED AT ROUNDABOUT. V2 FAILED TO STOP IN TIME AND COLLIDED WITH REAR OF V1.
Occurred on A38 TAUNTON ROAD, AT JUNCTION WITH STOCKMOOR DRIVE, NORTH PETHERTON.

Vehicle Reference 1 Car Slowing or Stopping
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Back Age of Driver 46
Vehicle direction W to E
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 46 Female Driver/rider Severity: Slight

Vehicle Reference 2 Car Slowing or Stopping
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 41
Vehicle direction W to E
FRV Not foreign registered vehicle Journey 6

Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

202100304 03/07/2020 Friday Time 1030 Vehicles 2 Casualties 1 Slight
Fine without high winds Road surface Dry Daylight:street lights present
Special Conditions None Road Type Single carriageway
V1 TRAVELLING NORTH EAST, V2 TRAVELLING NORTH WEST. V1 TURNED RIGHT SOUTH EAST AND COLLIDED WITH V2.
Occurred on A38 TAUNTON ROAD, AT JUNCTION WITH PARKSTONE AVENUE, BRIDGWATER

Vehicle Reference 1 Car Turning right
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Offside Age of Driver 49
Vehicle direction SW to SE
FRV Not foreign registered vehicle Journey 6

Vehicle Reference 2 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 57
Vehicle direction SE to NW
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 57 Female Driver/rider Severity: Slight

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202002903 19/07/2020 Sunday Time 2015 Vehicles 1 Casualties 1 Slight
Fine without high winds Road surface Dry Daylight: no street lighting
Special Conditions None Road Type Single carriageway
V1 TRAVELLIING SOUTH EAST. DRIVER LOST CONTROL AND V1 COLLIDED WITH A VERGE.
Occurred on A39 NEW ROAD, AT JUNCTION WITH LIMESTONE HILL, CANNINGTON.

Vehicle Reference 1 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 32
Vehicle direction NW to SE
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 32 Male Driver/rider Severity: Slight

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Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

202002970 29/07/2020 Wednesday Time 1023 Vehicles 2 Casualties 1 Slight
Fine without high winds Road surface Dry Daylight: street lighting unknown
Special Conditions None Road Type Roundabout
V1 & V2 TRAVELLING NORTH WEST BOTH TURNING LEFT SOUTH WEST. V1 WAS IN WRONG LANE AND COLLIDED WITH V2.
Occurred on A38 HUNTWORTH ROUNDABOUT, NORTH PETHERTON.

Vehicle Reference 1 Car Turning left
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Offside Age of Driver 55
Vehicle direction SE to SW
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 55 Male Driver/rider Severity: Slight

Vehicle Reference 2 Car Waiting to turn left
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Nearside Age of Driver
Vehicle direction SE to SW
FRV Not foreign registered vehicle Journey 6

202003325 25/08/2020 Tuesday Time 1850 Vehicles 1 Casualties 1 Slight
Fine with high winds Road surface Dry Daylight: street lighting unknown
Special Conditions None Road Type Unknown
V1 TRAVELLING WEST, PEDESTRIAN WALKING NORTHBOUND. V1 WAS TURNING LEFT SOUTH AND COLLIDED WITH PEDESTRIAN. V1 FAILED TO STOP.
Occurred on A38 BRITOL ROAD, AT JUNCTION WITH UNION STREET, BRIDGWATER

Vehicle Reference 1 Car Turning left
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver
Vehicle direction E to S
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 29 Male Pedestrian Severity: Slight
Pedestrian Direction: N

Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

202004006 21/09/2020 Monday Time 1549 Vehicles 2 Casualties 1 Slight
Fine without high winds Road surface Dry Daylight:street lights present
Special Conditions None Road Type Single carriageway
V1 TRAVELLING WEST, V2 TRAVELLING OPPOSITE DIRECTION. V2 TURNED RIGHT SOUTH AND COLLIDED WITH V1.
Occurred on A38 BROADWAY, AT JUNCTION WITH SUPERMARKET, BRIDGWATER.

Vehicle Reference 1 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 70
Vehicle direction E to W
FRV Not foreign registered vehicle Journey 6

Vehicle Reference 2 Car Turning right
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 19
Vehicle direction W to S
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 19 Female Driver/rider Severity: Slight

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202101170 27/09/2020 Sunday Time 1237 Vehicles 2 Casualties 2 Slight
Fine without high winds Road surface Dry Daylight:street lights present
Special Conditions None Road Type Dual carriageway
V1 & V2 TRAVELLING EAST IN DIFFERENT LANES. V2 CHANGED LANES AFTER OVERTAKING. V1 COLLIDED WITH REAR OF V2.
Occurred on A39 BROADWAY, AT JUNCTION WITH A38 TAUNTON ROAD, BRIDGWATER.

Vehicle Reference 1 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 31
Vehicle direction W to E
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 31 Female Driver/rider Severity: Slight

Vehicle Reference 2 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Back Age of Driver 35
Vehicle direction W to E
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 2 Age: 35 Male Driver/rider Severity: Slight

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Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

202004568 28/10/2020 Wednesday Time 1800 Vehicles 2 Casualties 1 Serious
Raining with high winds Road surface Wet/Damp Darkness: no street lighting
Special Conditions None Road Type Single carriageway
V1 TRAVELLING NORTH WEST, V2 (M/CYCLE) TRAVELLING OPPOSITE DIRECTION. V1 TURNED RIGHT NORTH EAST AND COLLIDED WITH V2.
Occurred on A39 QUANTOCK ROAD, AT JUNCTION WITH FILLING STATION, WEMBDON.

Vehicle Reference 1 Car Waiting to turn right
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Offside Age of Driver 74
Vehicle direction SE to NE
FRV Not foreign registered vehicle Journey 6

Vehicle Reference 2 Motorcycle over 125cc and up to 500cc Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Back Age of Driver 32
Vehicle direction NW to SE
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 32 Male Driver/rider Severity: Serious

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202101141 16/11/2020 Monday Time 1700 Vehicles 1 Casualties 2 Slight
Fine without high winds Road surface Wet/Damp Darkness: street lights present and lit
Special Conditions None Road Type Single carriageway
V1 TRAVELLING SOUTH, PEDESTRIAN WALKING EAST. V1 COLLIDED WITH PEDESTRIAN.
Occurred on A38 TAUNTON ROAD, NORTH PETHERTON.

Vehicle Reference 1 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 32
Vehicle direction N to S
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 32 Male Driver/rider Severity: Slight

Casualty Reference: 2 Age: 34 Female Pedestrian Severity: Slight
Pedestrian Direction: E

Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

202101149 17/11/2020 Tuesday Time 1655 Vehicles 3 Casualties 1 Slight
Fine without high winds Road surface Wet/Damp Darkness: no street lighting
Special Conditions None Road Type Single carriageway
V1, V2 & V3 TRAVELLING SOUTH EAST. V1 STOPPED DUE TO TRAFFIC, V2 ALSO STOPPED BUT V3 FAILED TO STOP IN TIME AND COLLIDED WITH REAR OF V2, WHICH IN TURN COLLIDED WITH REAR OF V1.
Occurred on A39 NEW ROAD, CANNINGTON.

Vehicle Reference 1 Car Waiting to go ahead but held up
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Back Age of Driver 18
Vehicle direction NW to SE
FRV Not foreign registered vehicle Journey 6

Vehicle Reference 2 Car Slowing or Stopping
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Back Age of Driver 36
Vehicle direction NW to SE
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 36 Female Driver/rider Severity: Slight

Vehicle Reference 3 Car Slowing or Stopping
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 37
Vehicle direction NW to SE
FRV Not foreign registered vehicle Journey 6

Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

202101153 19/11/2020 Thursday Time 1724 Vehicles 3 Casualties 1 Slight
Fine without high winds Road surface Dry Darkness: street lights present and lit
Special Conditions None Road Type Single carriageway
V1 TRAVELLING NORTH EAST, V2 & V3 TRAVELLING OPPOSITE DIRECTION, PEDESTRIAN WALKING NORTH WEST. V1 COLLIDED WITH V2. V3 THEN TRIED TO OVERTAKE V1 & V2 AND COLLIDED WITH PEDESTRIAN.
Occurred on A38 BRISTOL ROAD, BRIDGWATER.

Vehicle Reference 1 Goods between 3.5 and 7.5 tonnes mgw Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Offside Age of Driver 52
Vehicle direction SW to NE
FRV Foreign registered vehicle - left hand drive Journey 6

Vehicle Reference 2 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Offside Age of Driver 39
Vehicle direction NE to SW
FRV Not foreign registered vehicle Journey 6

Vehicle Reference 3 Car Overtaking stationary vehicle on its offside
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Did not impact Age of Driver 62
Vehicle direction NE to SW
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 51 Female Pedestrian Severity: Slight
Pedestrian Direction: NW

202101155 19/11/2020 Thursday Time 0630 Vehicles 2 Casualties 1 Slight
Fine without high winds Road surface Dry Darkness: street lights present and lit
Special Conditions None Road Type Single carriageway
V1 (M/CYCLE) TRAVELLING SOUTH WEST, V2 PARKED. V1 FAILED TO NOTICE V2 AND A COLLISION OCCURRED.
Occurred on A38 TAUNTON ROAD, AT JUNCTION WITH ASHLEIGH AVENUE, BRIDGWATER.

Vehicle Reference 1 Motorcycle over 50cc and up to 125cc Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 47
Vehicle direction NW to SE
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 47 Female Driver/rider Severity: Slight

Vehicle Reference 2 Car Parked
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Back Age of Driver 57
Vehicle direction Park to Parked
FRV Not foreign registered vehicle Journey 6

Accidents between dates **01/04/2018 and 31/03/2023** (60) months
Selection: **Notes:**

202004699 02/12/2020 Wednesday Time 0900 Vehicles 3 Casualties 1 Slight
Fine without high winds Road surface Dry Daylight: street lighting unknown
Special Conditions None Road Type Single carriageway
V1 & V3 TRAVELLING SOUTH, V2 TRAVELLING EAST. V1 SLOWED TO ALLOW V2 TO TURN RIGHT SOUTH. V3 FAILED TO STOP IN TIME AND COLLIDED WITH V1, WHICH IN TURN COLLIDED WITH V2.
Occurred on A38 TAUNTON ROAD, AT JUNCTION WITH WILLS ROAD, NORTH PETHERTON.

Vehicle Reference 1 Car Slowing or Stopping
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Back Age of Driver 58
Vehicle direction N to S
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 58 Male Driver/rider Severity: Slight

Vehicle Reference 2 Car Turning right
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Nearside Age of Driver 30
Vehicle direction W to S
FRV Not foreign registered vehicle Journey 6

Vehicle Reference 3 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 30
Vehicle direction N to S
FRV Not foreign registered vehicle Journey 6

202100156 18/12/2020 Friday Time 1345 Vehicles 2 Casualties 1 Slight
Raining without high winds Road surface Wet/Damp Daylight:street lights present
Special Conditions None Road Type Single carriageway
V1 TRAVELLING NORTH EAST, V2 TRAVELLING WEST. V2 TURNED RIGHT NORTH EAST. V1 SKIDDED AND A COLLISION OCCURRED.
Occurred on A38 BRISTOL ROAD, AT JUNCTION WITH UNION STREET, BRIDGWATER.

Vehicle Reference 1 Car Going ahead
Not in restricted lane Skidded
First point of impact Nearside Age of Driver 37
Vehicle direction SW to NE
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 37 Female Driver/rider Severity: Slight

Vehicle Reference 2 Goods <= 3.5 tonnes mgw Turning right
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Offside Age of Driver 27
Vehicle direction E to NE
FRV Not foreign registered vehicle Journey 6

Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

202100246 31/12/2020 Thursday Time 1650 Vehicles 4 Casualties 3 Serious
Fine without high winds Road surface Wet/Damp Darkness: street lights present and lit
Special Conditions None Road Type Single carriageway
V1, V3 & V4 TRAVELLING NORTH EAST, V2 TRAVELLING OPPOSITE DIRECTION. V3 WENT TO OVERTAKE V4 AND COLLIDED WITH V1. V3 THEN SPUN AND COLLIDED WITH V2.
Occurred on A38 TAUNTON ROAD, NORTH PETHERTON.

Vehicle Reference 1 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 58
Vehicle direction SW to NE
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 58 Female Driver/rider Severity: Serious

Casualty Reference: 3 Age: 32 Male Passenger Severity: Slight

Vehicle Reference 2 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 49
Vehicle direction NE to SW
FRV Not foreign registered vehicle Journey 6

Vehicle Reference 3 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 41
Vehicle direction SW to NE
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 2 Age: 41 Male Driver/rider Severity: Slight

Vehicle Reference 4 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 39
Vehicle direction SW to NE
FRV Not foreign registered vehicle Journey 6

Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

212102938 22/01/2021 Friday Time 0117 Vehicles 1 Casualties 1 Serious
Raining without high winds Road surface Wet/Damp Darkness: no street lighting
Special Conditions None Road Type Single carriageway
V1 TRAVELLING NW TOWARDS CANNINGTON WHEN IT HAS COME INTO CONTACT WITH A PEDESTRIAN WALKING ON ROAD, ON THE WRONG SIDE OF ROAD TO PAVEMENT, DRESSED ALL IN BLACK, INTOXICATED AND DURING HEAVY RAIN.
Occurred on A39 QUANTOCK ROAD, BRIDGWATER

Vehicle Reference 1 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 25
Vehicle direction SE to NW
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 18 Male Pedestrian Severity: Serious
9

212101614 28/01/2021 Thursday Time 0720 Vehicles 2 Casualties 1 Slight
Fine without high winds Road surface Wet/Damp Darkness: street lights present and lit
Special Conditions None Road Type Unknown
V1 TRAVELLING FROM BRIDGWATER TOWARDS TRAFFIC LIGHTS JUNCTION OF NDR, WYLDS ROAD ALONG EAST QUAY. LIGHTS ARE ON GREEN SO TRAVELLED ACROSS LIGHTS FROM EAST QUAY TO WYLDS ROAD. V2 HAS PULLED OUT OF WYLDS ROAD AGAINST THE LIGHTS AND HAS COLLIDED WITH V1.
Occurred on WYLDS ROAD, EAST QUAY, BRIDGWATER

Vehicle Reference 1 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 29
Vehicle direction W to E
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 29 Male Driver/rider Severity: Slight

Vehicle Reference 2 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 24
Vehicle direction N to S
FRV Not foreign registered vehicle Journey 6

Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

212101657 03/02/2021 Wednesday Time 1649 Vehicles 2 Casualties 1 Slight
Fine without high winds Road surface Dry Daylight:street lights present
Special Conditions None Road Type Dual carriageway
V1 WAS TRAVELLING E AND INTENDING TO TURN RIGHT, INTO MORRISONS. V2 WAS TRAVELLING WEST AND STATIONARY AT THE MORRISONS T /LIGHTS ON BROADWAY INTENDING TO GO STRAIGHT ON. AS THE TRAFFIC LIGHTS CHANGED TO GREEN IN V2 FAVOUR, V2 PROCEEDED FORWARD BUT WAS H
Occurred on A39 BROADWAY OUTSIDE/BY MORRISONS TRAFFIC LIGHTS, BRIDGWATER

Vehicle Reference 1 Car Turning right
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 89
Vehicle direction N to E
FRV Not foreign registered vehicle Journey 6

Vehicle Reference 2 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Nearside Age of Driver 59
Vehicle direction N to S
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 59 Female Driver/rider Severity: Slight

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212100487 09/02/2021 Tuesday Time 1214 Vehicles 2 Casualties 1 Slight
Fine without high winds Road surface Dry Daylight:street lights present
Special Conditions None Road Type Single carriageway
V1 WAS TRAVELLING NORTH ON RBT A38 TAUNTON ROAD IN THE SAME DIRECTOIN AS V2. AT THE EXIT FOR BRIDGWATER V1 HAS SLOWED AND TURNED SHARPLY RIGHT ACROSS THE PATH OF V2. COLLISION OCCURS.
Occurred on A38 TAUNTON ROAD AT JUNCTION WITH A38 J24, LINK ROAD, BRIDGWATER

Vehicle Reference 1 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Offside Age of Driver 22
Vehicle direction S to E
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 22 Female Driver/rider Severity: Slight

Vehicle Reference 2 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Nearside Age of Driver 34
Vehicle direction S to N
FRV Not foreign registered vehicle Journey Journey as part of work

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Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

212102410 10/03/2021 Wednesday Time 1330 Vehicles 2 Casualties 1 Serious
Fine without high winds Road surface Dry Daylight:street lights present
Special Conditions None Road Type Single carriageway
V1 TRAVELLING N ON A38 WHEN V2 IS ALLEGED TO HAVE PULLED OUT INTO ITS PATH FROM THE DROVE AND COLLISION OCCURED.
Occurred on A38 BRIDGEWATER ROAD AT JUNCTION WITH A39 THE DROVE, BRIDGEWATER

Vehicle Reference 1 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Offside Age of Driver 75
Vehicle direction S to N
FRV Not foreign registered vehicle Journey 6

Vehicle Reference 2 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 61
Vehicle direction W to E
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 61 Male Driver/rider Severity: Serious

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212101882 15/03/2021 Monday Time 1435 Vehicles 2 Casualties 1 Slight
Fine without high winds Road surface Dry Daylight:street lights present
Special Conditions None Road Type Single carriageway
V001 WAS WAITING TO TURN RIGHT FROM THE MINOR TAUNTON ROAD JUNCTION ONTO THE A38 MAJOR TAUNTON ROAD. JUST BEYOND THE JUNCTION IS A PEDESTRIAN CROSSING, THE LIGHTS FOR WHICH WERE ON RED. THIS LED TO A QUEUE OF VEHICLES STRETCHING BACK TOWARDS BRIDGWATER.
Occurred on A38 TAUNTON ROAD AT JUNCTION WITH TAUNTON ROAD (MINOR), HUNTWORTH, BRIDGWA

Vehicle Reference 1 Car Turning right
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Offside Age of Driver 60
Vehicle direction NE to N
FRV Not foreign registered vehicle Journey 6

Vehicle Reference 2 Motorcycle over 500cc Overtaking stationary vehicle on its offside
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 37
Vehicle direction N to SW
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 37 Male Driver/rider Severity: Slight

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Accidents between dates **01/04/2018 and 31/03/2023** (60) months
Selection: **Notes:**

212101920 23/03/2021 Tuesday Time 1703 Vehicles 2 Casualties 1 Slight
Fine without high winds Road surface Dry Daylight: no street lighting
Special Conditions None Road Type Single carriageway
V001 HAS PULLED OUT OF WILLS ROAD TURNING RIGHT, ON TO TAUNTON ROAD. THE VISION OF THE DRIVER WAS OBSTRUCTED BY A BUS ON THE OTHER SIDE OF THE ROAD. V002 HAS TRAVELLED SOUTH ALONG THE ROAD AND V001 COULD NOT SEE V002 AND HAS THEN COLLIDED WITH V002 AT LO
Occurred on A38 TAUNTON ROAD AT JUNCTION WITH WILLS ROAD, BRIDGWATER

Vehicle Reference 1 Taxi Turning right
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 34
Vehicle direction W to S
FRV Not foreign registered vehicle Journey Journey as part of work

Vehicle Reference 2 Motorcycle over 50cc and up to 125cc Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Offside Age of Driver 44
Vehicle direction N to S
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 44 Male Driver/rider Severity: Slight

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212102148 06/04/2021 Tuesday Time 0758 Vehicles 2 Casualties 2 Slight
Fine without high winds Road surface Dry Daylight:street lights present
Special Conditions ATS out Road Type Single carriageway
VEHICLE 002 TRAVELLING EAST HAS PROCEEDED ACROSS THE JUNCTION ON A CONFIRMED GREEN LIGHT WHEN V001 HAS ENTERED THE JUNCTION TRAVELLING SOUTH COLLIDING WITH V002.
Occurred on A39 WESTERN WAY, BRIDGWATER AT JUNCTION WITH CHILTON STREET

Vehicle Reference 1 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 33
Vehicle direction W to E
FRV Not foreign registered vehicle Journey 6

Vehicle Reference 2 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Offside Age of Driver 38
Vehicle direction N to S
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 38 Male Driver/rider Severity: Slight

Casualty Reference: 2 Age: 38 Female Passenger Severity: Slight

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Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

212101998 19/04/2021 Monday Time 0520 Vehicles 2 Casualties 1 Slight
Fine without high winds Road surface Dry Daylight: no street lighting
Special Conditions None Road Type Roundabout
V01 WAS WAITING IN A LINE OF NW BOUND TRAFFIC GOING ON TO THE ROUNDABOUT WHEN IT WAS STRUCK AT SPEED FROM BEHIND BY V02 WHICH HAS FAILED TO SLOW DOWN
Occurred on A38 APPROACH TO DUNBALL ROUNDABOUT, BRIDGWATER

Vehicle Reference 1 Car Waiting to go ahead but held up
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Back Age of Driver 22
Vehicle direction SE to NW
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 22 Female Driver/rider Severity: Slight

Vehicle Reference 2 Car Slowing or Stopping
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 30
Vehicle direction SE to NW
FRV Not foreign registered vehicle Journey 6

212102486 22/04/2021 Thursday Time 1508 Vehicles 2 Casualties 1 Slight
Fine without high winds Road surface Dry Daylight:street lights present
Special Conditions None Road Type Single carriageway
V001 TRAVELLING NE TOWARDS WYLDS ROAD WAS MID JUNCTION, V002 PROCEEDED INTO THE JUNCTION, DIDN'T LOOK PROPERLY AND COLLIDED WITH THE SIDE OF V001.
Occurred on WYLDS ROAD AT JUNCTION WITH A39 WESTERN WAY, BRIDGWATER

Vehicle Reference 1 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Nearside Age of Driver 22
Vehicle direction SW to NE
FRV Not foreign registered vehicle Journey 6

Vehicle Reference 2 Pedal cycle Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 15
Vehicle direction NW to SE
FRV Not foreign registered vehicle Journey Pupil riding to/from school

Casualty Reference: 1 Age: 15 Male Driver/rider Severity: Slight
School pupil to or from school

Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

212102472 29/04/2021 Thursday Time 1049 Vehicles 2 Casualties 1 Serious
Unknown Road surface Dry Daylight: street lighting unknown
Special Conditions ATS out Road Type Single carriageway
V001 WAS INDICATING TO TURN RIGHT ONTO WYLDS ROAD AT THE TRAFFIC LIGHTS ON A GREEN LIGHT. V001 THEN TURNED AND V002 HAS COME OVER THE BRIDGE ON WESTERN WAY AND THROUGH THE TRAFFIC LIGHTS. V002 HAS THEN HIT V001 TRAILER AT THE NEARSIDE FRONT CORNER AS IT
Occurred on A39 THE DROVE AT JUNCTION WITH WYLDS ROAD, BRIDGWATER

Vehicle Reference 1 Car Turning right
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Nearside Age of Driver 58
Vehicle direction SE to NE
FRV Not foreign registered vehicle Journey 6

Vehicle Reference 2 Motorcycle over 125cc and up to 500cc Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 81
Vehicle direction NW to SE
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 81 Male Driver/rider Severity: Serious

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212104035 13/05/2021 Thursday Time 1605 Vehicles 2 Casualties 1 Slight
Fine without high winds Road surface Wet/Damp Darkness: street lights present but unlit
Special Conditions None Road Type Single carriageway
V001 HAS BEEN TRAVELLING NE ON THE A39. AS V001 HAS APPROACHED THE TRAFFIC LIGHTS AT THE JUNCTION OF WEMBDON RISE THE DRIVER WAS SPEAKING TO HER SON. V001 HAS FAILED TO STOP AS THE LIGHTS TURNED RED HITTING V002 THAT WAS PULLING OUT OF WEMBDON RISE.
Occurred on B3339 WEMBDON RISE AT JUNCTION WITH A39

Vehicle Reference 1 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Nearside Age of Driver 31
Vehicle direction SW to NE
FRV Not foreign registered vehicle Journey 6

Vehicle Reference 2 Car Turning left
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 40
Vehicle direction NW to NE
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 40 Female Driver/rider Severity: Slight

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Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

212103795 15/05/2021 Saturday Time 1425 Vehicles 1 Casualties 1 Slight
Raining without high winds Road surface Wet/Damp Daylight: no street lighting
Special Conditions None Road Type Single carriageway
V001 TRAVELLING SOUTH ON THE A38 WHEN ITS ELDERLY DRIVER APPEARS TO HAVE SUFFERED A MEDICAL EPISOPE WHICH RESULTED IN THE LOSS OF CONTROL OF THE VEHICLE. THE CAR DRIFTED OFF THE ROAD HITTING A LOW WALL.
Occurred on A38 TAUNTON ROAD 42M N OF PARKSTONE AVENUE, BRIDGWATER

Vehicle Reference 1 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Nearside Age of Driver 85
Vehicle direction N to S
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 85 Male Driver/rider Severity: Slight

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212104195 08/06/2021 Tuesday Time 1400 Vehicles 2 Casualties 1 Slight
Fine without high winds Road surface Dry Daylight:street lights present
Special Conditions None Road Type Roundabout
V001 HAS BEEN TRAVELLING DOWN DUNBALL STRAIGHT ON THE A38 TOWARDS THE EXPRESS PARK ROUNDABOUT. V002 HAS BEEN TRAVELLING BEHIND V001 IN CRAWLING TRAFFIC. V002 HAS BELIEVED THAT V001 WAS PULLING OFF FROM THE JUNCTION. BUT V001 HAS BRAKED AND V002 HAS DRIVE
Occurred on A38 BRISTOL ROAD OUTSIDE/BY BUDGENS AT JUNCTION WITH EXPRESS PARK, BRIDGWATE

Vehicle Reference 1 Car Slowing or Stopping
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Back Age of Driver 25
Vehicle direction N to S
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 25 Female Driver/rider Severity: Slight

Vehicle Reference 2 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 51
Vehicle direction N to S
FRV Not foreign registered vehicle Journey 6

Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

212105615 14/07/2021 Wednesday Time 0738 Vehicles 2 Casualties 1 Slight
Fine without high winds Road surface Dry Daylight: no street lighting
Special Conditions None Road Type Dual carriageway
V1 & V2 (M/CYCLE) TRAVELLING NORTHBOUND. V2 BEGAN TO OVERTAKE V1 BUT V1 SWERVED. V2 LOST CONTROL AND RIDER FELL FROM MACHINE.
Occurred on A38 BRISTOL ROAD, BRIDGWATER.

Vehicle Reference 1 Goods >= 7.5 tonnes mgw Changing lane to right
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Did not impact Age of Driver
Vehicle direction S to N
FRV Not foreign registered vehicle Journey 6

Vehicle Reference 2 Motorcycle over 500cc Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Did not impact Age of Driver 58
Vehicle direction S to N
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 58 Male Driver/rider Severity: Slight

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212103736 18/07/2021 Sunday Time 1539 Vehicles 1 Casualties 2 Slight
Fine without high winds Road surface Dry Daylight:street lights present
Special Conditions None Road Type Single carriageway
V1, TRAVELLING NORTH EAST, TURNED LEFT NORTH WEST AND COLLIDED WITH A POST..
Occurred on A38 TAUNTON ROAD, AT JUNCTION WITH RHODE LANE, BRIDGWATER.

Vehicle Reference 1 Car Turning left
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 38
Vehicle direction SW to NW
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 40 Female Passenger Severity: Slight

Casualty Reference: 2 Age: 38 Male Driver/rider Severity: Slight

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Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

212200068 21/07/2021 Wednesday Time 1410 Vehicles 2 Casualties 4 Slight
Fine without high winds Road surface Dry Daylight: no street lighting
Special Conditions None Road Type Single carriageway
V1 TRAVELLING SOUTH EAST, V2 TRAVELLING OPPOSITE DIRECTION. V1 TURNED RIGHT SOUTH WEST AND COLLIDED WITH V2.
Occurred on A38 TAUNTON ROAD, BRIDGWATER.

Vehicle Reference 1 Car Turning right
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Offside Age of Driver 46
Vehicle direction NW to SW
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 46 Female Driver/rider Severity: Slight

Casualty Reference: 2 Age: 17 Female Passenger Severity: Slight

Casualty Reference: 3 Age: 11 Male Passenger Severity: Slight

Casualty Reference: 4 Age: 14 Female Passenger Severity: Slight

Vehicle Reference 2 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 59
Vehicle direction SE to NW
FRV Not foreign registered vehicle Journey 6

212103800 23/07/2021 Friday Time 1027 Vehicles 2 Casualties 1 Slight
Fine without high winds Road surface Dry Daylight:street lights present
Special Conditions None Road Type Single carriageway
V001 HAS FAILED TO SEE V002 BRAKING SHARPLY FOR STATIONARY TRAFFIC AND HAS GONE INTO THE BACK OF V002.
Occurred on A39 MAIN ROAD, CANNINGTON, BRIDGWATER

Vehicle Reference 1 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 22
Vehicle direction S to N
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 20 Female Passenger Severity: Slight

Vehicle Reference 2 Car Slowing or Stopping
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Back Age of Driver 36
Vehicle direction S to N
FRV Not foreign registered vehicle Journey 6

Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

212104283 02/08/2021 Monday Time 1001 Vehicles 3 Casualties 1 Slight
Fine without high winds Road surface Dry Daylight:street lights present
Special Conditions None Road Type Single carriageway
V1 & V2 TRAVELLING NORTH WEST, V3 TRAVELLING OPPOSITE DIRECTION. V1 STOPPED TO TURN INTO A LAYBY. V2 FAILED TO STOP IN TIME AND COLLIDED WITH REAR OF V1, WHICH THEN COLLIDED WITH V3.
Occurred on A38 TAUNTON ROAD, BRIDGWATER

Vehicle Reference 1 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Back Age of Driver 25
Vehicle direction SE to NW
FRV Not foreign registered vehicle Journey 6

Vehicle Reference 2 Goods <= 3.5 tonnes mgw Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 25
Vehicle direction SE to NW
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 25 Male Driver/rider Severity: Slight

Vehicle Reference 3 Goods <= 3.5 tonnes mgw Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 60
Vehicle direction NW to SE
FRV Not foreign registered vehicle Journey 6

212200440 23/08/2021 Monday Time 1615 Vehicles 1 Casualties 1 Serious
Fine without high winds Road surface Dry Daylight:street lights present
Special Conditions None Road Type Unknown
V1 TRAVELLING SOUTH EAST, PEDESTRIAN CROSSING ROAD. V1 COLLIDED WITH PEDESTRIAN.
Occurred on A38 TAUNTON ROAD AT N0. 56, BRIDGWATER.

Vehicle Reference 1 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 32
Vehicle direction NW to SE
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 15 Male Pedestrian Severity: Serious
9

Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

212200489 29/08/2021 Sunday Time 0917 Vehicles 1 Casualties 1 Slight
Fine without high winds Road surface Dry Darkness: no street lighting
Special Conditions None Road Type Single carriageway
V1 TRAVELLING EAST. DRIVER LOST CONTROL AND V1 ENDED UP IN A DITCH.
Occurred on A39 QUANTOCK ROAD, BRIDGWATER

Vehicle Reference 1 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 35
Vehicle direction W to E
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 35 Male Driver/rider Severity: Slight

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212104401 06/09/2021 Monday Time 1735 Vehicles 2 Casualties 2 Slight
Fine without high winds Road surface Dry Daylight: no street lighting
Special Conditions None Road Type Dual carriageway
V001 TRAVELLING EAST ON BROADWAY AND STARTED TO REDUCE SPEED ON THE APPROACH TO TRAFFIC LIGHTS. V002 FOLLOWING BEHIND HAS FAILED TO REDUCE SPEED IMPACTING WITH THE REAR OF V001. V002 HAS FAILED TO STOP.
Occurred on A39 BROADWAY, BRIDGWATER

Vehicle Reference 1 Car Waiting to go ahead but held up
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Back Age of Driver 26
Vehicle direction W to E
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 26 Female Driver/rider Severity: Slight

Casualty Reference: 2 Age: Male Passenger Severity: Slight

Vehicle Reference 2 Car Slowing or Stopping
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver
Vehicle direction W to E
FRV Not foreign registered vehicle Journey 6

Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

212104917 14/09/2021 Tuesday Time 2300 Vehicles 1 Casualties 1 Serious
Fine without high winds Road surface Dry Daylight:street lights present
Special Conditions None Road Type Roundabout
V001 HAS TRAVELLING ALONG THE A39 TOWARDS THE DUNBALL ROUNDABOUT, V001 HAS FAILED TO NEGOTIATE THE ROUNDABOUT TRAVELLING THOUGH IT AND TOWARDS THE SERVICE STATION. V001 HAS FLIPPED ON TO ITS ROOF AND COLLIDED WITH THE CARWASH AT THE SERVICE STATION.
Occurred on A38 DUNBALL RBT AT JUNCTION WITH A38 BRISTOL ROAD, BRIDGWATER

Vehicle Reference 1 Car Going ahead
Not in restricted lane Overturned
First point of impact Front Age of Driver 38
Vehicle direction E to W
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 38 Male Driver/rider Severity: Serious

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212200713 17/09/2021 Friday Time 0741 Vehicles 2 Casualties 1 Slight
Fine without high winds Road surface Dry Daylight: no street lighting
Special Conditions None Road Type Roundabout
V001 HAS BEEN TRAVELLING ALONG A39 BRISTOL ROAD OUTBOUND V002 HAS BEEN IN THE LEFT LANE. WHILST AT THE ROUNDABOUT V002 HAS GONE AND THEN STOPPED. V002 HAS THEN HIT THE BACK OF V002.
Occurred on A39 BRISTOL ROAD AT JUNCTION WITH A38 DUNBALL , BRIDGWATER

Vehicle Reference 1 Car Waiting to go ahead but held up
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 58
Vehicle direction E to W
FRV Not foreign registered vehicle Journey 6

Vehicle Reference 2 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Back Age of Driver 25
Vehicle direction E to W
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 25 Male Driver/rider Severity: Slight

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Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

212104760 24/09/2021 Friday Time 1830 Vehicles 2 Casualties 2 Slight
Fine without high winds Road surface Dry Daylight: street lighting unknown
Special Conditions None Road Type Single carriageway
V1 WAS DRIVING IN REEDMOOR GARDENS, V2 WAS COMING FROM SAVIANO WAY WHEN V1 STOPPED AND V2 ACCELERATED INSTEAD OF BRAKING AND HIT V1
Occurred on REEDMOOR GARDENS, BRIDGWATER

Vehicle Reference 1 Car Moving off
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 34
Vehicle direction NE to SW
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 34 Male Driver/rider Severity: Slight

Casualty Reference: 2 Age: 30 Female Passenger Severity: Slight

Vehicle Reference 2 Car Slowing or Stopping
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 40
Vehicle direction SW to NE
FRV Not foreign registered vehicle Journey 6

212104976 27/09/2021 Monday Time 1450 Vehicles 2 Casualties 1 Slight
Fine with high winds Road surface Dry Daylight:street lights present
Special Conditions None Road Type Single carriageway
V2 PULLED IN TO A CAR PARK AT THE BED HOUSE, TAUNTON RD, BRIDGWATER. V1 (UNMARKED POLICE VEHICLE) HAS PULLED UP BEHIND V2 AND ACTIVATED LIGHTS AND BEACONS. V2 MADE OFF TURNING INTO ASHLEIGH AVE. V1 FOLLOWED BUT V2 HAS SUDDENLY REVERSED INTO V1. ITS DRIVE
Occurred on ASHLEIGH AVENUE AT JUNCTION WITH A38 TAUNTON ROAD, BRIDGWATER

Vehicle Reference 1 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 33
Vehicle direction E to W
FRV Not foreign registered vehicle Journey Journey as part of work

Casualty Reference: 1 Age: 33 Male Driver/rider Severity: Slight

Vehicle Reference 2 Car Reversing
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Back Age of Driver
Vehicle direction W to E
FRV Not foreign registered vehicle Journey 6

Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

212200954 15/10/2021 Friday Time 1910 Vehicles 1 Casualties 1 Slight
Fine without high winds Road surface Dry Darkness: street lighting unknown
Special Conditions None Road Type Roundabout
V001 TRAVELLING NORTH APPROACHING ROUNDABOUT. DRIVER HAS LOST CONTROL OF THE CAR RESULTING IN AN IMPACT WITH A STREET LIGHT.
Occurred on A39 CANNINGTON AT JUNCTION WITH MAIN ROAD, BRIDGWATER

Vehicle Reference 1 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 66
Vehicle direction N to W
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 66 Male Driver/rider Severity: Slight

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212200984 18/10/2021 Monday Time 0134 Vehicles 1 Casualties 1 Slight
Other Road surface Dry Darkness: street lights present and lit
Special Conditions None Road Type Roundabout
V001 TRAVELLING NORTH . AS IT WAS ENTERING THE RBT THE DRIVER SWERVED TO AVOID HITTING AN ANIMAL HE SAW IN THE ROAD. THE DRIVER LOST CONTROL AND THE VEHICLE HIT A STREET LAMP.
Occurred on A38 BRISTOL ROAD AT JUNCTION WITH KINGS DRIVE, BRIDGWATER

Vehicle Reference 1 Car Going ahead
Not in restricted lane Skidded
First point of impact Front Age of Driver 33
Vehicle direction S to N
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 33 Male Driver/rider Severity: Slight

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Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

212105228 20/10/2021 Wednesday Time 2100 Vehicles 2 Casualties 1 Slight
Raining without high winds Road surface Wet/Damp Darkness: street lights present and lit
Special Conditions None Road Type Single carriageway
V1 WAS DRIVING NW ALONG NORTH STREET WHEN V2 EMERGED FROM THE DRIVEWAY OF THE FORD GARAGE KNOCKING V1 OVER.
Occurred on A39 NORTH STREET OUTSIDE FORD GARAGE, NORTH STREET, BRIDGWATER

Vehicle Reference 1 Motorcycle over 50cc and up to 125cc Going ahead
Not in restricted lane Skidded
First point of impact Front Age of Driver 36
Vehicle direction SE to NW
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 36 Male Driver/rider Severity: Slight

Vehicle Reference 2 Goods <= 3.5 tonnes mgw Going ahead
Footway (pavement) No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 35
Vehicle direction NE to SW
FRV Not foreign registered vehicle Journey 6

212201201 13/11/2021 Saturday Time 2020 Vehicles 2 Casualties 1 Slight
Fine without high winds Road surface Dry Darkness: street lights present and lit
Special Conditions None Road Type Single carriageway
V1 TRAVELLING EAST, V2 (M//CYCLE) TRAVELLING NORTH. V1 TURNED RIGHT SOUTH AND COLLIDED WITH V2.
Occurred on A38 TAUNTON ROAD, AT JUNCTION WITH WILLS ROAD, BRIDGWATER

Vehicle Reference 1 Car Turning right
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Offside Age of Driver 51
Vehicle direction W to S
FRV Not foreign registered vehicle Journey 6

Vehicle Reference 2 Motorcycle over 50cc and up to 125cc Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 18
Vehicle direction S to N
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 18 Male Driver/rider Severity: Slight

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Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

212105902 02/12/2021 Thursday Time 1711 Vehicles 2 Casualties 1 Slight
Raining with high winds Road surface Wet/Damp Darkness: street lighting unknown
Special Conditions None Road Type Dual carriageway
V2 TRAVELLING SOUTH PUSHED INTO LINE OF TRAFFIC, COLLIDING WITH V1. V2 FAILED TO STOP AND DROVE OFF WITHOUT LEAVING DETAILS AT THE SCENE.
Occurred on A38 BRISTOL ROAD OUTSIDE MORRISONS MANUFACTURING, BRIDGWATER

Vehicle Reference 1 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Offside Age of Driver 28
Vehicle direction N to S
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 28 Male Driver/rider Severity: Slight

Vehicle Reference 2 Car Changing lane to left
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Nearside Age of Driver
Vehicle direction N to S
FRV Not foreign registered vehicle Journey 6

212200134 07/12/2021 Tuesday Time 2115 Vehicles 2 Casualties 1 Serious
Raining with high winds Road surface Wet/Damp Darkness: street lights present and lit
Special Conditions None Road Type Single carriageway
V1 TRAVELLING NORTH HAS STOPPED AT THE SIDE OF THE ROAD TO PICK UP A PASSENGER. V1 STARTED TO PULL AWAY JUSTAS V2 WAS IN THE PROCESS OF PASSING IN THE SAME DIRECTION, CAUSING A COLLISION.
Occurred on A38 TAUNTON ROAD (OUTSIDE TAUNTON ROAD CAR CENTRE), BRIDGWATER

Vehicle Reference 1 Car Moving off
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 38
Vehicle direction S to N
FRV Not foreign registered vehicle Journey 6

Vehicle Reference 2 Motorcycle over 500cc Overtaking stationary vehicle on its offside
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 59
Vehicle direction S to N
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 59 Male Driver/rider Severity: Serious

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Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

212201482 13/12/2021 Monday Time 0856 Vehicles 3 Casualties 1 Slight
Fine without high winds Road surface Dry Daylight: no street lighting
Special Conditions None Road Type Dual carriageway
V001 HAS PULLED OUT OF ALBERT STREET TURNING LEFT ONTO BROADWAY. IT HAS STRUCK THE REAR OF V002 TRAVELLING NW ON BROADWAY CAUSING IT TO SPIN ACROSS THE CARRIAGEWAY ONTO THE OPPOSITE SIDE OF THE ROAD WHERE IT WAS STRUCK BY V003 (HGV). V003 DID NOT REMAIN
Occurred on A39 BROADWAY AT JUNCTION WITH ALBERT STREET, BRIDGWATER

Vehicle Reference 1 Car Turning left
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 35
Vehicle direction SW to NW
FRV Not foreign registered vehicle Journey 6

Vehicle Reference 2 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Back Age of Driver 63
Vehicle direction SE to NW
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 63 Male Driver/rider Severity: Slight

Vehicle Reference 3 Goods between 3.5 and 7.5 tonnes mgw Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Nearside Age of Driver 40
Vehicle direction NW to SE
FRV Not foreign registered vehicle Journey 6

22SE021 07/01/2022 Friday Time 0830 Vehicles 2 Casualties 1 Slight
Raining without high winds Road surface Wet/Damp Daylight:street lights present
Special Conditions None Road Type Dual carriageway
V1 WAS DRIVING ON ALBERT STREET WHERE IT HAS APPROACHED THE JUNCTION OF BROADWAY IT HAS PULLED AWAY ONTO BROADWAY IN ORDER TO TURN RIGHT TOWARDS MORRISONS AT THIS TIME V2 WAS TRAVELLING ON BROADWAY OUTBOUND TOWARDS WEST STREET V1 HAS COLLIDED WITH THE RE
Occurred on A39 BROADWAY CROSSOVER JNC FROM ALBERT STREET

Vehicle Reference 1 Car Turning right
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Back Age of Driver 50
Vehicle direction SW to SE
FRV Journey 6

Casualty Reference: 1 Age: 50 Female Driver/rider Severity: Slight

Vehicle Reference 2 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 63
Vehicle direction NW to SE
FRV Journey 6

Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

222200238 14/01/2022 Friday Time 0915 Vehicles 1 Casualties 2 Slight
Fine without high winds Road surface Dry Daylight:street lights present
Special Conditions None Road Type Single carriageway
WHILST WALKING ALONG A FOOTPATH IN A GROUP OF 5 PEDESTRIANS, TWO OF THE GROUP WERE STRUCK FROM BEHIND BY A BICYCLE TRAVELLING SOUTH ON THE FOOTPATH.
Occurred on MAIN ROAD, CANNINGTON

Vehicle Reference 1 Pedal cycle Going ahead
Footway (pavement) No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 30
Vehicle direction N to S
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 56 Male Pedestrian Severity: Slight
9

Casualty Reference: 2 Age: 40 Male Pedestrian Severity: Slight
9

22SE083 21/01/2022 Friday Time 0807 Vehicles 2 Casualties 1 Slight
Fine without high winds Road surface Wet/Damp Darkness: no street lighting
Special Conditions None Road Type Single carriageway
VEH 1 TRAVELLING NORTHBOUND ALONG BRISTOL ROAD. VEH 2 PARKED ON THE SAME SIDE OF THE ROAD. VEH 1 HAS COLLIDED INTO THE REAR AND RIGHT SIDE OF VEH 2.
Occurred on A38 BRISTOL ROAD, BRIDGWATER

Vehicle Reference 1 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Nearside Age of Driver 33
Vehicle direction S to N
FRV Journey 6

Casualty Reference: 1 Age: 33 Male Driver/rider Severity: Slight

Vehicle Reference 2 Goods <= 3.5 tonnes mgw Parked
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Offside Age of Driver 72
Vehicle direction Park to Parked
FRV Journey 6

Accidents between dates **01/04/2018 and 31/03/2023** (60) months
Selection: **Notes:**

222202036 03/02/2022 Thursday Time 2150 Vehicles 2 Casualties 1 Slight
Fine without high winds Road surface Dry Darkness: street lights present and lit
Special Conditions None Road Type Single carriageway
V001 HAS BEEN DRIVING NORTH ALONG BRISTOL ROAD TOWARDS THE EXPRESS PARK ROUNDABOUT. V002 HAS BEEN TRAVELLING IN THE OPPOSITE DIRECTION AT SPEED, WEAVING IN AND OUT OF TRAFFIC. V002 HAS LOST CONTROL AND SPUN, COLLIDING WITH V001.
Occurred on A38 BRISTOL ROAD OUTSIDE/BY NO.354, BRIDGWATER

Vehicle Reference 1 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 21
Vehicle direction S to N
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 21 Female Driver/rider Severity: Slight

Vehicle Reference 2 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 24
Vehicle direction N to S
FRV Not foreign registered vehicle Journey 6

222202513 09/03/2022 Wednesday Time 0639 Vehicles 2 Casualties 1 Slight
Fine without high winds Road surface Dry Daylight:street lights present
Special Conditions None Road Type Dual carriageway
V001 AND V002 TRAVELLING ALONG DUAL CARRIAGEWAY FROM BRIDGWATER TOWARDS DUNBALL. V001 IN LANE 1. V002 IN LANE 2. V001 HAS CROSSED IN TO V002'S PATH TO USE TURN-AROUND POINT BUT IMPACTED WITH THE SIDE OF V002 CAUSING IT TO OVERTURN.
Occurred on A38 BRISTOL ROAD, BRIDGWATER

Vehicle Reference 1 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Offside Age of Driver 57
Vehicle direction SE to NW
FRV Not foreign registered vehicle Journey 6

Vehicle Reference 2 Car Going ahead
Not in restricted lane Overturned
First point of impact Nearside Age of Driver 43
Vehicle direction SE to NW
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 43 Female Driver/rider Severity: Slight

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Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

222204221 01/04/2022 Friday Time 1709 Vehicles 3 Casualties 1 Serious
Fine without high winds Road surface Dry Daylight:street lights present
Special Conditions None Road Type Single carriageway
V1 TRAVELLING NORTH WEST, V2 TRAVELLING OPPOSITE DIRECTION. DRIVER OF V1 BECAME UNWELL V1 HIT A BARRIER THEN COLLIDED WITH V2 & V3.
Occurred on A39 NEW ROAD, CANNINGTON

Vehicle Reference 1 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 50
Vehicle direction SE to NW
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 50 Female Driver/rider Severity: Serious

Vehicle Reference 2 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 56
Vehicle direction NW to SE
FRV Not foreign registered vehicle Journey 6

Vehicle Reference 3 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 31
Vehicle direction NW to SE
FRV Not foreign registered vehicle Journey 6

22SE371 12/04/2022 Tuesday Time 2034 Vehicles 2 Casualties 1 Slight
Fine without high winds Road surface Dry Darkness: street lights present and lit
Special Conditions None Road Type Single carriageway
VEH 2 TRAVELLING ALONG BRISTOL ROAD TOWARDS DROVE JUNCTION. VEH 1 AT JUNCTION PULLED OUT IN FRONT OF VEH 2 COLLIDING WITH IT.
Occurred on A38 BRISTOL ROAD, BRIDGWATER

Vehicle Reference 1 Car Turning right
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 21
Vehicle direction W to S
FRV Journey 6

Vehicle Reference 2 Motorcycle over 50cc and up to 125cc Turning right
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 19
Vehicle direction N to W
FRV Journey 6

Casualty Reference: 1 Age: 19 Male Driver/rider Severity: Slight

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Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

222204410 22/04/2022 Friday Time 1145 Vehicles 1 Casualties 2 Slight
Fine without high winds Road surface Dry Daylight:street lights present
Special Conditions None Road Type Single carriageway
V1 TRAVELLING ON HOMBERG WAY, NORTH, TOWARDS BRISTOL. DRIVER OF V1 MOMENTARILY FELL ASLEEP AT THE WHEEL. V1 WENT ACROSS THE ROAD INTO LAMP POST, CAUSING INJURY TO CASUALTY 001 AND 002.
Occurred on A39 HOMBERG WAY NEAR CHURCH MEADOW.

Vehicle Reference 1 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 42
Vehicle direction S to N
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 42 Female Driver/rider Severity: Slight

Casualty Reference: 2 Age: 14 Male Passenger Severity: Slight

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22SE204 01/05/2022 Sunday Time 1956 Vehicles 2 Casualties 3 Serious
Raining without high winds Road surface Wet/Damp Daylight:street lights present
Special Conditions None Road Type Dual carriageway
VEH 1 TRAVELLING ON A39 TOWARDS BRIDGWATER. AFTER EXITING EXIT ON JUNCTION 23 FOR BRIDGWATER CROSSES THE CENTRAL RESERVATON COLLIDES HEAD ON WITH VEH 2
Occurred on A39 DOWN END, PURITON

Vehicle Reference 1 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 20
Vehicle direction W to E
FRV Journey 6

Casualty Reference: 3 Age: 34 Male Passenger Severity: Slight

Vehicle Reference 2 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 73
Vehicle direction E to W
FRV Journey 6

Casualty Reference: 1 Age: 73 Male Driver/rider Severity: Serious

Casualty Reference: 2 Age: 41 Female Passenger Severity: Serious

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Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

22SE217 07/05/2022 Saturday Time 1240 Vehicles 2 Casualties 1 Serious
Fine without high winds Road surface Dry Daylight:street lights present
Special Conditions None Road Type Roundabout
VEH 1 IN DEDICATED OUTBOUND LANE ON A38 ROUNDABOUT ON BRISTOL ROAD. VEH 2 BESIDE VEH 1 IN OFFSIDE LANE. VEH 1 TURNED ACROSS PATH OF VEH 2 COLLIDING WITH IT CAUSING THE RIDER TO FALL OFF.
Occurred on A38 BRISTOL ROAD, BRIDGWATER

Vehicle Reference 1 Car Turning right
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 49
Vehicle direction S to E
FRV Journey 6

Vehicle Reference 2 Motorcycle over 125cc and up to 500cc Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 29
Vehicle direction S to N
FRV Journey 6

Casualty Reference: 1 Age: 29 Male Driver/rider Severity: Serious

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222204570 08/05/2022 Sunday Time 2036 Vehicles 2 Casualties 1 Slight
Fine without high winds Road surface Dry Darkness: street lights present and lit
Special Conditions None Road Type Single carriageway
V1 HAS EXITED THE MOTORWAY BEHIND V2 WHERE V1 HAS CONTINUED TO TRAVEL ONTO THE TOP OF THE SLIP AND INTO THE REAR OF V2.
Occurred on A38 NORTH PETHERTON JUNCTION WITH M5 JUNCTION 24, BRIDGWATER

Vehicle Reference 1 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 24
Vehicle direction SE to NW
FRV Not foreign registered vehicle Journey 6

Vehicle Reference 2 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Back Age of Driver 30
Vehicle direction SE to NW
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 30 Female Driver/rider Severity: Slight

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Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

22SE322 12/05/2022 Thursday Time 0720 Vehicles 2 Casualties 2 Slight
Fine without high winds Road surface Dry Darkness: no street lighting
Special Conditions None Road Type Single carriageway
VEH 1 CROSSED THE WHITE LINE ON TO ANOTHER CARRIAGE WAY AND COLLIEDE WITH VEH 2.
Occurred on A39 QUANTOCK ROAD, BRIDGWATER

Vehicle Reference 1 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Offside Age of Driver 18
Vehicle direction E to W
FRV Journey 6

Casualty Reference: 1 Age: 18 Male Driver/rider Severity: Slight

Vehicle Reference 2 Goods <= 3.5 tonnes mgw Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Offside Age of Driver 51
Vehicle direction W to E
FRV Journey 6

Casualty Reference: 2 Age: 51 Male Driver/rider Severity: Slight

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222204880 02/06/2022 Thursday Time 0920 Vehicles 1 Casualties 1 Serious
Fine without high winds Road surface Dry Daylight:street lights present
Special Conditions None Road Type Single carriageway
DRIVER OF V1 WAS MOVING VEHICLE SLOWLY WITH THE CASUALTY STOOD IN THE ROAD DIRECTLY IN FRONT DIRECTING THE DRIVER. DRIVERS FOOT SLIPPED OFF OF THE BRAKE CAUSING V1 TO MOVE FORWARD PINNING THE CASUALTIES LEGS TO A PARKED VEHICLE.
Occurred on RIVERSIDE CLOSE (OUTSIDE NO.109), BRIDGWATER

Vehicle Reference 1 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 50
Vehicle direction NW to SE
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 47 Female Pedestrian Severity: Serious
Pedestrian Direction: 0

Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

222202926 24/06/2022 Friday Time 1415 Vehicles 2 Casualties 1 Slight
Unknown Road surface Dry Daylight: street lighting unknown
Special Conditions None Road Type Dual carriageway
V2 (PEDAL CYCLE) TRAVELLING NORTH ON A38 WHEN IT WAS HIT BY V1 (PEDAL CYCLE). AFTER THE COLLISION THE RIDER OF V2 PICKED UP THEIR BIKE AND THEN CONTINUED TO WALK AWAYWITHOUT GIVING ANY DETAILS.
Occurred on A38 BRISTOL ROAD, DUNBALL, BRIDGWATER

Vehicle Reference 1 Pedal cycle Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 48
Vehicle direction S to N
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 48 Male Driver/rider Severity: Slight

Vehicle Reference 2 Pedal cycle Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Back Age of Driver
Vehicle direction S to N
FRV Not foreign registered vehicle Journey 6

2300006 29/08/2022 Monday Time 0744 Vehicles 1 Casualties 1 Slight
Fine without high winds Road surface Dry Daylight:street lights present
Special Conditions None Road Type Single carriageway
V001 HAS BEEN APPROACHING THE ROUNDABOUT FROM THE DIRECTION OF THE HPC PARK AND RIDE . AS SHE HAS APPROACHED THE ROUNDABOUT SHE HAS VEERED OVER THE PEDESTRIAN ISLAND STRIKING A ROAD SIGN BEFORE SWERVING AROUND THE ROUNDABOUT THE WRONG WAY.
Occurred on A39 CANNINGTON BYPASS

Vehicle Reference 1 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 35
Vehicle direction W to E
FRV Journey 6

Casualty Reference: 1 Age: 35 Female Driver/rider Severity: Slight

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Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

222300087 15/09/2022 Thursday Time 1813 Vehicles 1 Casualties 2 Serious
Fine without high winds Road surface Dry Daylight: no street lighting
Special Conditions None Road Type Single carriageway
PEDESTRIAN HAS GONE TO CROSS THE ROAD JUST BEFORE THE CROSSING, V1 HAS BEEN COMING TOWARDS HIM IN THE DIRECTION OF BRIDGWATER. PEDESTRIAN HAS NOT BEEN ABLE TO GET TO THE OTHER SIDE IN TIME AND (V1) A MOTORCYCLIST HAS COLLIDED WITH PEDESTRIAN.
Occurred on A38 TAUNTON ROAD (OUTSIDE OPPOSITE RADSTOCK CO-OPERATIVE) JUNCTION WITH, BRID(

Vehicle Reference 1 Motorcycle over 500cc Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 51
Vehicle direction S to N
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 51 Male Driver/rider Severity: Serious

Casualty Reference: 2 Age: 49 Male Pedestrian Severity: Slight
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222204001 18/09/2022 Sunday Time 1300 Vehicles 2 Casualties 1 Slight
Fine without high winds Road surface Dry Daylight: no street lighting
Special Conditions None Road Type Unknown
V1 WAS DRIVING WHEN V2 (HORSE AND CART) WAS COMING THE OTHER SIDE OF THE ROAD ON THE WRONG SIDE COLLIDED WITH V1 AND CONTINUED TO DRIVE OFF.
Occurred on THE DROVE, BRIDGWATER

Vehicle Reference 1 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Did not impact Age of Driver 54
Vehicle direction S to N
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 54 Male Driver/rider Severity: Slight

Vehicle Reference 2 Ridden horse Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver
Vehicle direction N to S
FRV Not foreign registered vehicle Journey 6

Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

222300177 13/10/2022 Thursday Time 1616 Vehicles 2 Casualties 3 Slight
Fine without high winds Road surface Dry Daylight: no street lighting
Special Conditions None Road Type Single carriageway
POLICE WITNESSED COLLISION. V1 HAS BEEN TRAVELLING IN LANE 2 OF A38 USING EXCESS SPEED. V2 HAS BEEN IN LANE 1 AND HAS PULLED OUT INTO LANE 2. V1 HAS CRASHED INTO THE REAR OF V2 AND V1 HAS ENDED UP ON HIS ROOF. FAULT ON BOTH SIDES.
Occurred on A38 BRISTOL ROAD (OUTSIDE TRIZO LTD), CHILTON TRINITY, BRIDGWATER, SOMERSET

Vehicle Reference 1 Car Going ahead
Not in restricted lane Overturned
First point of impact Front Age of Driver 19
Vehicle direction S to N
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 3 Age: 19 Male Passenger Severity: Slight

Vehicle Reference 2 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Back Age of Driver 27
Vehicle direction S to N
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 27 Male Driver/rider Severity: Slight

Casualty Reference: 2 Age: 28 Female Passenger Severity: Slight

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2300165 07/11/2022 Monday Time 1200 Vehicles 2 Casualties 1 Slight
Other Road surface Wet/Damp Daylight:street lights present
Special Conditions None Road Type Single carriageway
VEHICLE 001 WAS TRAVELLING ALONG WEBDON ROAD BRIDGWATER FROM THE ROUNDABOUT WITH NORTH ST TOWARDS QUANTOCK RD. VEHICLE 001 WAS A GREY RANGE ROVER. A FEMALE ON A PUSHBIKE LEFT HER HOUSE ON WEMBDON RD AND ONCE OUTSIDE 16 WEMBDON RD THE FEMALE PAUSED ON THE
Occurred on A39 WEMBDON ROAD, BRIDGWATER

Vehicle Reference 1 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 65
Vehicle direction SW to NE
FRV Journey 6

Vehicle Reference 2 Pedal cycle Moving off
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 51
Vehicle direction SW to NE
FRV Journey 6

Casualty Reference: 1 Age: 51 Female Driver/rider Severity: Slight

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Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

222204940 11/11/2022 Friday Time 1900 Vehicles 2 Casualties 1 Slight
Fine with high winds Road surface Dry Darkness: street lights present and lit
Special Conditions None Road Type Single carriageway
V1 HAS HIT A SIGN ON THE SIDE OF THE ROAD CAUSING HIM TO FALL INTO THE ROAD WHERE V2 HAS COLLIDED WITH V1
Occurred on TAUNTON ROAD BRIDGWATER

Vehicle Reference 1 Pedal cycle Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Back Age of Driver 16
Vehicle direction S to N
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 16 Male Driver/rider Severity: Slight

Vehicle Reference 2 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 35
Vehicle direction N to S
FRV Not foreign registered vehicle Journey 6

222205315 01/12/2022 Thursday Time 1705 Vehicles 3 Casualties 2 Slight
Fog or mist Road surface Wet/Damp Darkness: street lighting unknown
Special Conditions None Road Type Unknown
ONLINE REPORT V1 WAS STOPPED IN TRAFFIC WHEN V3 HAS COLLIDED INTO THE REAR OF V2 CAUSING V2 TO COLLIDE INTO THE REAR OF V1 CAUSING DAMAGE.
Occurred on BRISTOL RD, BRIDGWATER

Vehicle Reference 1 Car Slowing or Stopping
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Did not impact Age of Driver 34
Vehicle direction N to S
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 34 Female Driver/rider Severity: Slight

Vehicle Reference 2 Car Slowing or Stopping
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 48
Vehicle direction N to S
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 2 Age: 48 Male Driver/rider Severity: Slight

Vehicle Reference 3 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 45
Vehicle direction N to S
FRV Not foreign registered vehicle Journey 6

Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

222300427 15/12/2022 Thursday Time 1725 Vehicles 2 Casualties 1 Slight
Fine without high winds Road surface Frost/Ice Darkness: street lights present and lit
Special Conditions None Road Type Single carriageway
V001 WAS TRAVELLING N ALONG TAUNTON ROAD WITH V002 TRAVELLING DIRECTLY BEHIND. V001 HAS SLOWED DOWN DUE TO STATIONARY TRAFFIC AHEAD HOWEVER THE DRIVER OF V002 HAS FAILED TO REACT AND HAS DRIVEN INTO THE REAR OF V001.
Occurred on A38 TAUNTON ROAD, BRIDGWATER

Vehicle Reference 1 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Back Age of Driver 35
Vehicle direction S to N
FRV Not foreign registered vehicle Journey 6

Vehicle Reference 2 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 36
Vehicle direction S to N
FRV Not foreign registered vehicle Journey 6

Casualty Reference: 1 Age: 36 Male Driver/rider Severity: Slight

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2300384 05/01/2023 Thursday Time 1728 Vehicles 2 Casualties 1 Slight
Raining without high winds Road surface Wet/Damp Daylight:street lights present
Special Conditions None Road Type Single carriageway
V001 WAS TURNING LEFT INTO PETROL GARAGE. HAS NOT SEEN CYCLIST (V002) THAT WAS PROGRESSING ALONG SIDE STATIONARY VEHICLES. V001 HAS COLLIDED WITH CYCLIST. BICYCLE WAS LIT UP WITH LIGHTS TO REAR AND TO FRONT.
Occurred on A38, TAUNTON ROAD, BRIDGWATER

Vehicle Reference 1 Car Turning left
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 75
Vehicle direction N to E
FRV Journey 6

Vehicle Reference 2 Pedal cycle Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 56
Vehicle direction N to S
FRV Journey 6

Casualty Reference: 1 Age: 56 Male Driver/rider Severity: Slight

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Accidents between dates **01/04/2018 and 31/03/2023** (60) months
Selection: **Notes:**

2300610 17/01/2023 Tuesday Time 0600 Vehicles 3 Casualties 70 Serious
Fine without high winds Road surface Frost/Ice Darkness: no street lighting
Special Conditions None Road Type Single carriageway
V1 HAS BEEN TRAVELLING OUTBOUND ON THE A39 WHEREBY IT HAS SLID ON ICE. (DASHCAM PRESENT) V2 HAS TRAVELLED THE SAME DIRECTION AND STRUCK THE BIKE ON THE GROUND WHICH AS RESULTED IN THE BUS TURNING 180¦ ON THE ROAD, STRUCK THE CURB AND THEN GONE OVER (CCTV
Occurred on A39 QUANTOCK ROAD, WEMBDON

Vehicle Reference 1 Motorcycle over 125cc and up to 500cc Going ahead left hand bend
Not in restricted lane Skidded
First point of impact Nearside Age of Driver 39
Vehicle direction SE to N
FRV Journey 6

Casualty Reference: 1 Age: 39 Male Driver/rider Severity: Slight

Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

Vehicle Reference 2 Bus or coach Going ahead left hand bend
Not in restricted lane Skidded and overturned
First point of impact Front Age of Driver 58
Vehicle direction SE to N
FRV Journey Journey as part of work

Casualty Reference:	10	Age:	25	Male	Passenger	Severity:	Slight
Casualty Reference:	11	Age:	39	Male	Passenger	Severity:	Slight
Casualty Reference:	12	Age:	45	Male	Passenger	Severity:	Slight
Casualty Reference:	13	Age:	57	Male	Passenger	Severity:	Serious
Casualty Reference:	14	Age:	46	Male	Passenger	Severity:	Slight
Casualty Reference:	15	Age:	44	Male	Passenger	Severity:	Slight
Casualty Reference:	16	Age:	43	Male	Passenger	Severity:	Slight
Casualty Reference:	17	Age:	34	Male	Passenger	Severity:	Serious
Casualty Reference:	18	Age:	29	Male	Passenger	Severity:	Slight
Casualty Reference:	19	Age:	28	Male	Passenger	Severity:	Slight
Casualty Reference:	2	Age:	58	Male	Driver/rider	Severity:	Slight
Casualty Reference:	20	Age:	41	Male	Passenger	Severity:	Slight
Casualty Reference:	21	Age:	63	Male	Passenger	Severity:	Slight
Casualty Reference:	22	Age:	54	Male	Passenger	Severity:	Slight
Casualty Reference:	23	Age:	39	Male	Passenger	Severity:	Slight
Casualty Reference:	24	Age:	42	Male	Passenger	Severity:	Slight

Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

Casualty Reference:	25	Age:	31	Male	Passenger	Severity:	Slight
Casualty Reference:	26	Age:	64	Male	Passenger	Severity:	Slight
Casualty Reference:	27	Age:	27	Male	Passenger	Severity:	Slight
Casualty Reference:	28	Age:	38	Male	Passenger	Severity:	Serious
Casualty Reference:	29	Age:	31	Male	Passenger	Severity:	Slight
Casualty Reference:	3	Age:	55	Male	Passenger	Severity:	Slight
Casualty Reference:	30	Age:	52	Male	Passenger	Severity:	Serious
Casualty Reference:	31	Age:	25	Male	Passenger	Severity:	Slight
Casualty Reference:	32	Age:	27	Female	Passenger	Severity:	Slight
Casualty Reference:	33	Age:	54	Male	Passenger	Severity:	Slight
Casualty Reference:	34	Age:	30	Male	Passenger	Severity:	Serious
Casualty Reference:	35	Age:	40	Female	Passenger	Severity:	Serious
Casualty Reference:	36	Age:	45	Male	Passenger	Severity:	Slight
Casualty Reference:	37	Age:	42	Male	Passenger	Severity:	Slight
Casualty Reference:	38	Age:	50	Male	Passenger	Severity:	Slight
Casualty Reference:	39	Age:	35	Male	Passenger	Severity:	Slight
Casualty Reference:	4	Age:	45	Male	Passenger	Severity:	Slight
Casualty Reference:	40	Age:	35	Male	Passenger	Severity:	Serious

Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

Casualty Reference:	41	Age:	30	Male	Passenger	Severity:	Serious
Casualty Reference:	42	Age:	41	Male	Passenger	Severity:	Slight
Casualty Reference:	43	Age:	50	Male	Passenger	Severity:	Slight
Casualty Reference:	44	Age:	27	Male	Passenger	Severity:	Serious
Casualty Reference:	45	Age:	43	Male	Passenger	Severity:	Slight
Casualty Reference:	46	Age:	34	Male	Passenger	Severity:	Slight
Casualty Reference:	47	Age:	39	Male	Passenger	Severity:	Slight
Casualty Reference:	48	Age:	41	Male	Passenger	Severity:	Slight
Casualty Reference:	49	Age:	30	Male	Passenger	Severity:	Serious
Casualty Reference:	5	Age:	31	Male	Passenger	Severity:	Serious
Casualty Reference:	50	Age:	25	Female	Passenger	Severity:	Serious
Casualty Reference:	51	Age:	39	Male	Passenger	Severity:	Serious
Casualty Reference:	52	Age:	31	Male	Passenger	Severity:	Slight
Casualty Reference:	53	Age:	34	Male	Passenger	Severity:	Slight
Casualty Reference:	54	Age:	36	Male	Passenger	Severity:	Slight
Casualty Reference:	55	Age:	52	Male	Passenger	Severity:	Slight
Casualty Reference:	56	Age:	55	Male	Passenger	Severity:	Slight
Casualty Reference:	57	Age:	61	Male	Passenger	Severity:	Serious

Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

Casualty Reference:	58	Age:	23	Male	Passenger	Severity:	Slight
Casualty Reference:	59	Age:	35	Male	Passenger	Severity:	Slight
Casualty Reference:	6	Age:	28	Male	Passenger	Severity:	Serious
Casualty Reference:	60	Age:	36	Male	Passenger	Severity:	Serious
Casualty Reference:	61	Age:	49	Male	Passenger	Severity:	Slight
Casualty Reference:	62	Age:	25	Male	Passenger	Severity:	Slight
Casualty Reference:	63	Age:	61	Male	Passenger	Severity:	Slight
Casualty Reference:	64	Age:	27	Male	Passenger	Severity:	Serious
Casualty Reference:	65	Age:	24	Male	Passenger	Severity:	Slight
Casualty Reference:	66	Age:	34	Male	Passenger	Severity:	Slight
Casualty Reference:	67	Age:	20	Male	Passenger	Severity:	Slight
Casualty Reference:	68	Age:	31	Male	Passenger	Severity:	Slight
Casualty Reference:	69	Age:	53	Male	Passenger	Severity:	Slight
Casualty Reference:	7	Age:	40	Male	Passenger	Severity:	Slight
Casualty Reference:	70	Age:	31	Male	Passenger	Severity:	Slight
Casualty Reference:	8	Age:	22	Male	Passenger	Severity:	Slight
Casualty Reference:	9	Age:	42	Male	Passenger	Severity:	Serious

Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

Vehicle Reference 3 Bus or coach Going ahead left hand bend
Not in restricted lane Skidded
First point of impact Front Age of Driver 54
Vehicle direction SE to N
FRV Journey Journey as part of work

2300907 15/02/2023 Wednesday Time 1448 Vehicles 2 Casualties 3 Slight
Raining without high winds Road surface Wet/Damp Daylight:street lights present
Special Conditions None Road Type Single carriageway
VEHICLE V001 WAS TRAVELLING TOWARDS BRIDGWATER AND VEH 002 WAS TRAVELLING AWAY FROM BRIDGWATER. V001 ENDED UP ON THE INCORRECT SIDE OF THE ROAD AND V002 ENDED UP CRASHING INTO V001. DRIVER OF V001 HAS DIABETES AND THIS IS THOUGHT TO BE THE PROBABLE CAUSE
Occurred on A39 NEW ROAD, CANNINGTON

Vehicle Reference 1 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 51
Vehicle direction NW to SE
FRV Journey 6

Casualty Reference: 1 Age: 51 Male Driver/rider Severity: Slight

Casualty Reference: 3 Age: 52 Female Passenger Severity: Slight

Vehicle Reference 2 Goods <= 3.5 tonnes mgw Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 55
Vehicle direction SE to NW
FRV Journey 6

Casualty Reference: 2 Age: 55 Male Driver/rider Severity: Slight

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2300957 20/02/2023 Monday Time 0622 Vehicles 1 Casualties 1 Serious
Fine without high winds Road surface Wet/Damp Darkness: no street lighting
Special Conditions None Road Type Single carriageway
V1 WAS TRAVELLING EAST ALONG A39 QUANTOCK ROAD TOWARDS BRIDGWATER WHEN IT STRUCK AN INTOXICATED MALE WALKING IN THE CARRIAGEWAY. WITNESS STATES PEDESTRIAN STUMBLED INTO PATH OF V1.
Occurred on A39 QUANTOCK ROAD, BRIDGWATER

Vehicle Reference 1 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 39
Vehicle direction NW to E
FRV Journey 6

Casualty Reference: 1 Age: 38 Male Pedestrian Severity: Serious
Pedestrian Direction: 0

Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

2300968 22/02/2023 Wednesday Time 0900 Vehicles 2 Casualties 2 Slight
Fine without high winds Road surface Dry Daylight:street lights present
Special Conditions None Road Type Single carriageway
V1 (PTW) TRAVELLING BEHIND V2 OUTBOUND (WEST) ALONG A39 QUANTOCK. V2 SLOWED TO ALLOW ANOTHER VEHICLE INTO QUANTOCK AVENUE. V1 UNABLE TO SLOW IN TIME SO COLLIDED WITH REAR OF V2 CAUSING RIDER TO FALL OFF HIS MOTORCYCLE.
Occurred on A39 QUANTOCK ROAD JUNC WITH QUANTOCK AVENUE, BRIDGWATER

Vehicle Reference 1 Motorcycle over 50cc and up to 125cc Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 17
Vehicle direction E to W
FRV Journey 6

Casualty Reference: 1 Age: 17 Male Driver/rider Severity: Slight

Vehicle Reference 2 Car Slowing or Stopping
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Back Age of Driver 41
Vehicle direction E to W
FRV Journey 6

Casualty Reference: 2 Age: 41 Female Driver/rider Severity: Slight

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2301124 16/03/2023 Thursday Time 1420 Vehicles 1 Casualties 1 Slight
Fine without high winds Road surface Wet/Damp Daylight:street lights present
Special Conditions None Road Type Single carriageway
V1 HAS EXITED MATALAN CAR PARK ALONG ALLERTON ROAD . AT WYLDS ROAD A VEH HAS ALLOWED V1 TO PULL OUT. AS IT DID SO IT HAS SUDDENLY ACCELLERATED CROSSING THE ROAD WHERE IT WAS DRIVEN ONTO A GARAGE FORECOURT BEFORE HITTING A FENCE.
Occurred on ALLERTON ROAD JUNC WITH WYLDS ROAD, BRIDGWATER

Vehicle Reference 1 Car Moving off
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Nearside Age of Driver 83
Vehicle direction SW to NE
FRV Journey 6

Casualty Reference: 1 Age: 83 Male Driver/rider Severity: Slight

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Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months
Selection: **Notes:**

2301141 17/03/2023 Friday Time 1354 Vehicles 2 Casualties 1 Slight
Fine without high winds Road surface Dry Daylight:street lights present
Special Conditions None Road Type Single carriageway
V2 (PTW) WAS FOLLOWING V1 (CAR). AS BOTH VEHS WERE ENTERING BROADWAY FROM TAUNTON ROAD V1 HAS BRAKED FOR 2 PEDESTRIANS IN THE PROCESS OF CROSSING THE ROAD. V2 RIDER HAS FAILED TO REACT AND V2 HIT THE REAR OF V1.
Occurred on A38 CROSSROAD JUNC OF TAUNTON ROAD AND BROADWAY, BRIDGWATER

Vehicle Reference 1 Motorcycle over 50cc and up to 125cc Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 57
Vehicle direction S to NW
FRV Journey 6

Casualty Reference: 1 Age: 57 Male Driver/rider Severity: Slight

Vehicle Reference 2 Car Slowing or Stopping
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Back Age of Driver 39
Vehicle direction S to NW
FRV Journey 6

2301184 19/03/2023 Sunday Time 0556 Vehicles 1 Casualties 1 Serious
Fine without high winds Road surface Wet/Damp Darkness: street lights present and lit
Special Conditions None Road Type Single carriageway
PEDESTRIAN WAS INTOXICATED. HE WAS WALKING IN MIDDLE OF ROAD IN THE DARK DESPITE PAVEMENTS AVAILABLE EITHER SIDE WALKING IN LANE AWAY FROM TRAFFIC. CAR TRAVELLING ON ROAD AT SPEED POSSIBLY IN EXCESS OF SPEED LIMIT HAS FAILED TO SEE PEDESTRIAN AND COLLIS
Occurred on A38 TAUNTON ROAD, TAUNTON

Vehicle Reference 1 Car Going ahead
Not in restricted lane No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 58
Vehicle direction N to S
FRV Journey 6

Casualty Reference: 1 Age: 20 Male Pedestrian Severity: Serious
9

Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months

Selection: **Notes:**

Accidents involving:

	Fatal	Serious	Slight	Total
Motor vehicles only (excluding	0	16	78	94
2-wheeled motor vehicles	0	6	20	26
Pedal cycles	0	2	19	21
Horses & other	0	0	1	1
Total	0	24	117	141

Casualties:

	Fatal	Serious	Slight	Total
Vehicle driver	0	10	85	95
Passenger	0	19	82	101
Motorcycle rider	0	5	20	25
Cyclist	0	2	18	20
Pedestrian	0	6	8	14
Other	0	0	0	0
Total	0	42	213	255

Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months

Selection:

Notes:

Young Drivers 17 to 24
Older Drivers >= 60

DEFAULT VEHICLE GROUPS

Accidents involving:	Fatal	Serious	Slight	Total
Motor Vehicles Only	0	16	77	93
2-wheeled motor vehicles	0	6	20	26
Pedal Cycles	0	2	19	21
Horses & Other	0	0	1	1
Total Accidents	0	24	117	141

Casualties:	Fatal	Serious	Slight	Total
Vehicle Driver	0	10	85	95
Vehicle Passenger	0	19	82	101
Motorcycle rider	0	5	20	25
Cyclist	0	2	18	20
Pedestrians	0	6	8	14
Other	0	0	0	0
Total	0	42	213	255

BVPI CATEGORIES

* Figures include Passengers/Pillions where applicable

Casualties:	Fatal	Serious	Slight	Total
Pedestrians	0	6	8	14
Pedal cyclists	0	2	18	20
Motorcyclists	0	5	20	25
Car users	0	11	107	118
Other vehicle use	0	18	60	78
Total	0	42	213	255

YOUNG DRIVERS

Accidents involving:	Fatal	Serious	Slight	Total
Car drivers	0	2	24	26
Cycle riders	0	0	0	0
Motorcycle riders	0	0	7	7
Other motor vehs	0	1	1	2

Casualties:	Fatal	Serious	Slight	Total
Car drivers	0	0	13	13
Cycle riders	0	0	0	0
Motorcycle riders	0	0	7	7
Other motor vehs	0	0	0	0
Passengers of YD	0	0	8	8
Pedestrians by YD	0	0	0	0
Total	0	0	28	28

CHILD CASUALTIES

Accidents involving:	Fatal	Serious	Slight	Total
Car drivers	0	1	9	10
Cycle riders	0	1	4	5
Motorcycle riders	0	0	0	0
Other motor vehs	0	1	1	2

Casualties:	Fatal	Serious	Slight	Total
Car drivers	0	0	0	0
Cycle riders	0	1	4	5
Motorcycle riders	0	0	0	0
Other motor vehs	0	0	0	0
Passengers	0	0	7	7
Pedestrians	0	1	0	1
Total	0	2	11	13

Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months

Selection: **Notes:**

Young Drivers 17 to 24
Older Drivers >= 60

OLDER DRIVERS

Accidents involving:	Fatal	Serious	Slight	Total
Car drivers	0	4	25	29
Cycle riders	0	0	2	2
Motorcycle riders	0	1	0	1
Other motor vehs	0	1	3	4

Casualties:	Fatal	Serious	Slight	Total
Car drivers	0	3	9	12
Cycle riders	0	0	2	2
Motorcycle riders	0	1	0	1
Other motor vehs	0	0	0	0
Passengers of OD	0	1	3	4
Pedestrians by OD	0	0	2	2
Total	0	5	16	21

URBAN/RURAL

Accidents:	Fatal	Serious	Slight	Total
Urban (Spd lim <41)	0	18	100	118
Rural (Spd lim >40)	0	6	17	23

Casualties:	Fatal	Serious	Slight	Total
Urban (Spd lim <4	0	35	185	220
Rural (Spd lim >4	0	7	28	35
Total	0	42	213	255

TRAFFMAP
AccsMap - Accident Analysis System

SELECTION RESULTS

Run on: **13/02/2024**

Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months

Selection: **Notes:**

Police Ref.	Date	Cas.	Sev.	P2W	Cycs	Peds	Ch	60+	Vis.	Manv.	Road Cond.	Time	Location
181803840	15/04/2018	1	Slight	0	0	0	0	1	Light	No turn	Dry	0935	A38 BRISTOL ROAD, NEAR EXPRESS PARK ROUNDABOUT, BRIDGWA
181803847	18/04/2018	1	Slight	0	1	0	0	1	Light	Left	Dry	1210	A38 BRISTOL ROAD, AT JUNCTION WITH VOLKSWAGEN GARAGE, B
181804370	08/05/2018	3	Slight	0	0	0	2	0	Light	No turn	Dry	1851	A38 BRISTOL ROAD, BRIDGWATER
181805002	06/06/2018	1	Slight	1	0	0	0	0	Light	Right	Dry	0815	A38 TAUNTON ROAD, AT JUNCTION WITH ELMWOOD AVENUE, BRID
181804926	16/07/2018	1	Slight	0	0	0	0	0	Light	Right	Wet/Damp	1630	FRIARN ST, BRIDGWATER
181807961	17/07/2018	1	Slight	0	0	1	0	0	Light	No turn	Dry	1810	A39 NORTH STREET, BRIDGWATER.
181900599	07/08/2018	1	Slight	0	0	0	0	0	Light	Left	Dry	1340	A39 WESTERN WAY, BRIDGWATER.
181900633	10/08/2018	3	Slight	0	0	0	0	1	Light	No turn	Dry	1410	A38 TAUNTON ROAD, AT JUNCTION WITH STOCKMOOR DRIVE, NOR
181805636	15/08/2018	1	Slight	1	0	0	0	0	Light	No turn	Dry	1942	A38 BRIDGWATER ROAD, AT JUNCTION WITH MARKET WAY, NORT
181806060	17/08/2018	4	Serious	0	0	0	0	0	Dark	No turn	Dry	2154	A38 BRISTOL ROAD JUNCTION WITH A39 DUNBALL ROUNDABOUT, I
181806211	28/08/2018	1	Slight	1	0	0	0	0	Dark	Right	Dry	1527	A38 TAUNTON ROAD, AT JUNCTION WITH WILLS ROAD, BRIDGWATI
181806040	05/09/2018	1	Slight	0	0	0	0	0	Light	No turn	Dry	0645	A38 BRISTOL ROAD, PURITON.
181807421	02/11/2018	1	Slight	1	0	0	0	0	Light	No turn	Dry	1630	TAUNTON ROAD, BRIDGWATER.
181807494	02/11/2018	1	Slight	0	0	0	0	0	Light	No turn	Dry	1330	A38 BRISTOL ROAD, AT JUNCTION WITH EXPRESS PARK, BRIDGWAT
181902092	09/11/2018	1	Slight	1	0	0	0	0	Light	Left	Dry	1205	A39 BROADWAY, AT JUNCTION WITH FRIARN STREET, BRIDGWATE
181807800	20/11/2018	1	Slight	0	0	0	0	0	Dark	Right	Dry	1830	A38 DUNBALL ROUNDABOUT, AT JUNCTION WITH A39, PURITON.
181900230	07/12/2018	3	Slight	0	0	0	0	0	Light	No turn	Wet/Damp	0912	A38 TAUNTON ROAD, NORTH PETHERTON.
181902538	11/12/2018	1	Slight	0	0	0	0	0	Dark	Right	Wet/Damp	1740	A39 BROADWAY, AT JUNCTION WITH ALBERT STREET, BRIDGWATE
191900065	03/01/2019	1	Slight	0	0	0	0	0	Light	No turn	Dry	0912	A39 HOMBERG WAY, BRIDGWATER.
191902758	07/01/2019	1	Slight	0	1	0	0	0	Light	No turn	Wet/Damp	0748	A38 BRISTOL ROAD, PURITON.
191900178	10/01/2019	1	Slight	0	0	0	0	0	Light	No turn	Dry	0825	A39 BROADWAY, BRIDGWATER.
191903020	24/01/2019	1	Slight	1	0	0	0	0	Dark	Left	Dry	1718	A38 TAUNTON ROAD AT JUNCTION WITH UNNAMED ROAD, BRIDGW
191903317	16/02/2019	1	Slight	0	0	0	0	1	Dark	Right	Dry	2208	A39 BROADWAY, BY JUNCTION TURNING INTO MORRISONS CAR PA
191903349	17/02/2019	1	Slight	1	0	0	0	0	Light	No turn	Dry	1240	A39 QUANTOCK ROAD, AT JUNCTION WITH HOMBERG WAY, BRIDG\
191901228	20/02/2019	1	Slight	0	0	1	0	0	Light	No turn	Dry	0925	FRIARN STREET, BRIDGWATER.
191903464	26/02/2019	1	Slight	1	0	0	0	0	Light	Right	Dry	1625	A38 TAUNTON ROAD, AT JUNCTION WITH MARSH LANE, NORTH PE
191903563	04/03/2019	1	Slight	0	1	0	0	0	Light	Right	Dry	1020	A39 NORTH STREET, AT JUNCTION WITH CAMDEN ROAD, BRIDGWA'
191901663	08/03/2019	1	Slight	0	1	0	1	0	Light	No turn	Dry	1510	A39 HOMBERG WAY, AT JUNCTION WITH REEDMOOR GARDENS, BR
191906630	23/03/2019	2	Slight	0	0	0	0	1	Light	No turn	Dry	1101	A38 BRISTOL ROAD, BRIDGWATER.
191902040	25/03/2019	1	Slight	0	1	0	0	0	Light	Left	Dry	1540	A39 NORTH STREET, AT JUNCTION WITH PENEL ORLIEU, BRIDGWAT
191902768	25/04/2019	1	Slight	0	1	0	0	0	Light	Left	Dry	0950	A38 BRISTOL ROAD, AT JUNCTION WITH EXPRESS PARK, BRIDGWAT
191905574	29/04/2019	1	Serious	0	1	0	0	0	Light	No turn	Dry	1649	A38 BRISTOL ROAD, NEAR JUNCTION WITH KIMBERLEY TERRACE, E
191907225	01/05/2019	1	Slight	0	1	0	0	0	Light	Right	Dry	1820	A38 TAUNTON ROAD, OUTSIDE ESSO SERVICE STATION, BRIDGWAT.
191905694	13/05/2019	1	Serious	0	0	0	0	1	Light	Right	Dry	0851	A38 TAUNTON ROAD, AT JUNCTION WITH A39 BROADWAY, BRIDGW

Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months

Selection: **Notes:**

Police Ref.	Date	Cas.	Sev.	P2W	Cycs	Peds	Ch	60+	Vis.	Manv.	Road Cond.	Time	Location
191905726	14/05/2019	3	Slight	0	0	0	0	0	Light	No turn	Dry	1832	A39 NEW ROAD, CANNINGTON.
191905725	16/05/2019	1	Slight	0	0	0	0	0	Light	No turn	Dry	1705	A38 TAUNTON ROAD, AT JUNCTION WITH PARKSTONE AVENUE, BR
191905978	12/06/2019	1	Serious	0	0	0	0	0	Light	Right	Dry	1610	A39 MAIN ROAD, AT JUNCTION WITH BLACKMORE LANE, CANNING'
191906091	24/06/2019	1	Slight	0	1	0	1	0	Light	Left	Dry	1521	A39 WESTERN WAY, AT JUNCTION WITH STANDISH STREET, BRIDG
191904509	19/07/2019	1	Slight	0	0	0	1	0	Light	No turn	Wet/Damp	1125	A38 AT JUNCTION WITH M5, NORTH PETHERTON.
191906377	23/07/2019	1	Slight	0	0	0	0	1	Light	No turn	Dry	1224	A39, AT JUNCTION WITH LIMESTONE HILL, CANNINGTON.
191906518	08/08/2019	2	Slight	0	0	0	0	0	Dark	Right	Wet/Damp	2105	A39 BROADWAY, AT JUNCTION WITH SUPERMARKET, BRIDGWATER
191906553	09/08/2019	1	Slight	0	0	0	0	0	Light	No turn	Wet/Damp	1832	A38 TAUNTON ROAD, AT JUNCTION WITH SHOWGROUND ROAD, NO
191906781	15/08/2019	1	Slight	0	0	0	0	0	Light	No turn	Dry	1757	A39 HOMBERG WAY, AT JUNCTION WITH BONITA DRIVE, WEMBDON
191905137	19/08/2019	1	Slight	0	0	0	1	0	Light	No turn	Dry	0955	A38 TAUNTON ROAD,, BRIDGWATER.
191905553	10/09/2019	1	Slight	0	1	0	0	0	Light	No turn	Dry	1700	A38 TAUNTON ROAD, AT JUNCTION WITH SOUTHGATE AVENUE, BR
192000795	25/09/2019	1	Serious	0	1	0	1	0	Light	No turn	Dry	1620	A39 QUANTOCK ROAD, BRIDGWATER
191906440	17/10/2019	1	Slight	0	1	0	1	0	Light	Right	Wet/Damp	1625	A38 TAUNTON ROAD, AT JUNCTION WITH RHODE LANE, BRIDGWAT
191906688	22/10/2019	2	Slight	0	0	0	0	0	Light	Right	Dry	1645	A38 TAUNTON ROAD, NORTH PETHERTON.
192000655	08/11/2019	1	Slight	0	1	0	0	0	Dark	No turn	Dry	1740	A38 BRISTOL ROAD, BRIDGWATER.
192001246	21/11/2019	1	Slight	0	0	0	0	0	Dark	Right	Wet/Damp	1653	A39 WESTERN WAY, AT JUNCTION WITH WYLDS ROAD, BRIDGWAT
191907150	27/11/2019	1	Slight	0	1	0	0	1	Dark	Right	Dry	2000	A39 QUANTOCK ROAD, AT JUNCTION WITH DANESBOROUGH ROAD
191907208	01/12/2019	1	Slight	0	0	0	0	0	Dark	No turn	Dry	1945	PENEL ORLIEU, BRIDGWATER.
192000371	02/12/2019	1	Serious	0	0	1	0	0	Light	Right	Dry	1132	A38 TAUNTON ROAD, AT JUNCTION WITH RHODE LANE, BRIDGWAT
192001332	05/12/2019	1	Slight	0	0	0	0	0	Light	No turn	Dry	1319	A38 TAUNTON ROAD, AT JUNCTION WITH HAMP GREEN RISE, BRIDG
192001534	23/12/2019	2	Slight	0	0	0	0	1	Dark	No turn	Dry	1645	A39 QUANTOCK ROAD, AT JUNCTION WITH SKIMMERTON LANE, WE
202000454	10/01/2020	5	Serious	0	0	0	0	0	Light	Right	Dry	1315	A38 BRISTOL ROAD, BRIDGWATER,.
202002095	04/02/2020	4	Slight	0	0	0	0	0	Dark	Right	Dry	1945	A39 WESTERN WAY, AT JUNCTION WITH WYLDS ROAD, BRIDGWATE
202000722	05/02/2020	1	Slight	0	1	0	0	0	Light	Right	Dry	1100	A39 BROADWAY, AT JUNCTION WITH ALBERT STREET, BRIDGWATE
202001387	01/03/2020	1	Slight	0	0	0	0	0	Dark	Right	Wet/Damp	0116	A39 BROADWAY, AT JUNCTION WITH PENEL ORLIEU, BRIDGWATER
202001500	10/03/2020	1	Slight	1	0	0	0	0	Dark	No turn	Wet/Damp	1845	A38 TAUNTON ROAD, NORTH PETHERTON.
202004736	22/03/2020	1	Slight	0	0	0	0	0	Light	No turn	Dry	1439	MAIN ROAD, CANNINGTON.
202004905	29/04/2020	1	Slight	0	0	0	0	0	Light	Both	Wet/Damp	0856	A39 THE DROVE, AT JUNCTION WITH WYLDS ROAD, BRIDGWATER.
202002275	12/05/2020	1	Serious	0	0	0	0	0	Light	No turn	Dry	2034	A38 TAUNTON ROAD, AT JUNCTION WITH A39 BROADWAY, BRIDGW
202002325	01/06/2020	1	Slight	0	0	0	0	0	Light	No turn	Dry	1815	A38 TAUNTON ROAD, AT JUNCTION WITH STOCKMOOR DRIVE, NOR'
202100304	03/07/2020	1	Slight	0	0	0	0	0	Light	Right	Dry	1030	A38 TAUNTON ROAD, AT JUNCTION WITH PARKSTONE AVENUE, BR
202002903	19/07/2020	1	Slight	0	0	0	0	0	Light	No turn	Dry	2015	A39 NEW ROAD, AT JUNCTION WITH LIMESTONE HILL, CANNINGTOI
202002970	29/07/2020	1	Slight	0	0	0	0	0	Light	Left	Dry	1023	A38 HUNTWORTH ROUNDABOUT, NORTH PETHERTON.
202003325	25/08/2020	1	Slight	0	0	1	0	0	Light	Left	Dry	1850	A38 BRITOL ROAD, AT JUNCTION WITH UNION STREET, BRIDGWATE

Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months

Selection: **Notes:**

Police Ref.	Date	Cas.	Sev.	P2W	Cycs	Peds	Ch	60+	Vis.	Manv.	Road Cond.	Time	Location
202004006	21/09/2020	1	Slight	0	0	0	0	0	Light	Right	Dry	1549	A38 BROADWAY, AT JUNCTION WITH SUPERMARKET, BRIDGWATER
202101170	27/09/2020	2	Slight	0	0	0	0	0	Light	No turn	Dry	1237	A39 BROADWAY, AT JUNCTION WITH A38 TAUNTON ROAD, BRIDGW
202004568	28/10/2020	1	Serious	0	0	0	0	0	Dark	Right	Wet/Damp	1800	A39 QUANTOCK ROAD, AT JUNCTION WITH FILLING STATION, WEMI
202101141	16/11/2020	2	Slight	0	0	1	0	0	Dark	No turn	Wet/Damp	1700	A38 TAUNTON ROAD, NORTH PETHERTON.
202101149	17/11/2020	1	Slight	0	0	0	0	0	Dark	No turn	Wet/Damp	1655	A39 NEW ROAD, CANNINGTON.
202101153	19/11/2020	1	Slight	0	0	1	0	0	Dark	No turn	Dry	1724	A38 BRISTOL ROAD, BRIDGWATER.
202101155	19/11/2020	1	Slight	0	0	0	0	0	Dark	No turn	Dry	0630	A38 TAUNTON ROAD, AT JUNCTION WITH ASHLEIGH AVENUE, BRID
202004699	02/12/2020	1	Slight	0	0	0	0	0	Light	Right	Dry	0900	A38 TAUNTON ROAD, AT JUNCTION WITH WILLS ROAD, NORTH PETI
202100156	18/12/2020	1	Slight	0	0	0	0	0	Light	Right	Wet/Damp	1345	A38 BRISTOL ROAD, AT JUNCTION WITH UNION STREET, BRIDGWAT
202100246	31/12/2020	3	Serious	0	0	0	0	0	Dark	No turn	Wet/Damp	1650	A38 TAUNTON ROAD, NORTH PETHERTON.
212102938	22/01/2021	1	Serious	0	0	1	0	0	Dark	No turn	Wet/Damp	0117	A39 QUANTOCK ROAD, BRIDGWATER
212101614	28/01/2021	1	Slight	0	0	0	0	0	Dark	No turn	Wet/Damp	0720	WYLDS ROAD, EAST QUAY, BRIDGWATER
212101657	03/02/2021	1	Slight	0	0	0	0	0	Light	Right	Dry	1649	A39 BROADWAY OUTSIDE/BY MORRISONS TRAFFIC LIGHTS, BRIDGV
212100487	09/02/2021	1	Slight	0	0	0	0	0	Light	No turn	Dry	1214	A38 TAUNTON ROAD AT JUNCTION WITH A38 J24, LINK ROAD, BRID(
212102410	10/03/2021	1	Serious	0	0	0	0	1	Light	No turn	Dry	1330	A38 BRIDGEWATER ROAD AT JUNCTION WITH A39 THE DROVE, BRII
212101882	15/03/2021	1	Slight	0	0	0	0	0	Light	Right	Dry	1435	A38 TAUNTON ROAD AT JUNCTION WITH TAUNTON ROAD (MINOR),
212101920	23/03/2021	1	Slight	0	0	0	0	0	Light	Right	Dry	1703	A38 TAUNTON ROAD AT JUNCTION WITH WILLS ROAD, BRIDGWATE
212102148	06/04/2021	2	Slight	0	0	0	0	0	Light	No turn	Dry	0758	A39 WESTERN WAY, BRIDGWATER AT JUNCTION WITH CHILTON ST
212101998	19/04/2021	1	Slight	0	0	0	0	0	Light	No turn	Dry	0520	A38 APPROACH TO DUNBALL ROUNDABOUT, BRIDGWATER
212102486	22/04/2021	1	Slight	0	1	0	1	0	Light	No turn	Dry	1508	WYLDS ROAD AT JUNCTION WITH A39 WESTERN WAY, BRIDGWATE
212102472	29/04/2021	1	Serious	0	0	0	0	1	Light	Right	Dry	1049	A39 THE DROVE AT JUNCTION WITH WYLDS ROAD, BRIDGWATER
212104035	13/05/2021	1	Slight	0	0	0	0	0	Dark	Left	Wet/Damp	1605	B3339 WEMBDON RISE AT JUNCTION WITH A39
212103795	15/05/2021	1	Slight	0	0	0	0	1	Light	No turn	Wet/Damp	1425	A38 TAUNTON ROAD 42M N OF PARKSTONE AVENUE, BRIDGWATER
212104195	08/06/2021	1	Slight	0	0	0	0	0	Light	No turn	Dry	1400	A38 BRISTOL ROAD OUTSIDE/BY BUDGENS AT JUNCTION WITH EXPI
212105615	14/07/2021	1	Slight	0	0	0	0	0	Light	No turn	Dry	0738	A38 BRISTOL ROAD, BRIDGWATER.
212103736	18/07/2021	2	Slight	0	0	0	0	0	Light	Left	Dry	1539	A38 TAUNTON ROAD, AT JUNCTION WITH RHODE LANE, BRIDGWAT
212200068	21/07/2021	4	Slight	0	0	0	2	0	Light	Right	Dry	1410	A38 TAUNTON ROAD, BRIDGWATER.
212103800	23/07/2021	1	Slight	0	0	0	0	0	Light	No turn	Dry	1027	A39 MAIN ROAD, CANNINGTON, BRIDGWATER
212104283	02/08/2021	1	Slight	0	0	0	0	0	Light	No turn	Dry	1001	A38 TAUNTON ROAD, BRIDGWATER
212200440	23/08/2021	1	Serious	0	0	1	1	0	Light	No turn	Dry	1615	A38 TAUNTON ROAD AT N0. 56, BRIDGWATER.
212200489	29/08/2021	1	Slight	0	0	0	0	0	Dark	No turn	Dry	0917	A39 QUANTOCK ROAD, BRIDGWATER
212104401	06/09/2021	2	Slight	0	0	0	0	0	Light	No turn	Dry	1735	A39 BROADWAY, BRIDGWATER
212104917	14/09/2021	1	Serious	0	0	0	0	0	Light	No turn	Dry	2300	A38 DUNBALL RBT AT JUNCTION WITH A38 BRISTOL ROAD, BRIDGW
212200713	17/09/2021	1	Slight	0	0	0	0	0	Light	No turn	Dry	0741	A39 BRISTOL ROAD AT JUNCTION WITH A38 DUNBALL , BRIDGWATI

Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months

Selection: **Notes:**

Police Ref.	Date	Cas.	Sev.	P2W	Cycs	Peds	Ch	60+	Vis.	Manv.	Road Cond.	Time	Location
212104760	24/09/2021	2	Slight	0	0	0	0	0	Light	No turn	Dry	1830	REEDMOOR GARDENS, BRIDGWATER
212104976	27/09/2021	1	Slight	0	0	0	0	0	Light	No turn	Dry	1450	ASHLEIGH AVENUE AT JUNCTION WITH A38 TAUNTON ROAD, BRID
212200954	15/10/2021	1	Slight	0	0	0	0	1	Dark	No turn	Dry	1910	A39 CANNINGTON AT JUNCTION WITH MAIN ROAD, BRIDGWATER
212200984	18/10/2021	1	Slight	0	0	0	0	0	Dark	No turn	Dry	0134	A38 BRISTOL ROAD AT JUNCTION WITH KINGS DRIVE, BRIDGWATE
212105228	20/10/2021	1	Slight	0	0	0	0	0	Dark	No turn	Wet/Damp	2100	A39 NORTH STREET OUTSIDE FORD GARAGE, NORTH STREET, BRID(
212201201	13/11/2021	1	Slight	0	0	0	0	0	Dark	Right	Dry	2020	A38 TAUNTON ROAD, AT JUNCTION WITH WILLS ROAD, BRIDGWATI
212105902	02/12/2021	1	Slight	0	0	0	0	0	Dark	No turn	Wet/Damp	1711	A38 BRISTOL ROAD OUTSIDE MORRISONS MANUFACTURING, BRID(
212200134	07/12/2021	1	Serious	0	0	0	0	0	Dark	No turn	Wet/Damp	2115	A38 TAUNTON ROAD (OUTSIDE TAUNTON ROAD CAR CENTRE), BRIL
212201482	13/12/2021	1	Slight	0	0	0	0	1	Light	Left	Dry	0856	A39 BROADWAY AT JUNCTION WITH ALBERT STREET, BRIDGWATE
22SE021	07/01/2022	1	Slight	0	0	0	0	0	Light	Right	Wet/Damp	0830	A39 BROADWAY CROSSOVER JNC FROM ALBERT STREET
222200238	14/01/2022	2	Slight	0	1	2	0	0	Light	No turn	Dry	0915	MAIN ROAD, CANNINGTON
22SE083	21/01/2022	1	Slight	0	0	0	0	0	Dark	No turn	Wet/Damp	0807	A38 BRISTOL ROAD, BRIDGWATER
222202036	03/02/2022	1	Slight	0	0	0	0	0	Dark	No turn	Dry	2150	A38 BRISTOL ROAD OUTSIDE/BY NO.354, BRIDGWATER
222202513	09/03/2022	1	Slight	0	0	0	0	0	Light	No turn	Dry	0639	A38 BRISTOL ROAD, BRIDGWATER
222204221	01/04/2022	1	Serious	0	0	0	0	0	Light	No turn	Dry	1709	A39 NEW ROAD, CANNINGTON
22SE371	12/04/2022	1	Slight	1	0	0	0	0	Dark	Right	Dry	2034	A38 BRISTOL ROAD, BRIDGWATER
222204410	22/04/2022	2	Slight	0	0	0	1	0	Light	No turn	Dry	1145	A39 HOMBERG WAY NEAR CHURCH MEADOW.
22SE204	01/05/2022	3	Serious	0	0	0	0	1	Light	No turn	Wet/Damp	1956	A39 DOWN END, PURITON
22SE217	07/05/2022	1	Serious	1	0	0	0	0	Light	Right	Dry	1240	A38 BRISTOL ROAD, BRIDGWATER
222204570	08/05/2022	1	Slight	0	0	0	0	0	Dark	No turn	Dry	2036	A38 NORTH PETHERTON JUNCTION WITH M5 JUNCTION 24, BRIDGW/
22SE322	12/05/2022	2	Slight	0	0	0	0	0	Dark	No turn	Dry	0720	A39 QUANTOCK ROAD, BRIDGWATER
222204880	02/06/2022	1	Serious	0	0	1	0	0	Light	No turn	Dry	0920	RIVERSIDE CLOSE (OUTSIDE NO.109), BRIDGWATER
222202926	24/06/2022	1	Slight	0	2	0	0	0	Light	No turn	Dry	1415	A38 BRISTOL ROAD, DUNBALL, BRIDGWATER
2300006	29/08/2022	1	Slight	0	0	0	0	0	Light	No turn	Dry	0744	A39 CANNINGTON BYPASS
222300087	15/09/2022	2	Serious	0	0	1	0	0	Light	No turn	Dry	1813	A38 TAUNTON ROAD (OUTSIDE OPPOSITE RADSTOCK CO-OPERATI
222204001	18/09/2022	1	Slight	0	0	0	0	0	Light	No turn	Dry	1300	THE DROVE, BRIDGWATER
222300177	13/10/2022	3	Slight	0	0	0	0	0	Light	No turn	Dry	1616	A38 BRISTOL ROAD (OUTSIDE TRIZO LTD), CHILTON TRINITY, BRID(
2300165	07/11/2022	1	Slight	0	1	0	0	0	Light	No turn	Wet/Damp	1200	A39 WEMBDON ROAD, BRIDGWATER
222204940	11/11/2022	1	Slight	0	1	0	0	0	Dark	No turn	Dry	1900	TAUNTON ROAD BRIDGWATER
222205315	01/12/2022	2	Slight	0	0	0	0	0	Dark	No turn	Wet/Damp	1705	BRISTOL RD, BRIDGWATER
222300427	15/12/2022	1	Slight	0	0	0	0	0	Dark	No turn	Frost/Ice	1725	A38 TAUNTON ROAD, BRIDGWATER
2300384	05/01/2023	1	Slight	0	1	0	0	0	Light	Left	Wet/Damp	1728	A38, TAUNTON ROAD, BRIDGWATER
2300610	17/01/2023	70	Serious	1	0	0	0	4	Dark	No turn	Frost/Ice	0600	A39 QUANTOCK ROAD, WEMBDON
2300907	15/02/2023	3	Slight	0	0	0	0	0	Light	No turn	Wet/Damp	1448	A39 NEW ROAD, CANNINGTON

Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months

Selection: **Notes:**

Police Ref.	Date	Cas.	Sev.	P2W	Cycs	Peds	Ch	60+	Vis.	Manv.	Road Cond.	Time	Location
2300957	20/02/2023	1	Serious	0	0	1	0	0	Dark	No turn	Wet/Damp	0622	A39 QUANTOCK ROAD, BRIDGWATER
2300968	22/02/2023	2	Slight	1	0	0	0	0	Light	No turn	Dry	0900	A39 QUANTOCK ROAD JUNC WITH QUANTOCK AVENUE, BRIDGWA
2301124	16/03/2023	1	Slight	0	0	0	0	1	Light	No turn	Wet/Damp	1420	ALLERTON ROAD JUNC WITH WYLDS ROAD, BRIDGWATER
2301141	17/03/2023	1	Slight	1	0	0	0	0	Light	No turn	Dry	1354	A38 CROSSROAD JUNC OF TAUNTON ROAD AND BROADWAY, BRIDG
2301184	19/03/2023	1	Serious	0	0	1	0	0	Dark	No turn	Wet/Damp	0556	A38 TAUNTON ROAD, TAUNTON
Column Totals		255		14	22	14	13	20					
No. of Accidents				14	21	13	11	17					

Total number of accidents listed: 141

Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months

Selection:

Notes:

Police Ref.	Acc Class	Date	Day	Time	Grid References	Casualties Ftl	Casualties Ser	Casualties Slt	Causation Factors/ Prob	Ped L M D	Light	Weather	Road Surface	Vehicle Types
181803840	Slight	15/04/2018	Sun	0935	330852 139266	0	0	1	505V001A	0 0 0	Light	Fine without high winds	Dry	9
181803847	Slight	18/04/2018	Wed	1210	330681 138428	0	0	1	309V002A 310V002A 710V001B 407V001B 405V001A	0 0 0	Light	Fine without high winds	Dry	9 1
181804370	Slight	08/05/2018	Tue	1851	330601 138027	0	0	3	308V003A 308V002A 408V001A	0 0 0	Light	Fine without high winds	Dry	9 9 9
181805002	Slight	06/06/2018	Wed	0815	330071 136482	0	0	1	403V001A 405V001A	0 0 0	Light	Fine without high winds	Dry	9 3
181804926	Slight	16/07/2018	Mon	1630	329696 136838	0	0	1		0 0 0	Light	Fine without high winds	Wet/Damp	9 9
181807961	Slight	17/07/2018	Tue	1810	329406 136997	0	0	1	802C001A 807C001A	5 9 9	Light	Fine without high winds	Dry	9
181900599	Slight	07/08/2018	Tue	1340	329583 138245	0	0	1		0 0 0	Light	Fine without high winds	Dry	9
181900633	Slight	10/08/2018	Fri	1410	330424 135274	0	0	3	405V002A 406V002A	0 0 0	Light	Fine without high winds	Dry	9 11
181805636	Slight	15/08/2018	Wed	1942	330284 134267	0	0	1		0 0 0	Light	Fine without high winds	Dry	9 3
181806060	Serious	17/08/2018	Fri	2154	330937 141110	0	1	3	409V001A 410V001B 602V001A	0 0 0	Dark	Fine without high winds	Dry	9
181806211	Slight	28/08/2018	Tue	1527	330360 135584	0	0	1		0 0 0	Dark	Fine without high winds	Dry	9 5 11
181806040	Slight	05/09/2018	Wed	0645	331134 140729	0	0	1		0 0 0	Light	Fine without high winds	Dry	9 9
181807421	Slight	02/11/2018	Fri	1630	329991 136793	0	0	1		0 0 0	Light	Fine without high winds	Dry	9 4
181807494	Slight	02/11/2018	Fri	1330	330761 139087	0	0	1		0 0 0	Light	Fine without high winds	Dry	11 9
181902092	Slight	09/11/2018	Fri	1205	329616 136816	0	0	1	405V002A 401V002A	0 0 0	Light	Fine without high winds	Dry	20 4
181807800	Slight	20/11/2018	Tue	1830	330931 141035	0	0	1		0 0 0	Dark	Unknown	Dry	9 9
181900230	Slight	07/12/2018	Fri	0912	330387 135439	0	0	3	404V001A 405V001A 406V001A	0 0 0	Light	Raining without high winds	Wet/Damp	9 9
181902538	Slight	11/12/2018	Tue	1740	329581 136836	0	0	1		0 0 0	Dark	Fine without high winds	Wet/Damp	9 9

Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months

Selection: **Notes:**

Police Ref.	Acc Class	Date	Day	Time	Grid References	Casualties Ftl	Ser	Slt	Causation Factors/ Prob	Ped L M D	Light	Weather	Road Surface	Vehicle Types
191900065	Slight	03/01/2019	Thu	0912	329146 137889	0	0	1		0 0 0	Light	Fine without high winds	Dry	9 9
191902758	Slight	07/01/2019	Mon	0748	330898 141170	0	0	1	405V002A 406V002A	0 0 0	Light	Fine without high winds	Wet/Damp	9 1
191900178	Slight	10/01/2019	Thu	0825	329648 136768	0	0	1		0 0 0	Light	Fine without high winds	Dry	9 9
191903020	Slight	24/01/2019	Thu	1718	330219 136031	0	0	1	405V001A 406V002A	0 0 0	Dark	Fine without high winds	Dry	9 4
191903317	Slight	16/02/2019	Sat	2208	329803 136742	0	0	1	403V001A	0 0 0	Dark	Fine without high winds	Dry	9 9
191903349	Slight	17/02/2019	Sun	1240	328429 137066	0	0	1	405V001A	0 0 0	Light	Fine without high winds	Dry	9 5
191901228	Slight	20/02/2019	Wed	0925	329687 136838	0	0	1		5 9 9	Light	Fine without high winds	Dry	9
191903464	Slight	26/02/2019	Tue	1625	330509 134933	0	0	1		0 0 0	Light	Fine without high winds	Dry	9 5
191903563	Slight	04/03/2019	Mon	1020	329367 137028	0	0	1	403V001A 405V001A 406V001B 407V001B	0 0 0	Light	Fine without high winds	Dry	9 1
191901663	Slight	08/03/2019	Fri	1510	329359 138185	0	0	1		0 0 0	Light	Fine without high winds	Dry	1 9
191906630	Slight	23/03/2019	Sat	1101	330702 138494	0	0	2	408V002B	0 0 0	Light	Fine without high winds	Dry	9 9
191902040	Slight	25/03/2019	Mon	1540	329491 136929	0	0	1		0 0 0	Light	Fine without high winds	Dry	9 1
191902768	Slight	25/04/2019	Thu	0950	330769 139099	0	0	1	405V001B 706V001A	0 0 0	Light	Fine without high winds	Dry	9 1
191905574	Serious	29/04/2019	Mon	1649	330588 137968	0	1	0	405V002B 406V002B 501V002B 502V002B 602V002B 505V002B	0 0 0	Light	Fine without high winds	Dry	21 1
191907225	Slight	01/05/2019	Wed	1820	330021 136719	0	0	1		0 0 0	Light	Fine without high winds	Dry	9 1
191905694	Serious	13/05/2019	Mon	0851	330002 136769	0	1	0	505V001A 108V001B 403V001B	0 0 0	Light	Fine without high winds	Dry	9
191905726	Slight	14/05/2019	Tue	1832	326783 138258	0	0	3	406V001A 706V001A	0 0 0	Light	Fine without high winds	Dry	9 9 9 9
191905725	Slight	16/05/2019	Thu	1705	330245 135962	0	0	1	602V003A	0 0 0	Light	Fine without high winds	Dry	9 9 9

Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months

Selection: **Notes:**

Police Ref.	Acc Class	Date	Day	Time	Grid References	Casualties Ftl	Ser	Slt	Causation Factors/ Prob	Ped L M D	Light	Weather	Road Surface	Vehicle Types
191905978	Serious	12/06/2019	Wed	1610	326206 138566	0	1	0		0 0 0	Light	Fine without high winds	Dry	19 9
191906091	Slight	24/06/2019	Mon	1521	329936 138241	0	0	1		0 0 0	Light	Fine without high winds	Dry	9 1
191904509	Slight	19/07/2019	Fri	1125	330279 134298	0	0	1		0 0 0	Light	Unknown	Wet/Damp	9 21
191906377	Slight	23/07/2019	Tue	1224	326356 138432	0	0	1		0 0 0	Light	Fine without high winds	Dry	9 9
191906518	Slight	08/08/2019	Thu	2105	329805 136742	0	0	2	104V002A 406V001A 406V002A 707V001A 707V002A	0 0 0	Dark	Raining with high winds	Wet/Damp	11 9
191906553	Slight	09/08/2019	Fri	1832	330428 135227	0	0	1		0 0 0	Light	Raining without high winds	Wet/Damp	9 3
191906781	Slight	15/08/2019	Thu	1757	328777 137277	0	0	1	405V002A	0 0 0	Light	Fine without high winds	Dry	9 9
191905137	Slight	19/08/2019	Mon	0955	330204 136071	0	0	1		0 0 0	Light	Fine without high winds	Dry	9 9
191905553	Slight	10/09/2019	Tue	1700	330138 136336	0	0	1		0 0 0	Light	Fine without high winds	Dry	1 9
192000795	Serious	25/09/2019	Wed	1620	328767 136944	0	1	0		0 0 0	Light	Fine without high winds	Dry	19 1
191906440	Slight	17/10/2019	Thu	1625	330194 136099	0	0	1		0 0 0	Light	Raining without high winds	Wet/Damp	9 1
191906688	Slight	22/10/2019	Tue	1645	330390 135437	0	0	2	406V001A 602V001B	0 0 0	Light	Fine without high winds	Dry	9 9 21
192000655	Slight	08/11/2019	Fri	1740	330603 138039	0	0	1	501V002A 507V002A 310V002A 406V002B	0 0 0	Dark	Fine without high winds	Dry	9 1
192001246	Slight	21/11/2019	Thu	1653	330171 137998	0	0	1		0 0 0	Dark	Raining without high winds	Wet/Damp	9 9
191907150	Slight	27/11/2019	Wed	2000	328502 137006	0	0	1		0 0 0	Dark	Fine without high winds	Dry	1 9
191907208	Slight	01/12/2019	Sun	1945	329513 136945	0	0	1		0 0 0	Dark	Fine without high winds	Dry	9 9
192000371	Serious	02/12/2019	Mon	1132	330191 136097	0	1	0		5 9 9	Light	Fine without high winds	Dry	9
192001332	Slight	05/12/2019	Thu	1319	330153 136283	0	0	1	403V001B 406V001B	0 0 0	Light	Fine without high winds	Dry	9 19 9
192001534	Slight	23/12/2019	Mon	1645	327212 137471	0	0	2	505V001A	0 0 0	Dark	Fine without high winds	Dry	9 9
202000454	Serious	10/01/2020	Fri	1315	330709 138530	0	1	4	602V001B 606V001B	0 0 0	Light	Fine without high winds	Dry	9 19 9

Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months

Selection: **Notes:**

Police Ref.	Acc Class	Date	Day	Time	Grid References	Casualties Ftl	Ser	Slt	Causation Factors/ Prob	Ped L M D	Light	Weather	Road Surface	Vehicle Types
202002095	Slight	04/02/2020	Tue	1945	330176 137996	0	0	4	406V001A 406V002A 605V001B	0 0 0	Dark	Fine without high winds	Dry	9 9
202000722	Slight	05/02/2020	Wed	1100	329587 136843	0	0	1	403V002A 405V002A 602V002A	0 0 0	Light	Fine without high winds	Dry	1 9
202001387	Slight	01/03/2020	Sun	0116	329491 136930	0	0	1	403V001A 406V001A	0 0 0	Dark	Raining without high winds	Wet/Damp	9 9
202001500	Slight	10/03/2020	Tue	1845	330447 135200	0	0	1	408V001A 103V001A 603V001A	0 0 0	Dark	Raining without high winds	Wet/Damp	4
202004736	Slight	22/03/2020	Sun	1439	326012 139066	0	0	1	308V001B 405V001B 406V001B 408V002A 410V001B	0 0 0	Light	Fine without high winds	Dry	4 4
202004905	Slight	29/04/2020	Wed	0856	330174 138003	0	0	1	402V001A 306V002B 103V002B	0 0 0	Light	Raining without high winds	Wet/Damp	20 9
202002275	Serious	12/05/2020	Tue	2034	330000 136774	0	1	0		0 0 0	Light	Fine without high winds	Dry	9 9
202002325	Slight	01/06/2020	Mon	1815	330399 135250	0	0	1		0 0 0	Light	Fine without high winds	Dry	9 9
202100304	Slight	03/07/2020	Fri	1030	330245 135962	0	0	1	403V001A 405V001B 406V001B	0 0 0	Light	Fine without high winds	Dry	9 9
202002903	Slight	19/07/2020	Sun	2015	326357 138432	0	0	1		0 0 0	Light	Fine without high winds	Dry	9
202002970	Slight	29/07/2020	Wed	1023	330239 134284	0	0	1		0 0 0	Light	Fine without high winds	Dry	9 9
202003325	Slight	25/08/2020	Tue	1850	330546 137753	0	0	1		5 1 1	Light	Fine with high winds	Dry	9
202004006	Slight	21/09/2020	Mon	1549	329805 136741	0	0	1		0 0 0	Light	Fine without high winds	Dry	9 9
202101170	Slight	27/09/2020	Sun	1237	329981 136771	0	0	2	308V001A 408V002B	0 0 0	Light	Fine without high winds	Dry	9 9

Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months

Selection:

Notes:

Police Ref.	Acc Class	Date	Day	Time	Grid References	Casualties Ftl	Ser	Slt	Causation Factors/ Prob	Ped L M D	Light	Weather	Road Surface	Vehicle Types
202004568	Serious	28/10/2020	Wed	1800	327238 137443	0	1	0	602V001B 403V001A 405V001A	0 0 0	Dark	Raining with high winds	Wet/Damp	9 4
202101141	Slight	16/11/2020	Mon	1700	330445 135235	0	0	2		5 1 3	Dark	Fine without high winds	Wet/Damp	9
202101149	Slight	17/11/2020	Tue	1655	326697 138294	0	0	1	405V003A 406V003B	0 0 0	Dark	Fine without high winds	Wet/Damp	9 9 9
202101153	Slight	19/11/2020	Thu	1724	330601 138028	0	0	1	104V001A 409V003A 705V003A	5 2 8	Dark	Fine without high winds	Dry	20 9 9
202101155	Slight	19/11/2020	Thu	0630	330175 136170	0	0	1		0 0 0	Dark	Fine without high winds	Dry	3 9
202004699	Slight	02/12/2020	Wed	0900	330362 135583	0	0	1		0 0 0	Light	Fine without high winds	Dry	9 9 9
202100156	Slight	18/12/2020	Fri	1345	330548 137753	0	0	1	305V002A 306V001B 405V002B 409V001B	0 0 0	Light	Raining without high winds	Wet/Damp	9 19
202100246	Serious	31/12/2020	Thu	1650	330318 134465	0	1	2		0 0 0	Dark	Fine without high winds	Wet/Damp	9 9 9 9
212102938	Serious	22/01/2021	Fri	0117	327189 137502	0	1	0	809C001A 806C001A 808C001A 707V001A 703V001A	9 8 9	Dark	Raining without high winds	Wet/Damp	9
212101614	Slight	28/01/2021	Thu	0720	330170 138000	0	0	1		0 0 0	Dark	Fine without high winds	Wet/Damp	9 9
212101657	Slight	03/02/2021	Wed	1649	329801 136742	0	0	1	301V001A	0 0 0	Light	Fine without high winds	Dry	9 9
212100487	Slight	09/02/2021	Tue	1214	330227 134350	0	0	1	403V001A 505V001A	0 0 0	Light	Fine without high winds	Dry	9 9
212102410	Serious	10/03/2021	Wed	1330	330544 137777	0	1	0		0 0 0	Light	Fine without high winds	Dry	9 9
212101882	Slight	15/03/2021	Mon	1435	330504 134757	0	0	1	701V001A 999V002A 306V001B 307V002B	0 0 0	Light	Fine without high winds	Dry	9 5
212101920	Slight	23/03/2021	Tue	1703	330364 135581	0	0	1	405V001A 406V001A	0 0 0	Light	Fine without high winds	Dry	8 3

Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months

Selection: **Notes:**

Police Ref.	Acc Class	Date	Day	Time	Grid References	Casualties Ftl	Ser	Slt	Causation Factors/ Prob	Ped L M D	Light	Weather	Road Surface	Vehicle Types
212102148	Slight	06/04/2021	Tue	0758	329711 138250	0	0	2	301V001A 105V001B	0 0 0	Light	Fine without high winds	Dry	9 9
212101998	Slight	19/04/2021	Mon	0520	330945 141021	0	0	1	306V002A 405V002A	0 0 0	Light	Fine without high winds	Dry	9 9
212102486	Slight	22/04/2021	Thu	1508	330170 138003	0	0	1	405V002A 406V002A 706V002A	0 0 0	Light	Fine without high winds	Dry	9 1
212102472	Serious	29/04/2021	Thu	1049	330171 137995	0	1	0	406V002A 703V002A 704V002B 706V002B 510V002B	0 0 0	Light	Unknown	Dry	9 4
212104035	Slight	13/05/2021	Thu	1605	328692 137206	0	0	1		0 0 0	Dark	Fine without high winds	Wet/Damp	9 9
212103795	Slight	15/05/2021	Sat	1425	330231 135999	0	0	1	505V001A	0 0 0	Light	Raining without high winds	Wet/Damp	9
212104195	Slight	08/06/2021	Tue	1400	330812 139108	0	0	1	402V001A 405V002B 308V002A 408V001B	0 0 0	Light	Fine without high winds	Dry	9 9
212105615	Slight	14/07/2021	Wed	0738	331011 139933	0	0	1	405V001A 404V001A	0 0 0	Light	Fine without high winds	Dry	21 5
212103736	Slight	18/07/2021	Sun	1539	330189 136105	0	0	2	501V001A 602V001B 403V001B	0 0 0	Light	Fine without high winds	Dry	9
212200068	Slight	21/07/2021	Wed	1410	330228 136006	0	0	4	405V002B 406V002B 406V001B 706V002B 706V001B	0 0 0	Light	Fine without high winds	Dry	9 9
212103800	Slight	23/07/2021	Fri	1027	326551 138353	0	0	1	405V001B	0 0 0	Light	Fine without high winds	Dry	9 9
212104283	Slight	02/08/2021	Mon	1001	330232 135991	0	0	1	201V002A 405V002A	0 0 0	Light	Fine without high winds	Dry	9 19 19
212200440	Serious	23/08/2021	Mon	1615	330114 136388	0	1	0		5 4 9	Light	Fine without high winds	Dry	9

Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months

Selection:

Notes:

Police Ref.	Acc Class	Date	Day	Time	Grid References	Casualties Ftl	Ser	Slt	Causation Factors/ Prob	Ped L M D	Light	Weather	Road Surface	Vehicle Types
212200489	Slight	29/08/2021	Sun	0917	327706 137222	0	0	1		0 0 0	Dark	Fine without high winds	Dry	9
212104401	Slight	06/09/2021	Mon	1735	329932 136766	0	0	2		0 0 0	Light	Fine without high winds	Dry	9 9
212104917	Serious	14/09/2021	Tue	2300	330902 141091	0	1	0	401V001A	0 0 0	Light	Fine without high winds	Dry	9
212200713	Slight	17/09/2021	Fri	0741	330976 141080	0	0	1	405V001A 406V001A 308V001B 408V002A	0 0 0	Light	Fine without high winds	Dry	9 9
212104760	Slight	24/09/2021	Fri	1830	329333 138221	0	0	2		0 0 0	Light	Fine without high winds	Dry	9 9
212104976	Slight	27/09/2021	Mon	1450	330162 136166	0	0	1	902V002A	0 0 0	Light	Fine with high winds	Dry	9 9
212200954	Slight	15/10/2021	Fri	1910	326035 138932	0	0	1	505V001A	0 0 0	Dark	Fine without high winds	Dry	9
212200984	Slight	18/10/2021	Mon	0134	330896 139444	0	0	1	408V001A 409V001A 510V001B	0 0 0	Dark	Other	Dry	9
212105228	Slight	20/10/2021	Wed	2100	329434 136974	0	0	1		0 0 0	Dark	Raining without high winds	Wet/Damp	3 19
212201201	Slight	13/11/2021	Sat	2020	330357 135589	0	0	1	405V001A 406V001A 605V002B	0 0 0	Dark	Fine without high winds	Dry	9 3
212105902	Slight	02/12/2021	Thu	1711	330804 138979	0	0	1		0 0 0	Dark	Raining with high winds	Wet/Damp	9 9
212200134	Serious	07/12/2021	Tue	2115	330407 135360	0	1	0	103V002B 305V001B 306V002B 307V002B 403V001B	0 0 0	Dark	Raining with high winds	Wet/Damp	9 5
212201482	Slight	13/12/2021	Mon	0856	329581 136834	0	0	1	403V001A 405V001A	0 0 0	Light	Fine without high winds	Dry	9 9 20
22SE021	Slight	07/01/2022	Fri	0830	329584 136838	0	0	1	405V1A	0 0 0	Light	Raining without high winds	Wet/Damp	9 9
222200238	Slight	14/01/2022	Fri	0915	326039 139013	0	0	2		6 9 9	Light	Fine without high winds	Dry	1
22SE083	Slight	21/01/2022	Fri	0807	330599 138026	0	0	1	405V1A 701V1A	0 0 0	Dark	Fine without high winds	Wet/Damp	9 19
222202036	Slight	03/02/2022	Thu	2150	330738 138659	0	0	1	501V002A	0 0 0	Dark	Fine without high winds	Dry	9 9

Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months

Selection: **Notes:**

Police Ref.	Acc Class	Date	Day	Time	Grid References	Casualties Ftl	Ser	Slt	Causation Factors/ Prob	Ped L M D	Light	Weather	Road Surface	Vehicle Types
222202513	Slight	09/03/2022	Wed	0639	331107 140576	0	0	1	401V001A 403V001A 405V001A 409V001A	0 0 0	Light	Fine without high winds	Dry	9 9
222204221	Serious	01/04/2022	Fri	1709	326606 138331	0	1	0	505V001A	0 0 0	Light	Fine without high winds	Dry	9 9 9
22SE371	Slight	12/04/2022	Tue	2034	330545 137777	0	0	1	403V1B 406V1B 405V1B	0 0 0	Dark	Fine without high winds	Dry	9 3
222204410	Slight	22/04/2022	Fri	1145	329060 137760	0	0	2	503V001A	0 0 0	Light	Fine without high winds	Dry	9
22SE204	Serious	01/05/2022	Sun	1956	331033 141107	0	2	1	501V1A 502V1A 602V1B 103V1A 108V1A 307V1A	0 0 0	Light	Raining without high winds	Wet/Damp	9 9
22SE217	Serious	07/05/2022	Sat	1240	330920 139394	0	1	0	405V1A 406V1A	0 0 0	Light	Fine without high winds	Dry	9 4
222204570	Slight	08/05/2022	Sun	2036	330212 134324	0	0	1	307V001A 405V001A 406V001A	0 0 0	Dark	Fine without high winds	Dry	9 9
22SE322	Slight	12/05/2022	Thu	0720	328570 136991	0	0	2	501V1A 502V1B 503V1A 602V1A	0 0 0	Dark	Fine without high winds	Dry	9 19
222204880	Serious	02/06/2022	Thu	0920	329898 138177	0	1	0	410V001A 509V001A	9 9 0	Light	Fine without high winds	Dry	9
222202926	Slight	24/06/2022	Fri	1415	331005 140896	0	0	1		0 0 0	Light	Unknown	Dry	1 1
2300006	Slight	29/08/2022	Mon	0744	325997 138943	0	0	1	306V1A 706V1A 410V1A	0 0 0	Light	Fine without high winds	Dry	9
222300087	Serious	15/09/2022	Thu	1813	330168 136195	0	1	1	802C002A 803C002B	5 9 9	Light	Fine without high winds	Dry	5
222204001	Slight	18/09/2022	Sun	1300	330333 137848	0	0	1		0 0 0	Light	Fine without high winds	Dry	9 16
222300177	Slight	13/10/2022	Thu	1616	331031 140059	0	0	3	306V001A 405V002A	0 0 0	Light	Fine without high winds	Dry	9 9
2300165	Slight	07/11/2022	Mon	1200	329200 136993	0	0	1	310V2B 410V2B	0 0 0	Light	Other	Wet/Damp	9 1
222204940	Slight	11/11/2022	Fri	1900	330017 136741	0	0	1		0 0 0	Dark	Fine with high winds	Dry	1 9
222205315	Slight	01/12/2022	Thu	1705	330840 139233	0	0	2		0 0 0	Dark	Fog or mist	Wet/Damp	9 9 9

Accidents between dates **01/04/2018** **and** **31/03/2023** (60) months

Selection: **Notes:**

Police Ref.	Acc Class	Date	Day	Time	Grid References	Casualties Ftl	Ser	Slt	Causation Factors/ Prob	Ped L M D	Light	Weather	Road Surface	Vehicle Types
222300427	Slight	15/12/2022	Thu	1725	330283 135858	0	0	1	405V002A 406V002A 307V002B 509V002B 510V002B	0 0 0	Dark	Fine without high winds	Frost/Ice	9 9
2300384	Slight	05/01/2023	Thu	1728	330396 135426	0	0	1	405V1A 405V2A	0 0 0	Light	Raining without high winds	Wet/Damp	9 1
2300610	Serious	17/01/2023	Tue	0600	326970 137916	0	18	52	103V1A 103V2A 109V2A 109V3A 409V2A 410V2A	0 0 0	Dark	Fine without high winds	Frost/Ice	4 11 11
2300907	Slight	15/02/2023	Wed	1448	326627 138320	0	0	3	409V1A 505V1A 103V1B 108V1B	0 0 0	Light	Raining without high winds	Wet/Damp	9 19
2300957	Serious	20/02/2023	Mon	0622	327907 137188	0	1	0	102V1B 803C1A 805C1A 806C1A 809C1A	9 9 0	Dark	Fine without high winds	Wet/Damp	9
2300968	Slight	22/02/2023	Wed	0900	328693 136958	0	0	2	406V1B 605V1B	0 0 0	Light	Fine without high winds	Dry	3 9
2301124	Slight	16/03/2023	Thu	1420	330640 138336	0	0	1	402V1A 505V1B	0 0 0	Light	Fine without high winds	Wet/Damp	9
2301141	Slight	17/03/2023	Fri	1354	330004 136754	0	0	1	406V1B 408V2A	0 0 0	Light	Fine without high winds	Dry	3 9
2301184	Serious	19/03/2023	Sun	0556	330371 135511	0	1	0	306V1B 307V1B 602V1A 805C1A 806C1A 809C1B	8 9 9	Dark	Fine without high winds	Wet/Damp	9

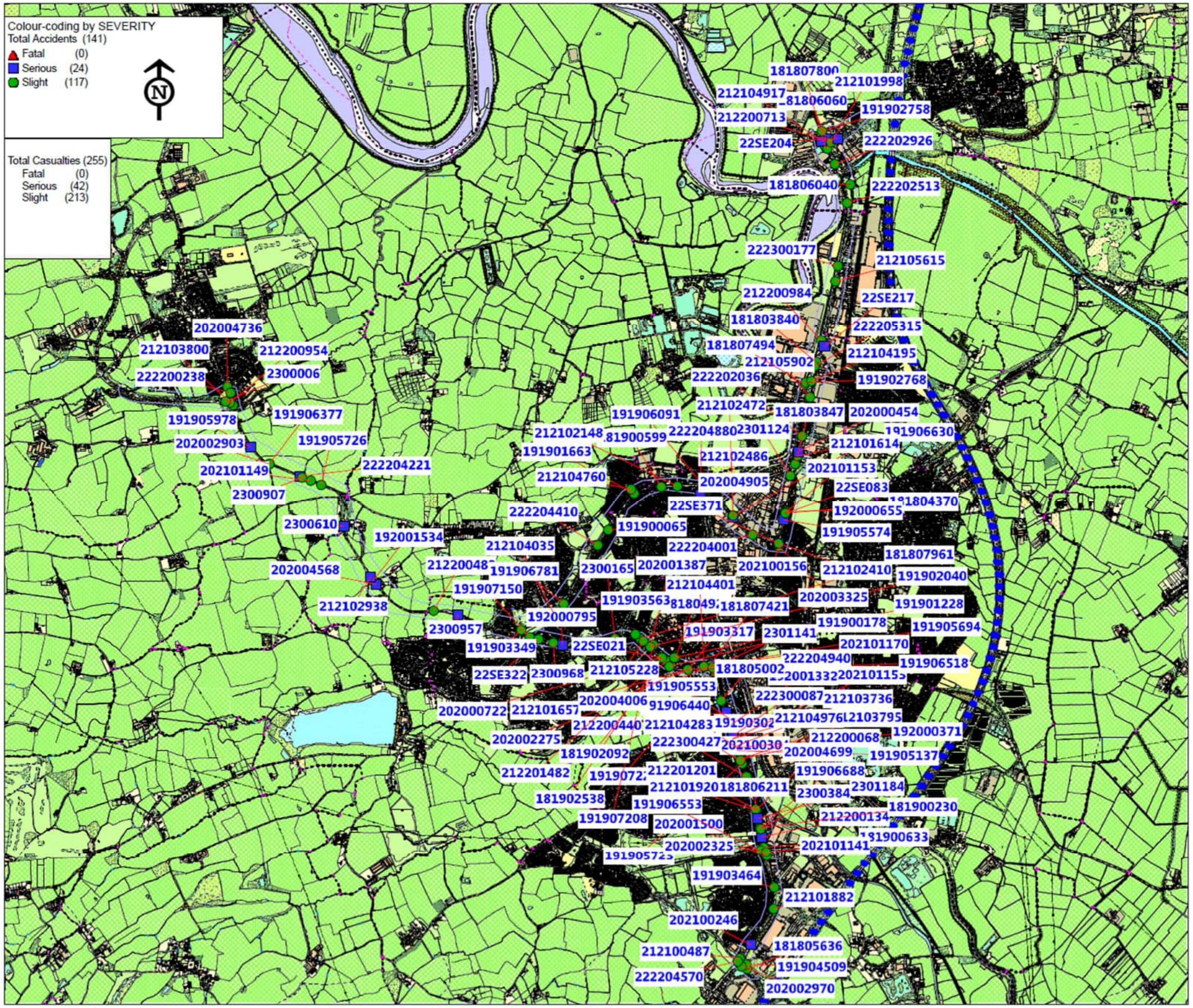
Column Totals **Slight :** 117 **Serious :** 24 **Fatal :** 0

Casualties: 0 42 0

Light : 99 **Dark :** 42

Dry : 105 **Wet :** 34

Total number of accidents listed: 141



A39 & A38 Northern Route Bridgwater WSP UK Ltd

Selected Range of Accidents between dates 01/04/2018 and 31/03/2023

AccsMap version 6.3

Additional Information

CORRECT AT TIME OF PRINTING

Somerset Council

Somerset Road Safety

SCALE	1 : 29600
DATE	13/02/2024
DRAWING No.	01/2024
DRAWN BY	IJF
CHECKED BY	MW

17

People and communities

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17A

Determinants of health review

Confidential

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6 Determinants of health review

6.1 Overview

6.1.1. EDF Energy Nuclear Generation Limited (hereafter referred to as the 'Applicant') is applying for consent from the Office for Nuclear Regulation (ONR) to decommission the Hinkley Point B Nuclear Power Station (hereafter referred to as 'HPB').

6.1.2. A Scoping Report[1] was prepared to support a request by the Applicant pursuant to Regulation 6(1) of Nuclear Reactors (Environmental Impact Assessment for Decommissioning) Regulations 1999 (as amended[2]) (hereafter referred to as 'EIADR') for a written Pre-application Opinion to be provided by the ONR with respect to the scope of the Environmental Impact Assessment (EIA) for the Proposed Works. Consequently, the ONR consulted with relevant bodies and issued the Applicant with a Pre-application Opinion.

6.1.3. The Pre-Application Opinion noted the following within Section 3.1.2 Omissions from the Scoping Report, Paragraph 15:

> "*In the environmental topic chapters, there are a number of receptors and aspects that do not appear to have been considered in the scoping exercise. These include: impacts to human health …*"

6.1.4. As set out in the Pre-Application Opinion Technical Note provided in **Appendix 5B** of this ES. The ONR Guidance on the Nuclear Reactors (Environmental Impact Assessment for Decommissioning) Regulations[3] states that "*Potential impacts of a decommissioning project on health could include noise and vibration nuisance, changes in air quality, and changes to how people feel about their local community affecting their sense of wellbeing*." Potential impacts on physical and mental health are therefore considered within the context of the relevant environmental aspect assessments rather than in a stand-alone chapter. This approach has been taken to reflect the potential human health effects as they arise across different aspects of the EIA and the development of relevant baseline information and assessment methodologies is included within these environmental aspect chapters.

6.1.5. This appendix has been prepared to provide further context and information about how the health determinants, as defined in Institute of Environmental Management and Assessment (IEMA) Guide to Effective Scoping of Human Health in Environmental Impact Assessment[4], have been considered inherently within the ES.

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[1] EDF Energy Nuclear Generation Limited. 2022. *Hinkley Point B Nuclear Power Station – Scoping Report.*
[2] UK Government (1999). *Nuclear Reactors (Environmental Impact Assessment for Decommissioning) Regulations 1999 (as amended)* (Online) Available at: https://www.legislation.gov.uk/uksi/1999/2892/contents/made (Accessed: August 2024)
[3] ONR (2023). Guidance on the Nuclear Reactors (Environmental Impact Assessment for Decommissioning) Regulations. Available at: Nuclear Reactors (Environmental Impact Assessment for Decommissioning) Regulations (EIADR) | Office for Nuclear Regulation (onr.org.uk) (Accessed: August 2024).
[4] Institute of Environmental Management and Assessment (IEMA) (2022). Guide to Effective Scoping of Human Health in Environmental Impact Assessment. (Online). Available at: IEMA - Launch of the EIA guidance for considering impacts on human health - November 2022. (Accessed: August 2024)

6.2 Review of Health Determinants

6.2.1. As set out in the IEMA guidance[4], "*there can be a temptation to scope in a long list of wider health determinants to avoid the risk of later challenge. This would be contrary to proportionality and could be detrimental to delivering an effective assessment of the likely significant health effects. Scoping may be informed by careful application of the precautionary principle.*"

6.2.2. **Table 17A-1** sets out the wider determinants of health associated with the World Health Organisations (WHO) definition of health and sets out an indicative list of wider determinants of health that cover the issues commonly encountered in EIAs.

6.2.3. Health pathways are complex and affected by multiple determinants. The IEMA guidance states that "*judgement should be used to cross-reference such overlaps*" to consider the most relevant health determinant.

6.2.4. **Table 17A-1** also provides a summary of where the health determinants have been considered in the ES (where appropriate in the context of the Proposed Works).

Table 17A-1 - EIA determinants of health[4] and consideration in the Environmental Statement

Categories	Wider determinants of health	Consideration in the Environmental Statement
Health related behaviours	Physical activity	**Chapter 6: Air Quality** of the ES considers the air quality effects of the Proposed Works on users of the King Charles III Coast Path, Public Right of Way (PRoW). **Chapter 14: Landscape and Visual Impact Assessment (LVIA)** of the ES considers the effects of the Proposed Works on visual amenity in views from settlements, recreational routes and transport routes. **Chapter 15: Noise and Vibration** of the ES considers the noise effects of the Proposed Works on users of the King Charles III Coast Path. The effects on walkers, cyclists and marine users are considered in **Chapter 17: People and Communities.**
	Risk taking behaviour	The Site will remain under the HPB Nuclear Site Licence for the duration of the Proposed Works and follows relevant health and safety legislation and guidance (such as the Health and Safety at Work Act 1974 (as amended)[5]). It is considered that the Proposed Works would have a negligible effect on risk taking behaviour as a result of the well-established safety culture on site. In addition, consideration of the potential effects of the Proposed Works in the context of major accidents and disasters are considered in **Chapter 18: Major Accidents and Disasters.**

[5] UK Government (1974) Health and Safety at Work Act (as amended). (Online). Available at: Health and Safety at Work etc. Act 1974 (legislation.gov.uk). (Accessed August 2024).

Categories	Wider determinants of health	Consideration in the Environmental Statement
	Diet and nutrition	The Proposed Works would have no effect on diet and nutrition and therefore are not considered further in the ES.
Social environment	Housing	**Chapter 17: People and Communities** considers the baseline context of the housing market at the local level, in comparison to the national level and concludes that the volume of house sales in the Three Districts substantially exceeds the volume of sales likely to be generated by the small proportion of the workers at HPB who may move away.
	Relocation	The effects of the Proposed Works on the local and regional employment market, effects on staff released from the workforce and local economy are considered in **Chapter 17: People and Communities.**
	Open space, leisure and play	as the spatial extent of the Proposed Works is limited to the existing HPB operational footprint, there will be limited direct, physical effects on areas of open space, leisure and play. **Chapter 6: Air Quality** of the ES considers the air quality effects of the Proposed Works on users of the King Charles III Coast Path. **Chapter 14: LVIA** of the ES considers the effects of the Proposed Works on visual amenity in views from settlements, recreational routes and transport routes. **Chapter 15: Noise and Vibration** of the ES considers the noise effects of the Proposed Works on users of the King Charles III Coast Path.

Categories	Wider determinants of health	Consideration in the Environmental Statement
		The effects on walkers, cyclists and marine users are considered in **Chapter 17: People and Communities.**
	Transport modes, access and connections	**Chapter 16: Traffic and Transport** of the ES considers the potential effects of the Proposed Works on the local highway network and includes consideration of road safety.
	Community safety	The Applicant has implemented a well-established integrated management system (IMS) across Nuclear Operations for decades; the IMS is a cornerstone of enacting normal business activities, as well as the generation and decommissioning strategies. While transitioning to decommissioning, the Applicant has strengthened our strong process culture which is documented in the IMS. The two general aims of the IMS are: ▪ To improve the safety performance including environmental safety of the organisation through the planning, control, and supervision of safety related activities in normal, transient, and emergency situations. ▪ To foster and support a strong safety culture through the development and reinforcement of good safety attitudes, values and behaviour in individuals and teams to allow them to carry out their tasks safely. The Applicant will continue to be committed to engaging with stakeholders at all phases in the decommissioning process, focusing on those who may be affected by the decommissioning works. The Applicant will develop and implement a stakeholder communications plan that includes community engagement before works that may cause disturbance in the Works Area commence.

Categories	Wider determinants of health	Consideration in the Environmental Statement
		Chapter 16: Traffic and Transport of the ES considers the potential effects of the Proposed Works on the local highway network and includes consideration of road safety. In addition, consideration of the potential effects of the Proposed Works in the context of major accidents and disasters is considered in **Chapter 18: Major Accidents and Disasters.**
	Community identity, culture, resilience and influence	Nuclear energy generation is embedded into the local area, with HPB having being operational since 1976, and a new nuclear power station (Hinkley Point C) under construction, which is anticipated to be operational at the end of the decade. As one of the larger employers in Somerset, the effects of the Proposed Works on the local and regional employment market, effects on staff released from the workforce and local economy are considered in **Section 17.10** of **Chapter 17: People and Communities.** The Applicant is committed to continued engagement with stakeholders at all phases in the decommissioning process, focusing on those who may be affected by the Proposed Works. The Applicant will develop and implement a stakeholder communications plan that includes community engagement before works that may cause disturbance commence in the Works Area. In addition, **Chapter 13: Historic Environment** of the ES considers the effects of the Proposed Works on heritage assets, through either disturbance or a change to setting. **Chapter 14: LVIA** of the ES considers the effects of the Proposed Works on visual amenity in views from settlements, recreational routes and transport routes.

Categories	Wider determinants of health	Consideration in the Environmental Statement
	Social participation, interaction and support	The existing quarterly Site Stakeholder Group (SSG) meetings will continue to be utilised to provide an update on current site activities throughout the Preparations for Quiescence phase. Details of tourist attractions within the area are provided in **Section 17.5** of **Chapter 17: People and Communities.** The effects on walkers, cyclists and marine users are considered in **Section 17.10** of **Chapter 17: People and Communities.**
Economic environment	Education and training	The Proposed Works will not impact on the ability to access education in the local area, as there will be no change to population or impact on facilities.
	Employment and income	The effects of the Proposed Works on the local and regional employment market, effects on staff released from the workforce and local economy are considered in **Chapter 17: People and Communities.**
Bio-physical environment	Climate change mitigation and adaption	**Chapter 7: Climate Change** of the ES considers the potential effects of the Proposed Works with respect to climate change, specifically in relation to greenhouse gas (GHG) emissions and considers the resilience of the Proposed Works to climate change in **Appendix 7B**. **Chapter 11: Surface Water and Flood Risk** considers effects of the Proposed Works to offsite people, property and infrastructure.

Categories	Wider determinants of health	Consideration in the Environmental Statement
	Air quality	**Chapter 6: Air Quality** of the ES considers the air quality effects of the Proposed Works on human and ecological receptors.
	Water quality or availability	**Chapter 10: Coastal Management and Water Quality**, **Chapter 11: Surface Water and Flood Risk** and **Chapter 12: Soils, Geology and Hydrogeology** of the ES consider the effects of the Proposed Works on water quality.
	Land quality	**Chapter 12: Soils, Geology and Hydrogeology** of the ES considers the effects of the Proposed Works on land quality.
	Noise and vibration	**Chapter 15: Noise and vibration** of the ES considers the noise and vibration effects of the Proposed Works on human receptors.
	Radiation	The Site will remain under the HPB Nuclear Site Licence and is therefore highly regulated in relation to radioactivity. Further information is provided in **Chapter 20: Radioactive Wastes and Discharges** of the ES.
Institutional and built environment	Health and social care services	The Proposed Works would not impact on the ability to access health services within the area, as there will be no change to population or impact on health providing facilities.

Categories	Wider determinants of health	Consideration in the Environmental Statement
	Built environment	The Proposed Works comprises the dismantling and decommissioning of infrastructure within the Works Area. The Site will remain a Nuclear Licenced Site and therefore highly restricted, to maintain safe separation from the public for the duration of the Proposed Works, until the decommissioning is complete, and the Site is assumed to be left as brownfield, for future development. Visible built form (such as the Safestore) will be present on the Site until its dismantling during Final Site Clearance. **Chapter 14: LVIA** of the ES considers the effects of the Proposed Works on visual amenity in views from settlements, recreational routes and transport routes. Other chapters within the ES, such as **Chapter 18: Major Accidents and Disasters** and **Chapter 19: Conventional Waste** consider other factors of this determinant of health.
	Wider societal infrastructure and resources	As an operating nuclear power station, HPB provided carbon neutral electricity to the UK between 1976 – 2022 and supported a workforce and supply chain through construction, operation and maintenance and currently, defueling. The Proposed Works will continue to interact with wider societal infrastructure and resources for its duration. These effects are considered within the ES, with specific reference to **Chapter 11: Surface Water and Flood risk**, **Chapter 16: Traffic and Transport**, **Chapter 17: People and Communities** and **Chapter 19: Conventional Waste**.

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18

Major accidents and disasters

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18A

Major accident and disaster criteria for magnitude

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18A Major accident and disaster criteria for magnitude

18A.1.1. The ES methodology in **Chapter 18: Major accidents and disasters**, **Section 18.7** describes the method used to assess the significance of a major accident and disaster effect for the Environmental Statement (ES). This appendix describes the magnitude criteria used to assess the damage/harm arising from a potential major accident and disaster, and the reasons for their selection. The criteria apply to the major hazard and disaster assessment and do not apply to other chapters.

18A.1.2. Effects that are relevant to the Proposed Works, but do not meet the magnitude thresholds for a major accidents and disasters, are assessed in other chapters, for example **Chapter 8: Terrestrial Biodiversity and Ornithology, Chapter 9: Marine Biodiversity and Chapter 12: Soils and Geology**, such as spills from construction vehicles, if they are considered likely and reasonably foreseeable. This means that a comprehensive range of effects will be addressed under the different aspects of the ES overall.

Magnitude criteria

18A.1.3. These criteria are aligned to and largely extracted from definitions used in commonly applied major hazard guidance for the environment CDOIF[1] and risk tolerability criteria for people applied by the Health and Safety Executive.

18A.1.4. The criteria in the CDOIF and HSE guidance for each receptor group was established with input from relevant specialists (such as ecologists and surface water specialists for non-human environmental criteria) to confirm the relevance and vulnerability of potential receptors (e.g., particular species) and, using their professional judgement, to provide input on the extent and nature of harm and recovery time.

18A.1.5. In relation to major accidents and disasters' magnitude criteria the following factors are important:

- For non-human receptor groups, both severity of harm, **Table 18A-1**, and duration of harm (i.e. its persistence - the recovery period over which the environment would be restored), **Table 18A-2** combine to establish the magnitude level, **Table 18A-3**.
- For human receptors, both severity of harm (se**e Table 18A-4)** and the number of people affected (see **Table 18A-5**) combine to establish the estimate of magnitude level, as shown in **Table 18A-6**.

18A.1.6. To distinguish between potential major accidents of differing scale, the magnitude of potential major accidents and disasters are categorised into one of four categories: **Low, Medium, High,** and **Very High**. Any scenario which does not meet the criteria of a major accident or disaster is simply listed is **Not MA&D** (i.e., not major accident and disaster).

Receptor Sensitivity

18A.1.7. Receptor sensitivity, which relates to the intrinsic value and/ or sensitivity of receptors, is embedded within the 'severity of harm,' 'duration of harm' and number of people affected criteria to establish their threshold levels and scaling factors. For this reason, receptor sensitivity is not explicitly considered in the major accidents and disasters assessment.

Magnitude of Harm – Non-human Receptors Groups

18A.1.8. The environmental (non-human) criteria have been directly extracted from that of the CDOIF guidance which sets a maximum or minimum severity ranking for some receptors. Where this is the case, the severity of harm categories that do not apply to those receptors are noted as non-applicable (N/A) in **Table 18A-1.**

18A.1.9. Four categories of severity of harm criteria are considered (see **Table 18A-1)**:

- **Not Significant**[1]: Any scenario which does not meet the criteria of a major accident or disaster, then it is simply listed is Not MA&D (i.e., not major accident and disaster). This level of harm is below the minimum threshold determined for a major accident or disaster in the CDOIF (for non-human receptor groups) guidance; and
- **Severe, Large, Very Large**: These represent increasing magnitudes of harm or damage to populations or environmental receptors.

18A.1.10. In **Table 18A-1,** where two threshold parameters are given within a single category, e.g., <0.5 ha or 10% of a designated site of national importance, the lesser of the two is taken to be the threshold for a given receptor. This ensures there is no gap between the 'severity of harm' categories.

18A.1.11. In line with the CDOIF and Department for the Environment, Transport and Regions (DETR) guidance, destruction of a Grade 2* or Grade 2 listed building is not considered to be a major accident as they are not considered to be historic and heritage assets of the highest significance under the National Heritage List for England[2]. However, if the incident which led to their destruction could endanger human life, or a relevant population of particular species, then it would be considered as a major accident under the appropriate receptor. However, Grade 1 buildings are those of 'national architectural or historic importance' according to the DETR guidance and are afforded an additional level of protection.

[1] The CDOIF guidance used the terminology of 'significant' for this severity of harm and defines it as a level of harm which might lead to significant pollution, but one which is not considered a major accident or disaster. While the CDOIF guidance uses the term 'significant' for this, this is very different to how the term is used in ES and therefore this criterion term has been replaced by 'not significant' for ES purposes.

[2] Historic England (2024) What are Listed Buildings? (Online) Available at: https://historicengland.org.uk/listing/what-is-designation/listed-buildings/ (Accessed on August 2024).

Table 18A-1 - Major accidents and disasters severity of harm criteria (non-human receptor groups)

	Severity of harm			
Receptor Type	**Not Significant**	**Severe**	**Large**	**Very Large**
Designated land/ water sites (internationally important)	<0.5 ha or <5% (<5% linear feature or population).	>0.5 ha or 5-25% of site area or 5-25% of associated linear feature or population.	25-50% of site area, associated linear feature or population.	>50% of site area, associated linear feature or population.
Designated land/ water sites (nationally important)	<0.5 ha or <10%.	>0.5 ha or 10-50% of site area, associated linear feature or population.	>50% of site area, associated linear feature population.	N/A.
Other designated land	<10 ha or <10%.	10-100 ha or 10-50% of land.	>100 ha or >50% of land.	N/A.
Scarce habitat	<2 ha or <10%.	2-20 ha or 10-50% of habitat.	>20 ha or >50% of habitat.	N/A.
Widespread habitat (non-designated land)	<10 ha.	Contamination of 10-100 ha of land, preventing growing of crops, grazing of domestic animals or renders the area inaccessible to the public because of possible skin contact with dangerous substances. Alternatively, contamination of 10ha or more of vacant land.	100 – 1,000 ha (applied as per text under ‘Severe’).	>1,000 ha (applied as per text under ‘Severe’).
Widespread habitat (non-designated water)	N/A.	Contamination of aquatic habitat which prevents fishing or aquaculture or renders it inaccessible to the public.	N/A.	N/A.

Severity of harm				
Particular species (these criteria apply nationally)	Loss of <1% of animal or <5% of plant ground cover in a habitat.	Loss of 1-10% of animal or 5-50% of plant ground cover.	Loss of 10-90% of animal or 50-90% of plant ground cover.	Total loss (>90%) of animal or plant ground cover.
Fresh and estuarine water habitats	Impact below that indicated to be severe.	Water Framework Directive (WFD) chemical or ecological status lowered by one class for 2-10 km of watercourse or 2-20 ha or 10-50% area of estuaries or ponds. Interruption of drinking water supplies, as per Groundwater Source of Drinking Water.	WFD chemical ecological status lowered by one class for 10-200 km of watercourse or 20-200 ha or 50-90% area of estuaries and ponds. Interruption of drinking water supplies, as per Groundwater Source of Drinking Water.	WFD Chemical or ecological status lowered by one class for >200 km of watercourse or >200 ha or >90% area of estuaries and ponds. Interruption of drinking water supplies, as per Groundwater Source of Drinking Water.
Marine	<2 ha littoral or sub-littoral zone, <100 ha of open sea benthic community, <100 dead sea birds (<500 gulls), <5 dead/ significantly impaired sea mammals.	2-20 ha littoral or sub-littoral zone, 100-1,000 ha of open sea benthic community, 100-1,000 dead sea birds (500-5,000 gulls), 5-50 dead/ significantly impaired sea mammals	20-200 ha littoral or sub-littoral zone, 100-10,000 ha of open sea benthic community, 1,000-10,000 dead sea birds (5,000-50,000 gulls), 50-500 dead/ significantly impaired sea mammals.	>200 ha littoral and sub-littoral zone, >1,000 ha of open sea benthic community, >10,000 dead sea birds (>50,000 gulls), >500 dead/ significantly impaired sea mammals.
Groundwater source of drinking water	Interruption of drinking water supply <1,000 person-hours.	Interruption of drinking water supplied from a ground or surface source (where persons affected x duration in hours (at least 2) >1,000).	>1 x 10^7 person-hours interruption of drinking water (a town of ~100,000 people losing supply for month).	>1 x 10^9 person-hours interruption of drinking (~1 million people losing supply for 1 month).
Groundwater – non-drinking water source	<1 ha.	1-100 ha of aquifer where water quality standards are breached (or hazardous substance is discernible).	100-10,000ha.	>10,000ha.

Severity of harm				
Soil or sediment	Contamination not leading to environmental damage (as per ELD), or not significantly, affecting overlying water quality.	Contamination of 10-100 ha of land etc. as per widespread habitat; contamination sufficient to be deemed environmental damage (Environmental Liability Directive).	Contamination of 100-1,000 ha of land, as per widespread habitat; contamination rendering the soil immediately hazardous to humans (e.g., skin contact) or the living environment, but remediation available.	Contamination of >1,000 ha of land, as per widespread habitat; contamination rendering the soil immediately hazardous to humans (e.g., skin contact) or the living environment and remediation difficult or impossible.
Historic environment[3]	Damage below a level at which designation of importance would be withdrawn.	Damage sufficient for designation of importance to be withdrawn.	Feature of historic environment subject to designation of importance entirely destroyed.	N/A.

[3] Historic environment receptors are those where the NPPF considers their harm should be treated as 'wholly exceptional'. These are historic and heritage assets of the highest significance, notably scheduled monuments, protected wreck sites, registered battlefields, Grade 1 Listed buildings, and World Heritage Sites. Associated conservation areas that contribute to their significance are also included.
In line with the CDOIF (CDOIF, 2016) and DETR guidance (DETR, 1999), destruction of Grade II listed buildings, or Grade II registered park and gardens, are not considered to be a Major Accident. However, if the incident which led to their destruction could endanger human life, or a relevant population of particular species, then it would be considered as a major accident under the appropriate receptor. Damage to Grade II assets is not considered to be 'wholly exceptional' under the National Policy Framework (Ministry of Housing, Communities and Local Government, 2019).

Duration of harm – non-human receptor groups

18A.1.12. The duration of harm, i.e., the recovery period, is also a factor in establishing criteria for the magnitude relating to major accidents and disasters on non-human receptors. This is given in **Table 18A-2.** The criteria are taken directly from the CDOIF guidance.

18A.1.13. In general terms a receptor which can recover quickly from an event is considered to have suffered a lesser level of harm than one that does not recover or recovers only after a very long time. This concept is recognised in the duration criteria, which takes account of the ability of the receptor to recover, and the importance given to the receptor by society. Duration criteria therefore differ by receptor type, and what is considered short term for one receptor type is not the same as that of another.

18A.1.14. Four categories of duration are considered: **Short, Medium, Long**, and **Very Long** term.

Table 18A-2 - Major accidents and disasters duration of harm criteria (non-human receptor groups)

Description	Short term	Medium term	Long term	Very long term
Groundwater or surface water drinking water source (public or private)	N/A.	N/A.	Harm affecting drinking water source or Source Protection Zone (SPZ) <6 years.	Harm affecting drinking water source or SPZ >6 years.
Groundwater (except drinking water sources):	Water Framework Directive (WFD) hazardous substances <3 months.	WFD hazardous subs >3 months.	WFD hazardous subs >6 years.	WFD hazardous subs >20 years.
	WFD non-hazardous substances <1 year.	WFD non-hazardous substances >1 year.	WFD non-hazardous substances >10 years.	WFD non-hazardous substances >20 years.
Surface water (except drinking water sources - see above)	<1 year.	>1 year.	>10 years.	>20 years.
Land	<3 years or <2 growing seasons for agricultural land.	>3 years or >2 growing seasons for agricultural land.	>20 years.	>50 years.
Historic environment	Can be repaired in <3 years, such that its designation can be reinstated.	Can be repaired in >3 years, such that its designation can be reinstated.	Feature destroyed, cannot be rebuilt, all features except world heritage site.	Feature destroyed, cannot be rebuilt, world heritage site.

18A.1.15. **Table 18A-3** provides a matrix which combines the factors of severity of harm/damage criteria (see **Table 18A-1**) with duration of harm criteria (see **Table 18A-2)** to establish magnitude criteria.

Table 18A-3 - Magnitude matrix (non-human receptor groups)

	Duration of Harm			
Severity of Harm	**Short**	**Medium**	**Long**	**Very Long**
Very Large	Not MA&D	**High**	**Very High**	**Very High**
Large	Not MA&D	**Medium**	**High**	**Very High**
Severe	Not MA&D	**Low**	**Medium**	**High**
Not Significant	Not MA&D			

Magnitude of Harm – Human Receptor Groups

18A.1.16. The descriptions for population and human health severity criteria in **Table 18A-4** have been developed to include wider health, social and economic effects as well as direct physical harm. These effects are drawn from the Civil Contingencies guidance15. The descriptions incorporate relevant aspects of the health, social and economic effects in the guidance, tailored to the severity of harm levels used in **Table 18A-4** and major accidents and disasters that are relevant to the Proposed Works.

18A.1.17. As for non-human receptors, four categories of severity of harm criteria (see **Table 18A-4**) are considered:

- **Low:** simply listed as **Not MA&D** (i.e., not major accident and disaster). This level of harm is below the minimum threshold determined for a major accident or disaster in Reducing Risk Protecting People (R2P2) (for human receptor groups); and
- **Medium, High, Very High**: These represent increasing magnitudes of harm or damage to populations or environmental receptors.

18A.1.18. Where the severity of harm is at the ‘Low’ and ‘Medium’ level, the severity of harm criteria for workers differs from that for members of the public. This is consistent with HSE’s R2P2 which reasons that individual members of the public ‘have the risk imposed on them in the wider interest of society’ whereas workers accept the risk, have more control over it and benefit from the activity. It is also easier to separate the public from the hazard and therefore reduce their risk.

18A.1.19. Where the severity of harm is ‘High’ or ‘Very High’ i.e., a substantial number of fatalities and life changing injuries arise from a single event, the severity of harm is the same for the workers as for the public. In setting criteria for societal risk, the HSE does not make the distinction between workers and the public.

18A.1.20. Where the severity of harm is ‘High’ or ‘Very High’ the wider health, social and economic effects that apply differ slightly, reflecting the differences in how the public and workers may be affected. For example, damage to residential properties is an effect upon the public and is not applicable to workers.

Table 18A-4 - Major accidents and disasters severity of harm criteria (human receptor groups)

	Severity of Harm			
Receptor Type	**Not Significant**	**Severe**	**Large**	**Very Large**
Human populations (public)	Small number of minor injuries.	Substantial number of people requiring medical attention. Events of this magnitude may also involve some damage to housing, with low numbers of people being displaced. Potential for localised interruption to utilities and damage to infrastructure.	Multiple life changing injuries and/ or potential loss of life in low numbers Events of this magnitude are also likely to involve: many people requiring medical treatment; many people suffering long term mental health issues related to the event; housing and business premises rendered uninhabitable with many people displaced for extended periods; Serious adverse medium-term economic effects locally; high clean-up and recovery costs to the local community; potential for disruption to regional infrastructure, utilities and services; and incident requiring emergency response at County/Regional scale.	Potential loss of life in high numbers and/or substantial number of life changing injuries Events of this magnitude are also likely to involve: very many people requiring medical treatment; widespread mental health issues related to the event; large areas of housing and business premises rendered uninhabitable with large numbers of people displaced for long extended periods; extensive adverse long-term economic effects regionally and nationally; extensive clean-up and recovery costs to society; potential for disruption to regional infrastructure, utilities and services; and incident requiring emergency response at National/International scale.
Human populations (workers)	Substantial number of people requiring medical attention.	Multiple life changing injuries.	Multiple life changing injuries and potential loss of life in low numbers. Events of this magnitude are also likely to involve: many people suffering long term mental health issues related to the event; serious adverse medium-term economic effects to locally; high clean-up and recovery costs to the local community; potential for disruption to regional infrastructure, utilities and services; and incident requiring emergency response at County/Regional scale.	Potential loss of life in high numbers and substantial number of life changing injuries. Events of this magnitude are also likely to involve: widespread mental health issues related to the event; extensive adverse long-term economic effects regionally and nationally; extensive clean-up and recovery costs to society; potential for disruption to regional infrastructure, utilities and services; and incident requiring emergency response at National/International scale.

Number of people affected

18A.1.21. For human receptors the magnitude is categorised based on the number of people affected (see **Table 18A-5**) to provide appropriate positioning against HSE risk tolerability concepts.

Table 18A-5 - Number of people affected (human receptor groups)

	Low	Medium – High	Very High
Human Populations	Less than 5	10s of people	100s of people

18A.1.22. The combination of harm severity and people affected for human receptors to determine magnitude is given in **Table 18A-6.**

Table 18A-6 - Major accidents and disasters duration of harm criteria (non-human receptor groups)

Severity of Harm	Number of people affected	
	Low to High	**Very High**
Very Large	**High**	**Very High**
Large	**Medium**	**High**
Severe	**Low**	**Medium**
Not Significant	**Not MA&D**	

18B

Impact Assessment of Scoped-In Scenarios

PUBLIC

example, damage to residential properties is an effect upon the public and is not applicable to workers.

18B Major accident and disaster criteria for magnitude Major accident and disaster criteria for magnitude

Table 18B-1 - Major accidents and disasters severity of harm criteria (non-human receptor groups)

<table>
<tr><th>Scoped in scenario</th><th>Potential impact on receptors (worst case)</th><th>Embedded measures</th><th>Relevant phases of the project</th><th>Severity</th><th>Likelihood</th><th>Significance</th></tr>
<tr><td rowspan="2">Major accidents associated with the Proposed Works resulting from a fire/ explosion and caused by accidental release of substances</td><td>Human population receptors
There is potential for a fire or explosion during the Proposed Works to impact the onsite workforce.

Whilst the majority of chemicals and fuels will be removed during the Preparations for Quiescence phase, there will be some residual inventories of hazardous substances that will be removed during Final Site Clearance phase.

There are no known explosive hazards other than remnant pressurised gases in piping systems where appropriate safety measures will be put in place to ensure that they have been depressurised and purged prior to removal.
Worst credible consequence: A small number (<5) of serious or fatal injuries to onsite workers from fires or explosion during removal works. The impact to offsite receptors is anticipated to be minimal and limited to the impact of any smoke plume.</td><td rowspan="2">The Site Licensee has prioritised the removal of chemicals and fuels from the Site as early as possible to allow safe decommissioning. This has resulted in the inventories of dangerous substances being substantially reduced, such that as of April 2024, HPB is no longer a COMAH Establishment. In addition, method statements for the identification and safe removal of all remaining dangerous substances will be developed as the Proposed Works progress.

The Site Licensee will continue to maintain an Integrated Management System (IMS) for the full life of the Proposed Works. The IMS will be maintained to the similar standard as currently implemented for complying with the COMAH Regulations as appropriate. The IMS will incorporate the principals of the Health and Safety at Work etc. Act 1974 and require:
▪ The hierarchy of controls to be embedded in the design where inherently safer options are selected wherever practicable.
▪ All activities will be subject to a suitable and sufficient risk assessment considering the impacts on people and the environment.
▪ The residual risk of harm from all activities will be reduced to As Low As Reasonably Practicable (ALARP).

The approach to the Proposed Works will be designed to reduce the risk so far as is practicable and then further preventative and control measures will be implemented to achieve ALARP. These measures will include:
▪ Site inspections will be carried out by all levels of management. Health and safety surveillances and audits will be carried out regularly by senior staff and safety officers.</td><td>Preparations for Quiescence, Final Site Clearance</td><td>Medium</td><td>Very small chance of occurring</td><td>Not Significant</td></tr>
<tr><td>Historic environment receptors
Given the distance between the Proposed Works and the receptors and the minimal inventory of hazardous chemicals on site, it is not considered credible that a fire or explosion on site could damage a historic environment receptor sufficiently to lead to a loss of classification.</td><td>Preparations for Quiescence, Final Site Clearance</td><td>Not MA&D</td><td>N/A</td><td>Not Significant</td></tr>
</table>

Scoped in scenario	Potential impact on receptors (worst case)	Embedded measures	Relevant phases of the project	Severity	Likelihood	Significance
		▪ Segregated storage of flammable, oxidising and combustible materials, which are stored in designated locations with good ventilation. All systems handling flammable materials will be designed to the appropriate design standard considering isolation and shutdown requirements. ▪ Appropriate fire and gas detection systems installed in areas where there is a risk of fires. ▪ Fire alarms and where suitable, automated and manual firefighting systems will be installed. Emergency response procedures will consider the potential for fires and will define the actions to be taken to minimize the risk arising from potential fires and prevent escalation.				
Major accidents associated with the Proposed Works. An accidental release of hazardous chemical or firewater run-off contaminated with Dangerous Substances	**Human population receptors** There is the potential for the accidental release of a hazardous substance to impact the onsite workforce. This could be caused by a variety of factors including corrosion, human error or fire. Various chemicals and fuels are used at the facility for current operations and, other than fuel, the storage of these will largely be removed prior to the Preparations for Quiescence phase. While there will be no storage of substances other than diesel fuel, there could be residual inventories of asphyxiants and corrosive materials in pipework which could cause injuries or fatalities to workers through asphyxiation, cryogenic burns, or corrosive burns, if not properly handled during removal. Note: The largest remaining inventory is anticipated to be the back-up diesel fuel but a spill of this will not have direct	The Site Licensee has prioritised the removal of chemicals and fuels from the Site as early as possible to allow safe decommissioning. This has resulted in the inventories of dangerous substances being substantially reduced, such that as of April 2024, HPB is no longer a COMAH Establishment. In addition, method statements for the identification and safe removal of all remaining dangerous substances will be developed as the Proposed Works progress. The Site Licensee will maintain an IMS for the full life of the Proposed Works. The IMS will be maintained to the same standard as currently implemented for complying with the COMAH Regulations as appropriate. The IMS will incorporate the principals of the Health and Safety at Work etc. Act 1974 and require: ▪ The hierarchy of controls to be embedded in the design where inherently safer options are selected wherever practicable. ▪ All activities will be subject to a suitable and sufficient risk	Preparations for Quiescence, Final Site Clearance	Medium	Very small chance of occurring	Not Significant

Scoped in scenario	Potential impact on receptors (worst case)	Embedded measures	Relevant phases of the project	Severity	Likelihood	Significance
	consequence to people, see fire scenario above or firewater below. Worst credible consequence: A single fatality or severe injury to a worker undertaking dismantling tasks impacted by residual corrosive materials or asphyxiants.	assessment considering the impacts on people and the environment. - The residual risk of harm from all activities will be reduced to ALARP. The approach to the Proposed Works will be designed to reduce the risk so far as is practicable and then further preventative and control measures will be implemented to achieve ALARP. These additional measures will include: - The decommissioning of the surface water drainage, bunding and containment, and any other safeguards will be assessed against the ongoing risk of major accidents, and the residual risk will be maintained at a level that is ALARP, throughout the duration of the Proposed Works. Emergency response procedures will consider the potential for releases of hazardous materials and will define the actions to be taken to minimize the risk arising from potential releases.				
	Land receptors There is the potential for the accidental release of a hazardous substance to impact the land receptors. This could be caused by a variety of factors including corrosion, human error or fire. Although a significant fraction of the chemicals and fuels have already been removed from site, it is noted that the majority of chemicals and fuels will be removed prior to Preparations for Quiescence phase. While the Site is no longer a COMAH establishment, there will still be some inventories of diesel fuel and other oils on site. The most likely release pathway is entrained in firewater to unmade ground. The worst case inventory is anticipated to be diesel fuel.	All of the measures above will also apply to land receptors. Additionally, the Site will maintain an effective emergency response plan to prevent the contamination of land.	Preparations for Quiescence, Final Site Clearance	Not MA&D	N/A	Not Significant

Scoped in scenario	Potential impact on receptors (worst case)	Embedded measures	Relevant phases of the project	Severity	Likelihood	Significance
	Worst case consequence: A release of contaminated firewater contaminates the non-designated land/soil on the Site requiring clean up. It is anticipated that clean up can be achieved within two years. This is not considered to be a major accident.					
	Water receptors There is the potential for the accidental release of a hazardous substance to impact the land receptors. This could be caused by a variety of factors including corrosion, human error or fire. Although it is noted that the majority of chemicals and fuels will be removed prior to Preparations for Quiescence phase and will be reduced further below the thresholds in the COMAH regulations, there will still be some hazardous materials on site. The most likely release pathway is entrained in firewater to surface water drains and containment systems or overland. Worst credible consequence: Contaminated firewater with significant volume of fuel oil or insulating oil, if released via an overland pathway, could impact the adjacent Severn Estuary designated sites. If released via the surface water drainage, then it could impact the marine receptor leading to serious damage across a wide area of the coastal marine environment potentially impacting >200 ha of littoral environment. Based upon the Energy Institute guidance, a Medium Term harm duration has been selected, which gives an overall severity of High	All inventories of hazardous substances will be removed from site other than diesel fuel and transformer insulating oil prior to the start of Preparations for Quiescence phase. The Site Licensee will maintain an SMS for the full life of the Proposed Works. The SMS will be maintained to the same standard as currently implemented for complying with the COMAH Regulations. The SMS will incorporate the principals of the Health and Safety at Work etc. Act 1974 and require: ▪ The hierarchy of controls to be embedded in the design where inherently safer options are selected wherever practicable. ▪ All activities will be subject to a suitable and sufficient risk assessment considering the impacts on people and the environment. ▪ The residual risk of harm from all activities will be reduced to ALARP. The approach to the Proposed Works will be designed to reduce the risk so far as is practicable and then further preventative and control measures will be implemented to achieve ALARP. These additional measures will include: ▪ The decommissioning of the surface water drainage, bunding and containment, and any other safeguards will be assessed against the ongoing risk of major accidents, and the residual risk will be maintained at a level that is ALARP, throughout the duration of the Proposed Works.	Preparations for Quiescence, Final Site Clearance	High	Very small chance of occurring	Not Significant

Scoped in scenario	Potential impact on receptors (worst case)	Embedded measures	Relevant phases of the project	Severity	Likelihood	Significance
		Emergency response procedures will consider the potential for releases of hazardous materials and will define the actions to be taken to minimize the risk arising from potential releases.				
Run-off of contaminated fire water from non-process/ non-rad fire/ explosion (e.g., building fires) associated with the Proposed Works.	**Land and Water receptors** A building fire on site would be tackled with local and portable firefighting equipment. There is the potential for some firewater to contain combustion products but should not contain any significant chemical or fuel inventory (see scenario above). Worst credible consequence: Firewater, if released overland, could impact the adjacent Blue Anchor to Lilstock Coast SSSI, but the area affected would be limited and short term. If released via the surface water drainage, then it could impact the marine receptor and Severn Estuary Ramsar/SAC/SPA sites but the area affected would be limited and would recover in short term. Therefore, it is not considered to be a major accident.	The Site Licensee will maintain an SMS for the full life of the Proposed Works. The SMS will be maintained to the same standard as currently implemented for complying with the COMAH Regulations. The SMS will incorporate the principals of the Health and Safety at Work etc. Act 1974 and require: ▪ The hierarchy of controls to be embedded in the design where inherently safer options are selected wherever practicable. ▪ All activities will be subject to a suitable and sufficient risk assessment considering the impacts on people and the environment. ▪ The residual risk of harm from all activities will be reduced ALARP. The approach to the Proposed Works will be designed to reduce the risk so far as is practicable and then further preventative and control measures will be implemented to achieve ALARP. These additional measures will include: ▪ The decommissioning of the surface water drainage, bunding and containment, and any other safeguards will be assessed against the ongoing risk of major accidents, and the residual risk will be maintained at a level that is ALARP, throughout the duration of the proposed works. Emergency response procedures will consider the potential for fires within buildings throughout the Proposed Works and will define the actions to be taken to minimize the risk arising from potential releases.	Preparations for Quiescence, Final Site Clearance	Not MA&D	N/A	Not Significant
Major accidents caused by physical effects associated with the Proposed Works, (structural collapse, impact, dropped or swung load, high energy pipe/	**Human population receptors** The Proposed Works will require a significant amount of construction and demolition with associated earthworks. These works will	All of the Proposed Works will be undertaken within the Works Area and this will be physically segregated from third-party populations and any sensitive receptors.	Preparations for Quiescence, Final Site Clearance	High	Very small chance of occurring	Not Significant

Scoped in scenario	Potential impact on receptors (worst case)	Embedded measures	Relevant phases of the project	Severity	Likelihood	Significance
equipment failure, collapse of excavation).	require the use of significant heavy plant vehicles, lifting equipment and temporary structures which are well recognised hazards in the demolition industry. The most recent example was the 2016 boiler house collapse at Didcot A which led to four fatalities, five injured and over 50 medical treatment cases. Worst credible consequence: A collapse of one of the buildings or voids during preparation for demolition is considered to be the worst case with the potential for a high number of fatalities (10-100) and additional medical treatment cases.	All of the Proposed Works will be managed and comply with a Construction Management Plan and relevant regulations such as the Construction (Design and Management) Regulations 2015 (CDM)**Error! Bookmark not defined.**. The Site Licensee will maintain an SMS for the full life of the Proposed Works. The SMS will be maintained to the same standard as currently implemented for complying with the COMAH Regulations and will incorporate the requirements of CDM. The SMS will incorporate the principals of the Health and Safety at Work etc. Act 1974 and require: ▪ The hierarchy of controls to be embedded in the design where inherently safer options are selected wherever practicable. ▪ All activities will be subject to a suitable and sufficient risk assessment considering the impacts on people and the environment. ▪ The residual risk of harm from all activities will be reduced to ALARP. The approach to the Proposed Works will be designed to reduce the risk so far as is practicable and then further preventative and control measures will be implemented to achieve ALARP. These additional measures will include: ▪ The majority of the deplanting operations will involve the use of the existing pile cap lifting and moving equipment. It is assumed that these items will be adequately maintained and inspected in accordance with normal EDF Energy procedures at all times during the deplanting process. ▪ Operation of this equipment by appropriately SQEP and trained operators will ensure that risks are minimised. ▪ A structural survey will be undertaken before commencement of dismantling operations.				
	Historic environmental receptors The Proposed Works will require a significant amount of construction and demolition with associated earthworks. These works will require the use of significant heavy plant vehicles, lifting equipment and temporary structures which are well recognised hazards in the demolition industry. However, the hazards of these activities are typically limited to the immediate vicinity of the works as the hazards relate to dropped or falling objects. While there is a Scheduled Monument within the Study Area, it is several hundred metres from the principal demolition works. Given the distance between the Proposed Works and the receptors it is not considered credible that a physical accident on site could damage an historic environment receptor sufficiently to lead to a loss of classification.		Preparations for Quiescence and Final Site Clearance	Not MA&D	N/A	Not Significant

Scoped in scenario	Potential impact on receptors (worst case)	Embedded measures	Relevant phases of the project	Severity	Likelihood	Significance
		Furthermore, the dismantling has been designed to minimise the risks associated with structural failure (e.g., of support systems). Emergency response procedures will consider the potential for physical accidents during the Proposed Works and will define the actions to be taken to minimise the risk arising from such events.				
Natural disasters where the Proposed Works have a material effect on the extent and severity of the disaster.	**Human population receptors** The potential effects of flooding are considered in **Chapter 11: Surface Water and Flood Risk**. A significant seismic incident affecting the Proposed Works leading to a loss of life is not considered to be credible. The design of the project will account for all foreseeable loads with due consideration of the changes due to climate change including wind speeds, precipitation, drought, extreme high/low temperatures. No risk of a direct fatality has been identified.	The design of the Proposed Works will make due allowance for the effects of climate change altering the environmental conditions and loads in which the works may be carried out including consideration of wind, temperature, precipitation, flooding, and drought etc., as described in **Appendix 7B**. All inventories of hazardous substances will be removed from site other than hydrazine and diesel fuel prior to the start of Preparations for Quiescence phase. The Site Licensee will prioritise the removal of chemicals and fuels from the Site as early as possible to allow safe decommissioning. The Site Licensee will maintain a Safety Management System (SMS) for the full life of the Proposed Works. The SMS will be maintained to the same standard as was previously implemented for complying with the COMAH Regulations. The SMS will incorporate the principals of the Health and Safety at Work etc. Act 1974 and require: - The hierarchy of controls to be embedded in the design where inherently safer options are selected wherever practicable. - All activities will be subject to a suitable and sufficient risk assessment considering the impacts on people and the environment. - The residual risk of harm from all activities will be reduced to ALARP. The approach to the Proposed Works will be designed to reduce the risk so far	Preparations for Quiescence, Final Site Clearance	Not MA&D	N/A	Not Significant
	Water and Land Receptors Potential flooding of area leading to contamination of water supply/ ground conditions of site. There will be some remaining inventories of diesel fuel and other oils into the Preparations for Quiescence phase which could be released in a worst case flood event. The consequences have been assessed based upon the risk from the operational station which is considered to be conservative. Worst credible consequence: Contaminated firewater with significant volume of diesel or insulating oil, if released overland, could impact the adjacent Severn		Preparations for Quiescence, Quiescence, Final Site Clearance	High	Remote chance of occurring	Not significant

Scoped in scenario	Potential impact on receptors (worst case)	Embedded measures	Relevant phases of the project	Severity	Likelihood	Significance
	Estuary Ramsar/SPA/SAC designated sites. If released via the surface water drainage, then it could impact the marine receptor leading to serious damage across a wide area of the coastal marine environment potentially impacting >200 ha of littoral environment. Based upon the Energy Institute guidance, a Medium Term harm duration has been selected, which gives an overall severity of High.	as is practicable and then further preventative and control measures will be implemented to achieve ALARP. These additional measures will include: ▪ Access to reliable meteorological forecasting services to inform work planning and controls to prevent undertaking works in inappropriate conditions such as heavy crane lifts in high winds. ▪ The decommissioning of the surface water drainage, bunding and containment, and any other safeguards will be assessed against the ongoing risk of major accidents, and the residual risk will be maintained at a level that is ALARP, throughout the duration of the proposed works. Emergency response procedures will consider the potential for significant weather events or other natural hazards and potential releases of hazardous materials and will define the actions to be taken to minimize the risk arising from these events.				
Major accidents caused by events external to the decommissioning where the Proposed Works have a material effect on the extent and severity of the accident: **This includes aircraft crash, projectiles, domino effects from an industrial accident in the vicinity, and loss of key utility (power supply, water supply) etc; and** **This excludes security, cyber-security and malicious acts.**	**Human population receptors** A major accident occurring at the adjacent HPA site during their Preparation for Care and Maintenance phase (until 2040) is unlikely to cause any serious harm to receptors associated with the Proposed Works during the Preparations for Quiescence phase. If an accident were to occur during the Final Site Clearance of HPA, then the Proposed Works would be in the Quiescence phase with minimal or no receptors which could be impacted. No MA&D potential identified. HPC is being constructed to the west of the Site, although it is buffered by the HPA site. HPC is currently undergoing intensive construction but during the Preparations for Quiescence phase, HPC will be in	The Site Licensee will maintain a Safety Management System (SMS) for the full life of the Proposed Works. The SMS will be maintained to the same standard as was previously implemented for complying with the COMAH Regulations. The SMS will incorporate the principles of the Health and Safety at Work etc. Act 1974 and require: ▪ The hierarchy of controls to be embedded in the design where inherently safer options are selected wherever practicable. ▪ All activities will be subject to a suitable and sufficient risk assessment considering the impacts on people and the environment. ▪ The residual risk of harm from all activities will be reduced to ALARP.	Preparations for Quiescence, Quiescence, Final Site Clearance	High	Remote chance of occurring	Not Significant

Scoped in scenario	Potential impact on receptors (worst case)	Embedded measures	Relevant phases of the project	Severity	Likelihood	Significance
	commissioning and then the early stages of power generation. HPC has a design operational life of 60 years, which will be during the Preparations for Quiescence and Quiescence phases. HPC will then be in a state of decommissioning during the Final Site Clearance phase. HPC will be regulated under a Nuclear Site License and associated Safety Case by the ONR. It is considered to be extremely unlikely that a Major Accident with offsite hazards could occur at a Licensed Site. However, there remains a small possibility of a large-scale nuclear accident. No other significant industrial activities have been identified in the vicinity of the Works Area. The design of the Proposed Works will account for the potential loss of utilities e.g. power and communications. The majority of process systems will be regulated by the Nuclear Safety Case or COMAH Regulations and will therefore be out of scope. All systems will be designed to fail safe and therefore loss of utilities should not lead to a major accident. The potential for an external hazard such as a plane crash to impact directly on the Proposed Works workforce is so low, it is not considered a credible major accident. Worst credible consequence: The only credible scenario identified is a Major Accident occurring during the commissioning or operation of HPC during Preparations for Quiescence phase, where the decommissioning workforce from the Proposed Works is the receptor. While the detailed Safety Case for HPC has not yet been submitted and accepted, it is anticipated that the Works Area will	The approach to the Proposed Works will be designed to reduce the risk so far as is practicable and then further preventative and control measures will be implemented to achieve ALARP. These additional measures will include: ▪ The Site Licensee will review all planning applications in the vicinity of the Proposed Works and object to any proposed development which would lead to a significant increase in risk at the Works Area. ▪ The Site Licensee will liaise with other local businesses and the local authorities to identify any potential hazards which arise over the course of the Proposed Works. ▪ The Site Licensee will liaise with the operator of HPC during the Proposed Works to ensure that appropriate emergency arrangements can be put in place. Emergency response procedures will consider the potential for external hazards or threats and will define the actions to be taken to minimize the risk arising from these events. Specific emergency response procedures will be developed for responding or evacuating from a major accident at an adjacent licensed site.				

Scoped in scenario	Potential impact on receptors (worst case)	Embedded measures	Relevant phases of the project	Severity	Likelihood	Significance
	fall within the Detailed Emergency Planning Zone (DEPZ). On this basis, it is assessed that the worst case consequence would be serious or fatal injuries (Very Large severity) to a Medium to High number of people (10-100) leading to a High magnitude (Note: this hazard exists only during the Preparations for Quiescence phase).					
	Water and Land Receptors No credible major accident scenarios identified.		Preparations for Quiescence, Quiescence, Final Site Clearance	Not MA&D	N/A	Not Significant
	Historic environment receptors No credible major accident scenarios identified.		Preparations for Quiescence, Quiescence, Final Site Clearance	Not MA&D	N/A	Not Significant

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Conventional Waste

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19A

Material and Resource Use

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19A Material and Resource Use

19A.1 Introduction

19A.1.1. This Appendix relating to material and resource use has been prepared in direct response to the Office for Nuclear Regulation's (ONR) Pre-Application Opinion (PAO), adopted 07 December 2022.

19A.1.2. Specifically, paragraphs 15 and 16 of the PAO stated:

"In the environmental topic chapters, there are a number of receptors and aspects that do not appear to have been considered in the scoping exercise. These include:

- *resource and material use…*

This should be considered further in the EIA process and the ES should clearly report on whether these aspects are in scope of the EIA."

19A.1.3. Noting the comments raised in the Pre-Application Opinion, this appendix, which has been prepared to provide supplementary information to **Chapter 19: Conventional Waste** and was produced to outline whether material and resource use, amongst other scope items would be covered in the Environmental Statement or if they were scoped out. This appendix considers the potential impact of the type and quantity of raw materials required because of the Proposed Works and evaluates the level of burden that the Proposed Works would place on local/ regional sources of raw building materials, with established landbanks for different materials representing the assessed receptors.

19A.2 Scope of this assessment

19A.2.1. This assessment considers the extent to which the Proposed Works places a burden on local/ regional sources of raw building materials at each of the Proposed Works three key phases (as described in **Chapter 2: Decommissioning Process**):

- Preparation for Quiescence phase;
- Quiescence phase; and
- Final Site Clearance.

19A.2.2. The Preparation for Quiescence phase will require supplies of raw materials – specifically for the construction works required for the completion of the Safestore. For this reason, this phase of the Proposed Works is included in this assessment of materials.

19A.2.3. The Quiescence phase will not require significant supplies of raw building materials – as essentially this stage represents a 'dormant' 70-year period. As such, it is not considered necessary to assess this phase's effects on material assets.

19A.2.4. It is also not proposed to assess the Final Site Clearance phase of the proposed development. This is because:

- Due to the Final Site Clearance phase taking place at some considerable time into the future, there is a high degree of uncertainty around the specific Final Site Clearance proposals. In this regard, it is not practical to assess the Final Site Clearance phase.

- Notwithstanding this, however, it is also considered that the Preparation for Quiescence stage is likely to represent the worst case scenario, particularly given the need to construct the Safestore. In this context, there would be limited value in assessing the Final Site Clearance stage given that the worst case stage (the Preparation for Quiescence stage) will have already been assessed.

19A.2.5. With the above points in mind, this assessment focuses on the material and resource asset effects of the Preparation for Quiescence phase only.

19A.3 Relevant legislation, policy and technical guidance

Legislation

19A.3.1. Legislation, policy and technical guidance relevant to this material and resource use assessment is presented in **Chapter 19: Conventional Waste**.

19A.4 Data gathering methodology

Study Area

19A.4.1. The Study Area for the materials assessment focuses on the administrative area of the appropriate Minerals Planning Authority (MPA)– in this case, Somerset Council (formerly Somerset County Council (SCC)).

Desk study

19A.4.2. The materials assessment has been undertaken with reference to **Chapter 2: The Decommissioning Process,** supported by a number of data sources. The principal data sources used to inform this Appendix comprise:

- Somerset Mineral Plan (2015)[1] and its supporting evidence;
- British Geological Survey (2020) Directory of Mines and Quarries (Online)[2;] and
- British Geological Survey (2019) Mineral Planning Factsheet Construction aggregates. (Online)[3.]

[1] Somerset County Council (2015). *Somerset Minerals Plan*. (Online). Available at: https://somersetcc.sharepoint.com/sites/SCCPublic/Planning%20and%20Land/Forms/AllItems.aspx?id=%2Fsites%2FSCCPublic%2FPlanning%20and%20Land%2FSomerset%20Minerals%20Plan%2Epdf&parent=%2Fsites%2FSCCPublic%2FPlanning%20and%20Land&p=true&ga=1 (Accessed August 2024)
[2] British Geological Society. 2020. *Directory of Mines and Quarries*. (Online). Available at: https://www2.bgs.ac.uk/mineralsuk/download/dmq/Directory_of_Mines_and_Quarries_2020.pdf (Accessed August 2024)
[3] British Geological Society (2019). *Mineral Planning Factsheet Construction aggregates*. (Online). Available at: Mineral planning factsheet : construction aggregates - NERC Open Research Archive (Accessed August 2024)

Data limitations

19A.4.3. The assessment baseline uses the most recent available published data, which is up to and including 2020 (unless stated otherwise). Future trends are not available for scrutiny and are – at the time of publication – generally accepted to be relatively unpredictable (particularly with supply chain impacts resulting from COVID-19 or the UKs departure from the EU).

19A.4.4. In terms of data relating to the consumption of material assets by the Proposed Works, specifically in respect of the construction and cladding of the Safestore and the construction of the Decommissioning Waste Processing Facility (DWPF) and Operational Waste Processing Facility (OWPF), only limited quantitative data on the tonnage of material requirements has been available. A partially qualitative assessment has therefore been carried out in respect of these aspect of the Proposed Works, which has drawn upon relevant design information, as appropriate.

Survey work

19A.4.5. Due to the nature of the material impact assessment and its reliance on publicly available data sources, the assessment has been based upon published data sources only and has not necessitated the carrying out of any survey work.

19A.5 Assessment methodology

19A.5.1. The proposed generic project-wide approach to the assessment methodology is set out in **Chapter 5: The EIA Process**, and specifically in **Section 5.3** and **Section 5.4**. However, whilst this has informed the approach that has been used in this material and resource use appendix, it is necessary to set out how this methodology will be applied, and adapted as appropriate, to address the specific needs of the waste and material and resource use assessment in the ES.

General approach

19A.5.2. The Institute of Environmental Management and Assessment (IEMA) (2020), *Guide to Materials and Waste in EIA*[4] (hereinafter referred to as the IEMA Guide) has been used to assess the potential impacts and effects from the Proposed Development, using the process and significance criteria it sets out. In accordance with the IEMA Guide, the assessment is a quantitative exercise that aims to identify the type and volume of materials to be consumed by the Proposed Works, including details of any recycled materials content.

19A.5.3. The sensitive receptors incorporated into the assessment are essentially supplies of material assets – the consumption of which adversely impacts on their immediate and long-term availability, resulting in depletion of natural resources.

19A.5.4. The sensitivity of materials relates to the regional (and where justified, national) availability and type of resources to be consumed by the Proposed Works.

[4] Institute of Environmental Management and Assessment (IEMA) (2020), Guide to Materials and Waste in EIA (Online) Available at: IEMA - Materials and Waste in Environmental Impact Assessment - March 2020 (Accessed August 2024).

19A.5.5. The magnitude of impacts from the Proposed Works that have been considered in the assessment relate to anticipated reductions in availability (stocks, production and/or sales) of materials regionally and, where appropriate, nationally.

19A.5.6. The likely types and estimated quantities of material resources required for the Proposed Works have been assessed. Impacts and effects have been evaluated against data for the regional and (where appropriate) national materials markets, where information is available.

Significance criteria

19A.5.7. The criteria for assessing sensitivity of materials are set out in **Table 19A-1**. The information provided is based on Section 10.2 of the IEMA Guide. The sensitivity of materials will be determined by identifying where one or more of the criteria from the following thresholds are met.

Table 19A-1 - Materials sensitivity criteria

Sensitivity	Materials criteria
Negligible	*"The key materials required for the construction of the Proposed Works are forecast (through trend analysis and other information) to be free from known issues regarding supply and stock;* *and / or* *… are available comprising a very high proportion of sustainable features and benefits compared to industry-standard materials."*
Low	*"The key materials required for the construction of the Proposed Works are forecast (through trend analysis and other information) to be generally free from known issues regarding supply and stock*."
Medium	*"The key materials required for the construction of the Proposed Works are forecast (through trend analysis and other information) to suffer from some potential issues regarding supply and stock."*
High	"*The key materials required for the construction of the Proposed Works are forecast (through trend analysis and other information) to suffer from known issues regarding supply and stock*."
Very high	"*The key materials required for the construction of the Proposed Works are known to be insufficient in terms of production, supply and / or stock*."

19A.5.8. **Table 19A-2** sets out the criteria for assessing the magnitude of impact on materials and waste. The table articulates information set out in Section 10.3 of the IEMA Guide.

Table 19A-2 - Materials magnitude of change

Magnitude	Materials criteria
No change	*"No materials are required."*
Negligible	*"No individual material type is equal to or greater than 1% by volume of the regional (or where justified national) baseline availability."*
Minor	*"One or more materials is between 1-5% by volume of the regional (or where justified, national) baseline availability;*

Magnitude	Materials criteria
	and / or *the development has the potential to adversely and substantially impact access to one or more allocated mineral site (in their entirety), placing their future use at risk.* *The level of impact is justified using professional judgement, based on the scale and nature of the allocated mineral site being assessed."*
Moderate	*"... one or more materials is between 6-10% by volume of the regional (or where justified, national) baseline availability;* *and / or* *one allocated mineral site is substantially sterilised by the development rendering it inaccessible for future use.* *The level of impact is justified using professional judgement, based on the scale and nature of the allocated mineral site being assessed."*
Major	*"One or more materials is >10% by volume of the regional (or where justified, national) baseline availability;* *and / or* *more than one allocated mineral site is substantially sterilised by the development rendering it inaccessible for future use.* *The level of impact is justified using professional judgement, based on the scale and nature of the allocated mineral site being assessed."*

Effects of significance

19A.5.9. In accordance with Section 11 of the IEMA Guide, the significance of effects on materials will be determined by comparing sensitivity and magnitude using the matrix provided in **Table 19A-3**.

Table 19A-3 - Significance of effects

		Sensitivity				
		Negligible	**Low**	**Medium**	**High**	**Very high**
Magnitude of change	**None**	Neutral	Neutral	Neutral	Neutral	Neutral
	Negligible	Neutral	Neutral or slight	Neutral or slight	Slight	Slight
	Minor	Neutral or slight	Neutral or slight	Slight	Slight or **moderate**	**Moderate or large**
	Moderate	Neutral or slight	Slight	**Moderate**	**Moderate or large**	**Large or very large**
	Major	Slight	Slight or **moderate**	**Moderate or large**	**Large or very large**	**Very large**

19A.5.10. Effects that are classified as moderate, large or very large are considered to be significant, for materials (noted in bold text in **Table 19A-3**). Effects classified as slight or neutral are not significant.

19A.6 Baseline conditions

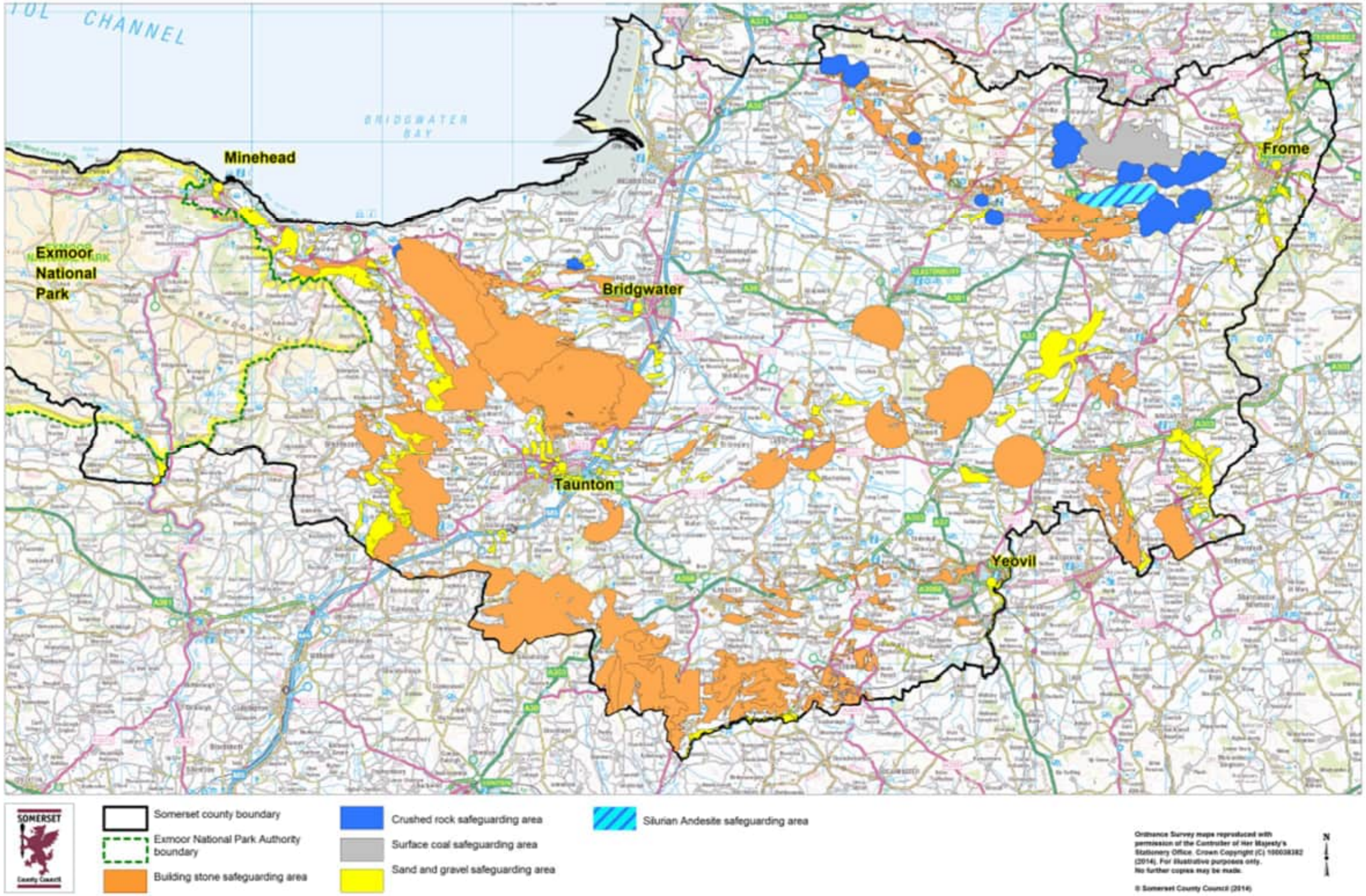
Current baseline conditions

19A.6.1. The Proposed Works fall within the unitary planning authority area of Somerset Council, which is the statutory body responsible for the management and determination of mineral planning applications and is specifically responsible for ensuring that minerals development proceeds in line with national targets [5].

19A.6.2. There are no safeguarded economically viable mineral resources within the vicinity of the Proposed Works. Therefore, the Proposed Works are very unlikely to sterilise any significant / economically viable existing mineral deposits within and surrounding the Site. **Graphic 19A-1**[6] identifies the mineral safeguarding areas in Somerset, which substantiates this assumption.

[5] Minerals Planning Authorities are required to ensure there is a sufficient landbank and supply of at least 7 years for sand and gravel and at least 10 years for crushed rock, whilst ensuring that the capacity of operations to supply a wide range of materials is not compromised (paragraph 219 of the National Planning Policy Framework, 2023).
[6] Source: Somerset County Council (2015) Somerset Minerals Plan Development Plan Document up to 2030 (Online). Available at: somersetcc.sharepoint.com/sites/SCCPublic/Planning and Land/Forms/AllItems.aspx?id=%2Fsites%2FSCCPublic%2FPlanning and Land%2FSomerset Minerals Plan%2Epdf&parent=%2Fsites%2FSCCPublic%2FPlanning and Land&p=true&ga=1 (Accessed 2024).

Graphic 19A-1 - Mineral Safeguarding Areas in Somerset



19A.6.3. The performance of the extant Minerals Plan is reviewed on an annual basis through the production of a Local Aggregates Assessment (LAA). The latest LAA - Somerset Local Aggregate Assessment, Eighth Edition, data to 2022 (incorporating data from 2022) - was published by Somerset Council in December 2023. The data set out in this LAA represents the most up to date information on minerals consents, outputs, and reserves across Somerset.

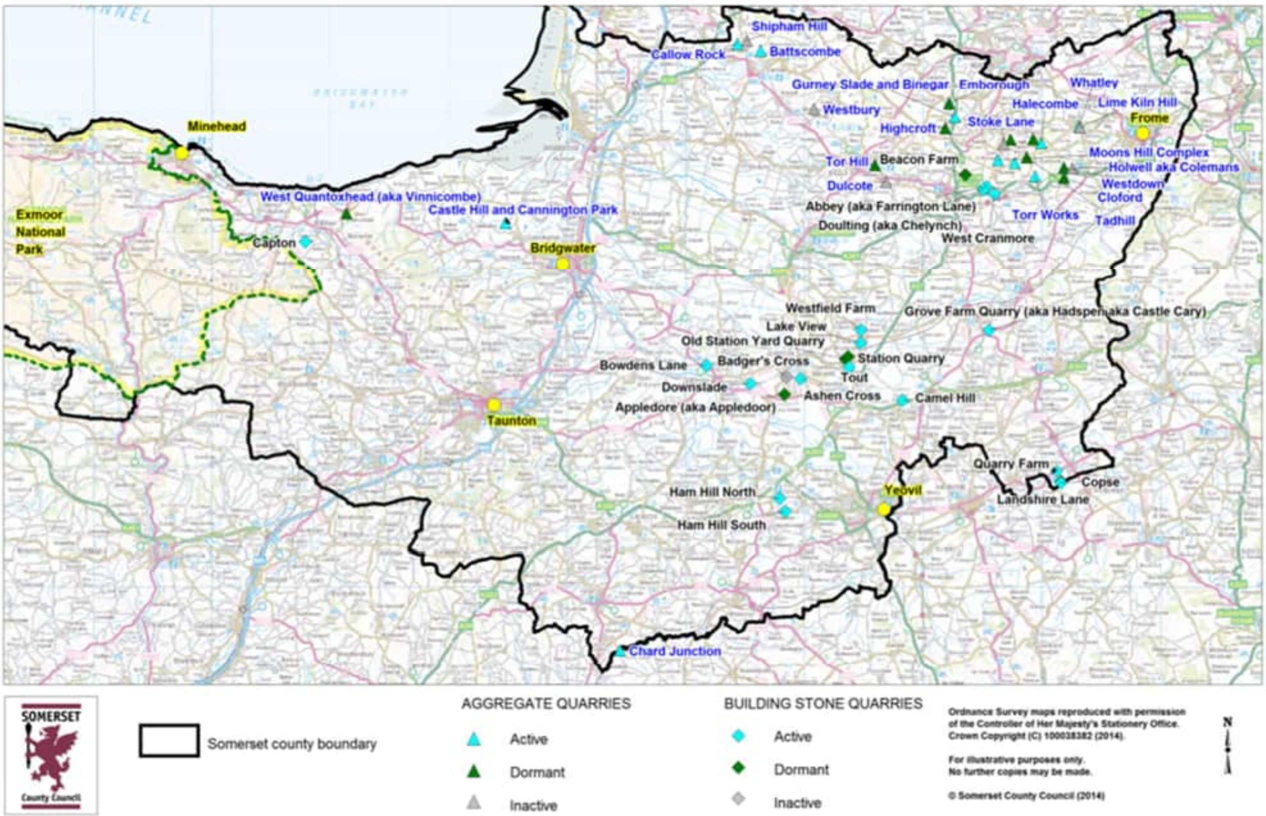
19A.6.4. **Table 19A-4** shows recent outputs and estimated reserves in permitted sites in Somerset at the end of 2022. This indicates that aggregates are sourced from four distinct types of supply – land won primary sources (namely sand and gravel and crushed rock extraction); marine extraction; secondary sources (most notably the use of by-products from other industrial processes as aggregate substitutes e.g. blast furnace slags); and recycled sources i.e. that from the recycling of construction and demolition wastes/ rubble. **Table 19A-4** also illustrates that for primary aggregate supplies, there are in excess of almost 24 years' worth of supply of crushed rock and almost 6 years' supply of sand and gravel.

Table 19A-4 - Estimated consented reserves in active sites in Somerset

	Sand & gravel	Crushed rock	Marine aggregates	Secondary aggregates	Recycled aggregates
2022 sales	0.521 million tonnes	14.35 million tonnes	72,490 tonnes	0 tonnes	25,367 tonnes
10-year average sales	0.516 million tonnes	13.78 million tonnes	-	13,882 tonnes	52,679 tonnes
Reserves at end of 2022	3.034 million tonnes	326.22 million tonnes	-	-	-
Landbank (at end of 2022)	4.5 years	24.3 years	-	-	-

19A.6.5. The supply of aggregate minerals across Somerset is derived from numerous operators located across the county. **Graphic 19A-2** illustrates the geographical spread of quarry operators across Somerset.

Graphic 19A-2 - Location of Quarry Sites in Somerset



19A.6.6. Baseline data indicates that aggregate minerals are readily available across Somerset, from a range of sources – both numerous land won primary aggregate suppliers, as well as alternative sources (i.e. marine won, secondary and recycled).

19A.6.7. It should also be noted that the Applicant has indicated that approximately 10,000m^3 of clean rubble derived from demolition is suitable for re-use on site as fill material. This re-use of onsite material will substitute a proportion of the currently anticipated total fill material requirements, (77,000m^3) for the Preparation for Quiescence phase. This means that approximately 67,000m^3 of fill material will be required.

19A.6.8. In terms of the availability of other construction materials, **Table 19A-5** provides a summary of the main construction materials in the Southwest and the UK. The overview provides a context in which the assessment of impacts and significant effects from material consumption from the Proposed Works has been undertaken. Unless otherwise stated, the data in this table relates to the baseline position in 2022.

Table 19A-5 - Construction Materials Availability in the Southwest and UK[7]

Material type	Southwest	UK
Concrete blocks#	12.8 million m^2 (2023) – South England	60.7 million m^2 (2023)
Ready mixed concrete*	1.1 million tonnes	21 million m^3
Steel +	(no data)	5.9 million tonnes
Asphalt*	2.1 million tonnes	26.8 million tonnes

= stocks; + = production; * = sales

Future baseline

19A.6.9. Irrespective of the Proposed Works, there are unlikely to be any notable changes to the existing material and resource use baseline and future consumption rates in Somerset.

19A.7 Embedded environmental measures

19A.7.1. There are no embedded environmental measures for this aspect.

19A.8 Assessment of potential effects

19A.8.1. The Proposed Works fundamentally comprise the dismantling and deconstruction of buildings and structures within the Works Area during the Preparation for Quiescence phase. However, the Proposed Works also involve the construction of the OWPF and DWPF and construction and cladding of the Safestore. In this regard, it is anticipated that materials (aggregates/mineral) will be required or imported to the Works Area for these purposes.

19A.8.2. It is intended to re-use rubble generated from the demolition activities required for the Proposed Works in both the Preparations for Quiescence (a duration of approximately 13 years) and Final Site Clearance phases as across the whole decommissioning lifecycle, the site could potentially achieve an approximate cut/fill balance as outlined in **Chapter 3: Alternatives**. However, this would require

[7]Mineral Products Association (2023) Profile of the UK Mineral Products Industry, 2023 Edition (Online) Available at: https://mineralproducts.org/Homepage-Promotions/Profile-of-the-UK-Mineral-Products-Industry.aspx (Accessed August 2024).
Welsh Government (2023) Iron and Steel production: 1999 to 2022 (Online) Available at: https://www.gov.wales/iron-and-steel-production (Accessed August 2024).
Department for Business and Trade (2024) Building Materials and Components statistics – January 2024 Tables 11c and 12c (Online) Available at: https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fassets.publishing.service.gov.uk%2Fmedia%2F65bcb652709fe1000f637089%2FConstruction_Building_Materials_-_Tables_January_2024.xlsx&wdOrigin=BROWSELINK (Accessed August 2024).

the retention of voids on-site through the Quiescence phase which may still prove to not be practicable. With this in mind, this assessment will consider the worst case that import of fill material during the Preparations for Quiescence phase is required so that voids don't need to be retained through the Quiescence phase.

19A.8.3. Whilst EIADR must consider the full duration of the decommissioning proposals, the impact on Material Resources is anticipated to be highest during the Preparations for Quiescence phase. Very little works are anticipated during the Quiescence phase and likely significant effects during this phase can therefore be scoped out. During Final Site Clearance, the lack of infill materials that will be required to be imported to site in any eventuality, and the material requirements for the construction of the Waste Management Centre are highly likely to be lower than those for the modification of the Safestore – primarily because of the difference in scale of the two structures. Assessment of the materials impacts of the Preparation for Quiescence stage is therefore considered to represent a suitable worst case scenario.

Material resources

19A.8.4. As identified in **Section 19A.6**, the Proposed Works will require a total of approximately (~) 77,000m^3 of fill material, although ~10,000m^3 of this will be sourced from within the Site. Using a conversion factor of 1.7 tonnes = 1 m^3, this means that ~17,000 tonnes of clean rubble derived from demolition within the Works Area will be utilised on site as fill material. The currently anticipated fill material requirements, amounts to ~130,900 tonnes in total (or ~113,900 tonnes once account has been taken of the re-use of onsite material).

19A.8.5. As discussed in **Chapter 3: Alternatives**, the preferred approach to AGR decommissioning of deferred dismantling is the Early Safestore scenario (Option 4b). Option 4b requires a full-height Safestore and is therefore a worst-case scenario for this assessment due to the associated material and resource requirements.

19A.8.6. As discussed in **Chapter 3: Alternatives**, the DWPF and OWPF are assumed to be new-build structures for the purposes of the EIADR. The facilities are assumed to be steel framed buildings incorporating a 300 mm concrete slab, designed for industrial use, with a height of approximately 10 m. The DWPF and OWPF are assumed to have footprints of approximately 2,000 m^2 and 1,500 m^2 respectively.

19A.8.7. Key (indicative) bulk construction material required for the Proposed Works are set out in **Table 19A-6**. Data is based on the current design estimates and has been rounded up to the nearest 10 tonnes, m^2 or m^3.

Table 19A-6 - Indicative bulk material resources required for the Preparation for Quiescence phase

Material type	Estimated quantity	Use of material in Proposed Works	Consumption compared to baseline
Infill			
Aggregates	113,900 tonnes	Fill material	0.03% of Somerset consented primary aggregate reserve
Construction			
Vertical Cladding	21,350 m^2	Construction and cladding of the Safestore. Construction of the DWPF and OWPF.	See text in paragraph 19A.6.19.
Façade structure/ infill and re-enforcement	4,400 m^2	Construction and cladding of the Safestore.	See text in paragraph 19A.6.19.
Roofing	11,500 m^2	Construction and cladding of the Safestore. Construction of the DWPF and OWPF.	See text in paragraph 19A.6.19.
Steelwork (for roof)	1,160 m^2	Construction and cladding of the Safestore.	See text in paragraph 19A.6.19.
Foundation pads	230 m^3	Construction and cladding of the Safestore. Construction of the DWPF and OWPF.	Refer to aggregates.
Strip footings	400 m^3	Construction and cladding of the Safestore.	Refer to aggregates.
Protection wall	3,800 m^2	Construction and cladding of the Safestore.	Refer to aggregates.

Material type	Estimated quantity	Use of material in Proposed Works	Consumption compared to baseline
Masonry face and insulation	3,800 m^2	Construction and cladding of the Safestore.	For masonry face refer to aggregates. For insulation, any comparison with the baseline has not been possible as there is no data relating to the availability of building insulation.

19A.8.8. The data presented in **Table 19A-4** indicates that aggregates are readily available locally and regionally. It is also known that there will be on-site material available, which has the potential for re-use as fill material, which will temper the requirements for materials being brought into the Site.

19A.8.9. For those elements of the Proposed Works which will require supplies of steel and/ or aluminium i.e. vertical cladding (façade structure/ infill and re-enforcement, roofing steelwork for roof) etc. for the construction of the Safestore and the DWPF and OWPF, data presented in **Section 19A.6** of this Appendix has demonstrated that both of these materials are in ready supply domestically and are produced and traded on a national and global scale. Allied to this, whilst it has not been possible to identify specific steel and aluminium quantities in tonnage terms, the material requirements of the Proposed Works are likely to represent a minor magnitude of material resource consumption. Using professional judgement to apply the criteria set out in **Table 19A-1**, the sensitivity of aggregate material resources is considered low. Using the criteria set out in **Table 19A-2** and the supporting text above, the magnitude of material resource consumption considering the impact on mineral safeguarding areas is negligible. The effects associated with material resource consumption (in accordance with **Table 19A-3**) are **slight or neutral** and are therefore **Not Significant**.

19A.8.10. Whilst not formally assessed, effects during the Final Site Clearance phase are likely to lead to a minor/negligible magnitude of resource consumption on the same low sensitivity receptors. Effects in the Final Site Clearance phase are therefore anticipated to be **Slight/neutral** and therefore **Not Significant**.

19A.9 Summary

Table 19A-7 - Summary

Receptor	Summary of Predicted Effect	Sensitivity / Importance / Value of Receptor	Magnitude	Significance	Summary of Rationale
Material resources	Depletion of material resources and sterilisation of mineral safeguarding areas.	Low	Negligible	Neutral/ slight adverse (**Not Significant**)	The material resources required to achieve the Proposed Works are minor in magnitude, in the context of local and national supply chains.

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Cumulative Effects

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21A

Intra-project screening tables

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21A Intra-project screening tables

Table 21A-1 - Stage 3 intra-project screening table during Preparations for Quiescence phase

Receptor	Relevant aspects	Effect	Potential for Intra-Project Cumulative Effects	Taken forward to Stage 4
Workers of HPB power station	People and communities, transport, air quality, noise and vibration	High risk of dust emissions arising from demolition activities and low risk of dust emissions arising from construction activities associated with the Proposed Works (not significant). Minor adverse noise effects (not significant) arising from activities in the Works Area and road traffic noise. Changes in traffic flows as a result of decommissioning activities, however no significant traffic and transport effects have been identified. Moderate (significant) adverse effect arising from economic effects and a change in health effects.	Workers will wear appropriate personal protective equipment (PPE), with works managed to reduce potential health risks. There is a small increase in traffic arising from the Proposed Works, however this increase would be negligible. Combined dust, noise and traffic effects are thus unlikely to contribute to an increased sense of disturbance. It is expected the existing workers at HPB will reduce gradually during the Proposed Works. Whilst workers will experience changes in employment, this is unlikely to combine with the above-described effects, which will result in moderate significant effects. However, consideration of impacts associated with employment on local area is considered separately.	No

Receptor	Relevant aspects	Effect	Potential for Intra-Project Cumulative Effects	Taken forward to Stage 4
HPA station site (workers)	Traffic and transport, air quality, noise and vibration, landscape and visual	Up to major adverse effects (not significant) on landscape character and coastal character areas during Preparations for Quiescence phase (considered cumulatively with other development). These effects would reduce towards the culmination of this phase. Up to Major adverse visual effects (significant) on King Charles III England Coast Path and West Somerset Coast Path, Castles & Coast Way and local PRoW network, and other open access land, as well as Wick Moor Road during the Preparations for Quiescence phase (considered cumulatively with other development). High risk of dust emissions arising from demolition activities and low risk of from other construction activities associated with the Proposed Works (not significant). Minor adverse noise effects (not significant) arising from activities in the Works Area and road traffic noise. Changes in traffic flows as a result of decommissioning activities, however no significant traffic and transport effects have been identified.	There is the potential for combined effects arising from noise, air quality and the deterioration of visual and recreational amenity. However, due to the nature of the decommissioning works at HPA, workers will already wear appropriate personal protective equipment (PPE), and similar works would be managed to reduce potential health risks. If workers used adjacent recreational routes, PRoW and promoted coastal paths will be maintained throughout all phases of the Proposed Works (though a local diversion to King Charles III England Coast Path is in use due to HPC construction). Due to local conditions (noise/dust) already experienced due to the decommissioning of HPA and construction of HPC, users are unlikely to be further inconvenienced. Whilst there is a small increase in traffic arising from the Proposed Works, this increase would be negligible. Combined dust, noise and traffic effects are thus unlikely to contribute to an increased sense of disturbance.	No

HPC site (workers)	People and communities, transport, landscape and visual, air quality, noise and vibration	Up to major adverse effects (not significant) on landscape character and coastal character areas during Preparations for Quiescence phase (considered cumulatively with other development). These effects would reduce towards the culmination of this phase. Up to Major adverse visual effects (significant) on King Charles III England Coast Path and West Somerset Coast Path, Castles & Coast Way and local PRoW network, and other open access land, as well as Wick Moor Road during the Preparations for Quiescence phase (considered cumulatively with other development). Medium risk of dust emissions arising from demolition activities and low risk of dust emissions arising from demolition activities and low risk from construction activities associated with the Proposed Works (not significant). Minor adverse noise effects (not significant) arising from activities in the Works Area and road traffic noise. Changes in traffic flows as a result of decommissioning activities, however no significant traffic and transport effects on have been identified. Major significant adverse effect, at a very local level, associated with changes to employment in the local area with potentially variable periods of unemployment and associated mental health impacts.	There is the potential for combined effects arising from noise, air quality and the deterioration of visual and recreational amenity. However, due to the nature of construction works at HPC, effects on views are already experienced, and workers will already wear appropriate personal protective equipment (PPE), and similar works would be managed to reduce potential health risks. If workers used adjacent recreational routes, PRoW and promoted coastal paths will be maintained throughout all phases of the Proposed Works (though a local diversion to King Charles III England Coast Path is in use due to HPC construction). Due to local conditions (noise/dust) already experienced due to the decommissioning of HPA and construction of HPC, users are unlikely to be further inconvenienced. Whilst there is a small increase in traffic arising from the Proposed Works, this increase would be negligible. Combined dust, noise and traffic effects are thus unlikely to contribute to an increased sense of disturbance.	Yes

Receptor	Relevant aspects	Effect	Potential for Intra-Project Cumulative Effects	Taken forward to Stage 4
Rural communities in the vicinity of HPB site (Stolford, Wick)	Landscape and visual, noise and vibration, air quality	Noise levels during peak years of activity are predicted not to exceed the BS 5228-1 thresholds of significance. Minor adverse noise effects reported (with the impact itself being negligible), which are not significant. No decommissioning /construction traffic noise effects are anticipated. Visual effects arising from seeing the Proposed Works in views from Stolford are anticipated to be up to major/moderate (significant). Views from Wick are considered to be not-significant. Up to Major adverse visual effects (significant) on King Charles III England Coast Path and West Somerset Coast Path, Castles & Coast Way and local PRoW network, and other open access land, as well as Wick Moor Road during the Preparations for Quiescence phase (considered cumulatively with other development). Residents within Stolford and Wick are outside of the air quality assessment as effects are anticipated to be negligible, and no significant decommissioning /construction traffic associated with the Proposed Works.	The assessment presented in **Chapter 15: Noise and Vibration** and **Chapter 6: Air Quality** of the **ES** has identified that receptors within Stolford and Wick are not expected to experience significant effects. Views of the Proposed Works during the Preparations for Quiescence phase are considered to be significant.	Yes

Receptor	Relevant aspects	Effect	Potential for Intra-Project Cumulative Effects	Taken forward to Stage 4
Rural communities in the vicinity of HPB site (other)	People and communities, transport, landscape and visual, noise and vibration, air quality	Noise levels during peak years of activity are predicted not to exceed the BS 5228-1 thresholds of significance. Minor adverse noise effects reported (with the impact itself being negligible), which are not significant. No decommissioning / construction traffic noise effects are anticipated. Visual effects arising from seeing the Proposed Works in views are expected to be not significant. Up to Major adverse visual effects (significant) on King Charles III England Coast Path and West Somerset Coast Path, Castles & Coast Way and local PRoW network, and other open access land, as well as Wick Moor Road during the Preparations for Quiescence phase (considered cumulatively with other development). Residents are outside of the air quality assessment as effects are anticipated to be negligible.	No significant noise, air quality or transport effects are anticipated during the proposed activities being undertaken in this phase Effects of the Proposed Works in views from other rural communities in vicinity of HPB site are not significant. However, residents may use coastal paths and local PRoW network. In addition, due to local conditions (noise/dust) already experienced due to the decommissioning of HPA and construction of HPC, users are unlikely to be further inconvenienced. There is the potential for effects in the settlement arising from loss of employment and, while employee health may have benefited from stable employment. This context includes challenging localised socio-economic conditions, and geographic constraints. Overall, it is considered there is limited potential for intra-project effects to arise on the community and residential receptors within Fairlie. The main effects, due to loss of employment are not likely to interact with other effects reported.	No

Communities and residential receptors within Bridgwater	People and communities, transport, landscape and visual, noise and vibration, air quality	Noise levels during peak years of activity are predicted not to exceed the BS 5228-1 thresholds of significance. Minor adverse noise effects reported (with the impact itself being negligible), which are not significant. No decommissioning /construction traffic noise effects are anticipated. No visual effects are anticipated in views from Bridgwater as a result of the Proposed Works, which is outside of the Study Area. If members of the community use recreational facilities, users may experience up to Major adverse visual effects (significant) on King Charles III England Coast Path and West Somerset Coast Path, Castles & Coast Way and local PRoW network, and other open access land. Moderate (significant) adverse effect arising from economic effects and a change in health effects.	No significant noise, air quality and transport effects are anticipated during the proposed activities being undertaken in this phase, Whilst the preferred traffic routes pass through Bridgwater, due to low volumes of traffic associated with the Proposed Works, no significant traffic effects are anticipated. Effects of the Proposed Works in views from PRoW in may be experienced if used. However, access will be maintained throughout all phases of the Proposed Works. In addition, due to local conditions (noise/dust) users would already experience effects associated with decommissioning of HPA and construction of HPC in vicinity of the Site, therefore users are unlikely to be further inconvenienced. There is the potential for effects in the settlement arising from loss of employment and, while employee health may have benefited from stable employment, the context includes challenging localised socio-economic conditions, and geographic constraints. Overall, it is considered there is limited potential for intra-project effects to arise on the community and residential receptors within Bridgwater. The main effects, due to loss of employment are not likely to interact with other effects reported.	No

Receptor	Relevant aspects	Effect	Potential for Intra-Project Cumulative Effects	Taken forward to Stage 4
Users of public rights of way, promoted routes and roads	People and communities, transport, landscape and visual, air quality, noise and vibration	Up to major adverse effects (significant) on landscape character and coastal character areas during Preparations for Quiescence phase. These effects would reduce towards the culmination of this phase. Users may experience up to Major adverse visual effects (significant) on King Charles III England Coast Path and West Somerset Coast Path, Castles & Coast Way and local PRoW network, and other open access land. Medium risk of dust emissions arising from demolition activities and low risk of dust emissions from remaining construction activities associated with the Proposed Works (not significant). Minor adverse noise effects (not significant) arising from activities in the Works Area and road traffic noise. Changes in traffic flows as a result of decommissioning activities, however significant traffic and transport effects on have been identified.	There is the potential for combined effects arising from noise, air quality and the deterioration of visual and recreational amenity. Combined, these effects are likely to lead to an increased sense of disturbance. Whilst there is a small increase in traffic arising from the Proposed Works, this increase has not warranted further assessment due to the low likelihood to have significant effects. Traffic is therefore unlikely to contribute to an increased sense of disturbance.	Yes

Receptor	Relevant aspects	Effect	Potential for Intra-Project Cumulative Effects	Taken forward to Stage 4
Statutory and Non-Statutory Biodiversity Conservation Sites – Terrestrial	Terrestrial biodiversity and ornithology, air quality,	Dust and vehicle emissions can result in physical effects on vegetation where photosynthesis is reduced due to soiling of the vegetation surface, and there can be chemical effects on soils or watercourses depending on the composition of the dust. Increases in the baseline concentration of oxides of Nitrogen (NOx) and Ammonia (NH_3) in particular can lead to poorer plant growth, reduced productivity and eutrophication, which can damage sensitive habitats and biodiversity conservation sites.	The potential for intra-project cumulative effects on terrestrial Statutory and Non-Statutory Biodiversity Conservation Sites has already been considered within **Chapter 8: Terrestrial biodiversity and ornithology**. The assessment of dust emission reported within **Chapter 6: Air quality** has concluded that without appropriate mitigation measures applied, the highest risk of impact from dust emissions to ecological receptors (reported within **Chapter 6: Air quality, Table 6.20**) is 'High', and this is during demolition works associated with the Proposed Works (as reported within **Chapter 6: Air quality)**. However, as per the IAQM guidance, with effective mitigation measures applied, the residual effect from these dust emissions is not significant. Best practice measures have been proposed as an outcome of the dust assessment and are reported within **Chapter 6: Air quality**. Severn Estuary SAC is 0.025 km from vehicle routes. However, the projected increase in traffic flows are unlikely to change the baseline concentrations of NOx or Ammonia at the SSSI by >1%. Further detail is included in **Chapter 8: Terrestrial biodiversity and ornithology**.	No

Receptor	Relevant aspects	Effect	Potential for Intra-Project Cumulative Effects	Taken forward to Stage 4
Statutory and Non-Statutory Biodiversity Conservation Sites – Marine	Marine biodiversity, water quality and surface water and flood risk	The discharge of water from the Site towards the offshore marine environment, could result in reduced marine water quality and lead to degradation of designated sites.	The potential for intra-project cumulative effects on marine Statutory and Non-Statutory Biodiversity Conservation Sites has already been considered within **Chapter 9: Marine biodiversity**. Run-off from potentially contaminated land due to the demolition of land-based infrastructure will be controlled using standard site management practices and the risk of such run-off is thus considered to be low risk with the appropriate measures in place. However, through the implementation of the embedded measures outlined in this chapter and **Chapter 10: Coastal management and water quality** and **Chapter 12: Soils, geology and hydrogeology** of the ES, it is considered that neither of the above potential intra-project effects would be significant.	No
Habitats – Terrestrial	Terrestrial biodiversity and ornithology, air quality	The Proposed Works are mainly confined to hard standing within the Works Area, with vegetation being retained wherever practicable. The terrestrial habitats within the Works Area are predominantly of negligible intrinsic biodiversity conservation importance.	The potential for intra-project cumulative effects on terrestrial habitats has already been considered within **Chapter 8: Terrestrial biodiversity and ornithology**. Any unavoidable damage to or loss of habitat within or immediately adjacent to the Works Area would therefore be limited to small areas of habitat that are or no greater	No

Receptor	Relevant aspects	Effect	Potential for Intra-Project Cumulative Effects	Taken forward to Stage 4
			than local biodiversity conservation importance. The embedded environmental measures to be implemented through the EMP, for example dust control measures, will minimise the risk of habitat degradation outside of the Works Area.	
Habitats – Marine	Marine biodiversity, water quality and surface water and flood risk	The discharge of water from the Site towards the offshore marine environment, could result in reduced marine water quality and lead to degradation of habitat. Discharges from vessels during decommissioning and removal of marine infrastructure during the Preparations for Quiescence phase.	The potential for intra-project cumulative effects on subtidal and intertidal habitats has already been considered within **Chapter 9: Marine biodiversity**. Run-off from potentially contaminated land due to the demolition of land-based infrastructure will be controlled using standard site management practices and the risk of such run-off is thus considered to be low be low risk with the appropriate measures in place. Routine discharges from the vessels will be controlled through tertiary environmental measures, adopted in order to comply with applicable legislation. The likelihood of non-routine events will be minimised by the implementation of appropriate management plans. However, through the implementation of the embedded measures outlined in the ES no significant effects are anticipated.	No

Receptor	Relevant aspects	Effect	Potential for Intra-Project Cumulative Effects	Taken forward to Stage 4
Protected Species – Terrestrial	Terrestrial biodiversity and ornithology, air quality, noise and vibration	Disturbance of breeding birds, wintering/passage birds, badger, reptile and bats due to noisy works activities during Preparations for Quiescence phase.	The potential for intra-project cumulative effects on protected terrestrial species has already been considered within **Chapter 8: Terrestrial biodiversity and ornithology**. The Proposed Works are likely to have a temporary, localised displacement effects. The embedded environmental measures to be implemented through the EMP, for example dust control measures, will minimise the risk of habitat degradation outside of the Works Area.	No
Protected Species – Marine	Marine biodiversity, noise and vibration, water quality and surface water and flood risk	Seabed intervention may cause a temporary resuspension of solids and increased turbidity as well as underwater noise. The Proposed Works will create limited and temporary resuspension of sediments from the removal of seabed structures. These activities may result in some displacement of fish within the Study Area. Underwater noise may also pose various risks to marine mammals, ranging from disorientation, disturbing their prey, to causing auditory impairments leading to strandings and/or death in extreme cases.	The potential for intra-project cumulative effects on protected marine species has already been considered within **Chapter 9: Marine biodiversity**. The Severn Estuary is naturally a highly turbid body of water due to its physical shape, tidal regime and flow rates within which the fauna and mammals are acclimated to relatively high loadings of suspended sediment. Runoff and treated site drainage will affect a very localised area as it will disperse rapidly due to the relatively energetic marine environment and tidal regime. Furthermore, the habitats potentially impacted are widespread and it is expected that most fish would relocate temporarily to adjacent areas with a lower level of disturbance.	No

Receptor	Relevant aspects	Effect	Potential for Intra-Project Cumulative Effects	Taken forward to Stage 4
			With the appropriate EMP in place, the potential for demolition of land-based infrastructure to impact the fish community is very low. In addition, it is not expected that the Proposed Works will create noise level frequencies that would lead to behavioural disturbance and thus the magnitude of change due to temporary, intermittent and limited duration underwater noise from decommissioning activities is considered to be low.	
Landscape Character	Landscape character and terrestrial biodiversity and ornithology	The modification of the landscape character through construction activity, vegetation loss and visibility of deconstruction construction works in the Preparations for Quiescence phase would have result in adverse effects on Quantock Vale - Eastern Lowlands Sub-Area, Quantock Vale - The Coast (St Audries to Hinkley Point) Sub-Area, and Quantock Vale - Wick Moor and Coast Sub-Area. Effects would become beneficial on the LCT at the end of works.	Effective screening which already surrounds the site on all sides (by way of woodland belts to the east, south and west and floodwall to the north, would be retained.	No
Above and below ground heritage assets	Historic environment and landscape and visual	Construction works would result in changes to the landscape character and setting of historic assets.	Effects on the setting of Scheduled round cairn known as Pixie's Mound, Grade II listed Zine Farmhouse and the Stolford Group: Grade II listed Sea View, Stolford Farmhouse, and D'Arches are considered to be negligible. The residual effects identified in **Chapter 14: Landscape and Visual Impact Assessment** already take into	No

Receptor	Relevant aspects	Effect	Potential for Intra-Project Cumulative Effects	Taken forward to Stage 4
			account the potential for combined effects and no likely significant residual effects are identified.	
Coastal Protection	Surface water and flood risk, coastal management and water quality	The removal of the jetty and decommissioning of cooling water intake structure during the Preparations for Quiescence may result in the removal of an obstruction to currents and waves. This could lead to long-term localised changes in the wave climate, currents (direction and speed) and associated changes in sediment transport capacity. These changes may lead to long-term changes in coastal processes (erosion deposition regime). Tidal flood risk on buildings within the Site.	The Proposed Works to remove and/or decommissioning marine infrastructure could be considered to represent a return to a natural situation pertaining before the marine infrastructure was constructed (subject to climate change considerations). None of the Proposed Works are expected to compromise the condition of the existing coastal flood defences. Each of the proposed new buildings (including the Safestore location) on-site are set back from all of the projected coastal flood risk spatial envelopes, taking into account climate change allowances for 2120. Embedded measures will include coastal protection and flood risk adaptation measures and emergency flood planning to further minimise risk on site. As part of the coastal protection and flood risk adaptation measures the HPB Safety Case will be periodically reviewed to take account of any new data such as future updates to information on the condition of the flood defences in the area and/or future updates to climate change allowances.	No

Receptor	Relevant aspects	Effect	Potential for Intra-Project Cumulative Effects	Taken forward to Stage 4
Surface water	Surface water and flood risk, coastal management and water quality, soils, geology and hydrogeology	Surface water runoff from adjacent external areas (e.g. HPA) putting site infrastructure and staff at risk. Decommissioning activities and the presence of staff working on-site could alter of existing surface water pathways, and changes in surface water flood risk on site and to surrounding areas. There is potential for an increase in tidal flood risk towards the Site and surrounding areas as a result of changes in wave energy, and resultant effects on tidal erosion, sediment deposition and weakening of flood defences. Activities have the potential to generate the mobilisation of silt or other contaminants. Substances may also be spilled or leaked during the infilling process.	The new buildings on-site mostly avoid areas of existing surface water flooding, and the existing drainage system will be in place throughout the Proposed Works, which is designed to sufficiently accommodate surface water runoff. The existing drainage system will be left modified to sufficiently accommodate surface water runoff during the Proposed Works. Embedded measures including site water management measures, flood risk adaptation measures and emergency flood response planning will further minimise risk on site. Measures also include preparation of a drainage plan, and undertaking drainage survey and surface water monitoring will help reduce any potential effects upon ditch water quality during the Proposed Works.	No
Ground Water	Surface water and flood risk, coastal management and water quality, soils, geology and hydrogeology	Spillages and infiltration of runoff from the construction	Embedded measures to ensure adequate characterisation of soil and groundwater conditions, and inform the design of remedial measures if needed	No
Soils	Surface water and flood risk, coastal management and water quality, soils, geology and hydrogeology	Construction activities may increase soil erosion, compaction and impact on ground stability, or result in the spillage of contaminative materials into soils.	There is potential for interaction of effects on soils, geology and hydrogeology with effects on receptors considered in **Chapter 10: Coastal management and water quality**, and **Chapter 11: Surface water and flood risk**.	No

Receptor	Relevant aspects	Effect	Potential for Intra-Project Cumulative Effects	Taken forward to Stage 4
			Construction works may result in a number of effects on the existing soil resource, due to the potential impacts of erosion, compaction, ground stability and the loss of soil resource due to excess material being created during earthworks. However, these effects are not considered to result in a combined effect. In addition, embedded measures lowering the risk of a pollution incident impacting on environmental receptors during changes to the existing drainage systems will reduce the probability of a pollution incident taking place	

Table 21A-2 - Stage 3 intra-project screening table during Quiescence phase

Receptor	Relevant aspects	Effect	Potential for Intra-Project Cumulative Effects	Taken forward to Stage 4
Landscape Character	Landscape character and terrestrial biodiversity and ornithology	Up to Moderate (not significant) effects on the landscape character and views during the Quiescence phase due to presence of Safestore (though these are considered to be significant when considered cumulatively with HPC).	Effective screening which already surrounds the site on all sides (by way of woodland belts to the east, south and west and floodwall to the north, would be retained).	No
Above and below ground heritage assets	Historic environment and landscape and visual	Minor adverse to negligible effects anticipated during the Quiescence phase due to the presence of the Safestore within the landscape and setting of historic assets.	Effects on n the setting of Scheduled round cairn known as Pixie's Mound, Grade **II** listed Zine Farmhouse and the Stolford Group: Grade **II** listed Sea View, Stolford Farmhouse, and D'Arches are considered in **Chapter 14: Landscape and Visual Impact Assessment** of this ES. The residual effects identified in **Chapter 14: Landscape and Visual Impact Assessment** already take into account the potential for combined effects and no likely significant residual effects are identified.	No
Coastal Protection	Surface water and flood risk, coastal management and water quality	Works during Quiescence phase would be minimal and generally restricted to monitoring and maintenance of the Safestore. However, long-term impacts from the removal of the jetty and decommissioning of the cooling water intake structure during the Preparations for Quiescence may remain. This could lead to long-term localised changes in the wave climate, currents (direction and speed) and associated changes in sediment transport capacity. These changes may lead to long-term changes in coastal processes (erosion deposition regime).	None of the Proposed Works during the Preparations for Quiescence and Quiescence phases are expected to compromise the condition of the existing coastal flood defences. The Safestore will be set back from all of the projected coastal flood risk spatial envelopes, taking into account climate change allowances for 2120. Embedded measures will include coastal protection and flood risk adaptation measures and emergency flood planning to further minimise risk on site. As part of the coastal protection and flood risk adaptation measures the HPB Safety Case will be periodically reviewed to take account of any new data such as	No

Receptor	Relevant aspects	Effect	Potential for Intra-Project Cumulative Effects	Taken forward to Stage 4
		On-site maintenance activities also have the potential to generate the mobilisation of silt or other contaminants.	future updates to information on the condition of the flood defences in the area and/or future updates to climate change allowances.	
Surface water	Surface water and flood risk, coastal management and water quality, soils, geology and hydrogeology	Surface water runoff from adjacent external areas (e.g. HPA) putting site infrastructure and staff at risk. Works during Quiescence phase would be minimal and generally restricted to monitoring and maintenance of the Safestore. However, maintenance activities on-site could alter surface water pathways, and changes in surface water flood risk on site and to surrounding areas. Maintenance activities also have the potential to generate the mobilisation of silt or other contaminants. There is the potential for an increase in tidal flood risk towards the Site and surrounding areas arising as a result of changes in wave energy, and resultant effects on tidal erosion, sediment deposition and weakening of flood defences.	The Safestore will be located within areas of outside of existing surface water flooding and the existing drainage system will be in place throughout the Proposed Works and is designed/modified to sufficiently accommodate surface water runoff. Embedded measures including site water management measures, flood risk adaptation measures and emergency flood response planning will further minimise risk on site. Measures also include preparation of a drainage plan, and undertaking drainage survey and surface water monitoring will help reduce any potential effects upon ditch water quality during the Proposed Works.	No
Ground Water	Surface water and flood risk, coastal management and water quality, soils, geology and hydrogeology	Works during Quiescence phase would be minimal and generally restricted to monitoring and maintenance of the Safestore. However, maintenance activities on-site may result in spillages and infiltration of runoff from the works.	Embedded measures to ensure adequate characterisation and monitoring of soil and groundwater conditions and inform the design of remedial measures if needed.	No

Receptor	Relevant aspects	Effect	Potential for Intra-Project Cumulative Effects	Taken forward to Stage 4
Soils	Surface water and flood risk, coastal management and water quality, soils, geology and hydrogeology	Works during Quiescence phase would be minimal and generally restricted to monitoring and maintenance of the Safestore. However, maintenance activities on-site may increase soil erosion, compaction and impact on ground stability, or result in the spillage of contaminative materials into soils.	There is potential for interaction of effects on soils, geology and hydrogeology with effects on receptors considered in **Chapter 10: Coastal management and water quality**, and **Chapter 11: Surface water and flood risk**. Maintenance works may result in a number of effects on the existing soil resource, due to the potential impacts of erosion, compaction, ground stability and the loss of soil resource due to excess material being created during earthworks. Embedded measures to ensure adequate characterisation and monitoring of soil and groundwater conditions and inform the design of remedial measures if needed.	No

Table 21A-3 - Stage 3 intra-project screening table during Final Site Clearance phase

Receptor	Relevant aspects	Effect	Potential for Intra-Project Cumulative Effects	Taken forward to Stage 4
Workers of HPB power station	Transport, air quality, noise and vibration, people and communities	Future workers undertaking final site clearance works on the Site would experience similar (but no worse) transport, air quality, noise and vibration effects to those reported during the Preparations for Quiescence phase.	It is expected the future workers at the Site will reduce gradually during the Proposed Works. Workers will wear appropriate personal protective equipment (PPE), with works managed to reduce potential health risks.	No
HPA station site (workers)	n/a	Not applicable for Final Site Clearance phase as it is assumed works will be complete at Hinkley Point A during Final Site Clearance.		No
HPC site (workers)	Noise, air quality, transport, and landscape and visual	HPC is expected to be operational for at least 60 years. After which it would undergo decommissioning. Workers would experience similar (but no worse) transport, air quality, noise and vibration effects to those reported during the Preparations for Quiescence phase.	It is expected the future workers at the Site will reduce gradually during the Proposed Works. Workers will wear appropriate personal protective equipment (PPE), with works managed to reduce potential health risks.	Yes
Rural communities in the vicinity of HPB site (Stolford, Wick)	Noise, and landscape and visual	Residents would experience similar (but no worse) noise and vibration effects and effects on visual amenity to those reported during the Preparations for Quiescence phase.	Similar to the Preparations for Quiescence phase, noise sensitive receptors are not expected to experience significant noise effects during the Final Site Clearance phase. In addition, views of the Proposed Works during the Final Site Clearance range from moderate (significant) to moderate/minor (not significant) adverse; however, effects would become beneficial after the culmination of this phase. Overall, it is considered there is limited potential for intra-project effects to arise on community and residential receptors within Stolford, Wick.	Yes

Receptor	Relevant aspects	Effect	Potential for Intra-Project Cumulative Effects	Taken forward to Stage 4
Rural communities in the vicinity of HPB site (other)	Noise, transport, and landscape and visual	Residents would experience similar (but no worse) noise and vibration effects and effects on visual amenity to those reported during the Preparations for Quiescence phase.	Similar to the Preparations for Quiescence phase, noise sensitive receptors within other rural communities in vicinity of the site are not expected to experience significant noise effects during the Final Site Clearance phase. In addition, views of the Proposed Works during the Final Site Clearance phase are considered to be not significant. Overall, it is considered there is limited potential for intra-project effects to arise on community and residential receptors within other rural communities in vicinity of the site.	No
Communities and residential receptors within Bridgwater	Noise, and landscape and visual	Residents would experience similar (but no worse) noise and vibration effects and effects on visual amenity to those reported during the Preparations for Quiescence phase.	Similar to the Preparations for Quiescence phase, noise sensitive receptors within Bridgwater are not expected to experience significant noise effects during the Final Site Clearance phase. In addition, views of the Proposed Works during the Final Site Clearance phase are considered to be not significant. Overall, it is considered there is limited potential for intra-project effects to arise on community and residential receptors within Bridgwater.	No
Users of public rights of way, promoted routes and roads	Noise, air quality and landscape and visual	Decommissioning works during the Final Site Clearance phase would be up to moderate adverse effects (not significant) on landscape character and coastal character areas. These effects would reduce towards the culmination of this phase.	There is the potential for combined effects arising from noise, air quality and the deterioration of visual and recreational amenity. Combined, these effects are likely to lead to an increased sense of disturbance.	Yes

Receptor	Relevant aspects	Effect	Potential for Intra-Project Cumulative Effects	Taken forward to Stage 4
		Up to Major adverse visual effects (significant) on King Charles III England Coast Path, and not significant effects on other PRoW. These effects would reduce towards the culmination of this phase. At other views further from the Site, effects would be up to moderate (not significant) during the peak of these phases. Users of these resources would experience similar (but no worse) transport, air quality, noise and vibration effects to those reported during the Preparations for Quiescence phase.		
Statutory and Non-Statutory Biodiversity Conservation Sites – Terrestrial	Terrestrial biodiversity and ornithology, air quality	Potential dust and vehicle pollutants during final site clearance works would be similar (but no worse) to those reported during the Preparations for Quiescence phase.	The potential for intra-project cumulative effects on terrestrial Statutory and Non-Statutory Biodiversity Conservation Sites has already been considered within **Chapter 8: Terrestrial biodiversity and ornithology**. Works would be managed in accordance with the latest guidance and standards, which may include technological advancements, to minimise the residual effects so that they are not significant.	No
Statutory and Non-Statutory Biodiversity Conservation Sites – Marine	Marine biodiversity, water quality and surface water and flood risk	No discharges or marine works are anticipated as a result of the final site clearance works. There is the potential for water run-off to enter the sea.	Run-off from potentially contaminated land due to the demolition of land-based infrastructure will be controlled using standard site management practices and the risk of such run-off is thus considered to be low with the appropriate good practice measures in place.	No.

Receptor	Relevant aspects	Effect	Potential for Intra-Project Cumulative Effects	Taken forward to Stage 4
Habitats – Terrestrial	Terrestrial biodiversity and ornithology, air quality	Potential dust and vehicle pollutants during final site clearance works would be similar (but no worse) to those reported during the Preparations for Quiescence phase.	The potential for intra-project cumulative effects on terrestrial Statutory and Non-Statutory Biodiversity Conservation Sites has already been considered within **Chapter 8: Terrestrial biodiversity and ornithology**. Works would be managed in accordance with the latest guidance and standards, which may include technological advancements, to minimise the residual effects so that they are not significant.	No
Habitats – Marine	Marine biodiversity, water quality and surface water and flood risk	No discharges or marine works are anticipated as a result of the final site clearance works. There is the potential for water run-off to enter the sea.	Run-off from potentially contaminated land due to the demolition of land-based infrastructure will be controlled using standard site management practices and the risk of such run-off is thus considered to be low with the appropriate good practice measures in place.	No
Protected Species – Terrestrial	Terrestrial biodiversity and ornithology, air quality, noise and vibration	At this time, details on the species present during final site clearance are unknown. Disturbance of species may occur due to noisy works activities during Preparations for Quiescence and Final Site Clearance phase.	The Proposed Works are likely to have a temporary, localised displacement effects on local species within the area at the time of the works. Ongoing monitoring and surveys prior to the commencement of works will be undertaken to determine the level of embedded environmental measures which are required. These could include dust control measures, which will minimise the risk of habitat degradation outside of the Works Area.	No

Receptor	Relevant aspects	Effect	Potential for Intra-Project Cumulative Effects	Taken forward to Stage 4
Protected Species – Marine	Marine biodiversity, noise and vibration, water quality and surface water and flood risk	There are no works proposed within the marine environment during the Final Site Clearance. Disturbance of species may occur due to noisy works activities during Final Site Clearance phase.	It is not expected that the Proposed Works will create noise level frequencies that would lead to behavioural disturbance in fish or mammals and thus the magnitude of change due to temporary, intermittent and limited duration underwater noise from decommissioning activities is considered to be low.	No
Landscape Character	Landscape character and terrestrial biodiversity and ornithology	The modification of the landscape character through construction activity, vegetation loss and visibility of deconstruction works in the Final Site Clearance phase would have result in adverse effects on Quantock Vale - Eastern Lowlands Sub-Area, Quantock Vale - The Coast (St Audries to Hinkley Point) Sub-Area, and Quantock Vale - Wick Moor and Coast Sub-Area (however these are not significant). Effects would become beneficial on the LCT at the end of works.	The Site will be managed and cleared to enable future development.	No
Above and below ground heritage assets	Historic environment and landscape and visual	Construction works would result in changes to the landscape character and setting of historic assets. Effects would reduce on assets at the end of the works.	There would be no effect on the landscape of heritage assets	No

Receptor	Relevant aspects	Effect	Potential for Intra-Project Cumulative Effects	Taken forward to Stage 4
Coastal Protection	Surface water and flood risk, coastal management and water quality	There are no works proposed within the marine environment during the Final Site Clearance. However, long-term impacts from the removal of the jetty and cooling water intake structure during earlier phases may remain from the removal of an obstruction to currents and waves. This could lead to long-term localised changes in the wave climate, currents (direction and speed) and associated changes in sediment transport capacity. These changes may lead to long-term changes in coastal processes (erosion deposition regime). On-site maintenance activities also have the potential to generate the mobilisation of silt or other contaminants.	Changes in coastal processes could be considered to represent a return to a natural situation pertaining before HPB marine infrastructure was built (subject to climate change considerations). However, none of the Proposed Works during this phase are expected to compromise the condition of the existing coastal flood defences. The Site will be managed to ensure appropriate implementation of coastal protection and flood risk adaptation measures as required to further minimise risk on site.	No
Surface water	Surface water and flood risk, coastal management and water quality, soils, geology and hydrogeology	Decommissioning activities and the presence of staff working on-site could alter of existing surface water pathways, and changes in surface water flood risk on site and to surrounding areas. There is the potential for an increase in tidal flood risk towards the Site and surrounding areas as a result of changes in wave energy, and resultant effects on tidal erosion, sediment deposition and weakening of flood defences. Activities also have the potential to generate the mobilisation of silt or other contaminants. Substances may also be spilled or leaked during the infilling process.	The existing drainage system will be left in place throughout the Proposed Works and will be modified to sufficiently accommodate surface water runoff. Embedded measures including site water management measures, flood risk adaptation measures and emergency flood response planning will further minimise risk on site.	No

Receptor	Relevant aspects	Effect	Potential for Intra-Project Cumulative Effects	Taken forward to Stage 4
Ground Water	Surface water and flood risk, coastal management and water quality, soils, geology and hydrogeology	Spillages and infiltration of runoff from the construction.	Embedded measures to ensure adequate characterisation of soil and groundwater conditions and inform the design of remedial measures if needed.	No
Soils	Surface water and flood risk, coastal management and water quality, soils, geology and hydrogeology	Decommissioning activities may increase soil erosion, compaction and impact on ground stability, or result in the spillage of contaminative materials into soils.	There is potential for interaction of effects on soils, geology and hydrogeology with effects on receptors considered in **Chapter: 10: Coastal management and water quality**, and **Chapter 11: Surface water and flood risk**. Construction works may result in a number of effects on the existing soil resource, due to the potential impacts of erosion, compaction, ground stability and the loss of soil resource due to excess material being created during earthworks. However, these effects are not considered to result in a combined effect. In addition, embedded measures lowering the risk of a pollution incident impacting on environmental receptors during changes to the existing drainage systems will reduce the probability of a pollution incident taking place.	No

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21B

Inter-project cumulative effects

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21B Inter-project cumulative effects

21B.1 Introduction

21B.1.1. The first step in identifying the long list of other developments which have the potential to interact with the Proposed Project was to establish the Zone of Influence (ZoI) for the Proposed Works.

21B.1.2. **Chapter 21: Cumulative Effects Assessment** presents how the ZoI has been defined based upon 5 km to identify a long list of 'other developments'.

21B.1.3. A Scoping Report for the Proposed Project was issued to the Office for Nuclear Regulation (ONR) on 5 October 2022. An initial long list of other developments was prepared during Scoping which has been updated to reflect any additional other developments that have been considered since Scoping and is presented in **Table 22B-1**. This includes the inclusion of Bridgwater Tidal Barrier and Gravity Local Development Order, which, whilst outside of this 5 km ZoI have been included at the request of the ONR.

21B.1.4. Developments have been included on the basis that they are either:

- under construction / decommissioning;
- permitted application(s), but not yet implemented (those from the past 5 years have been considered, taking into account those that received planning consent over 3 years ago and are still valid, but have not been completed);
- submitted application(s) not yet determined;
- refused, subject to appeal procedures not yet determined;
- developments where EIA Screening and/or Scoping has been undertaken but a full planning application has not yet been submitted;
- on the National Infrastructure Planning Programme of Projects;
- identified local development orders;
- identified in the local plan/development plan:
  - West Somerset Local Plan to 2032 (2016)
  - Sedgemoor Local Plan 2011 - 2032
- identified in other plans and programmes, such as the following (as appropriate) which set the framework for future development consents/approvals, where such development is reasonably likely to come forward.

21B.1.5. There are a number of development types, which, due to their nature and scale, have not been considered to have the potential to result in cumulative impacts and were therefore screened out of the assessment. This has been based on professional judgement, undertaking a review of the distances from each element of the proposed development and the type of development and therefore the impacts likely to arise. This includes:

- construction of agricultural buildings (e.g. storage of livestock, machinery or feed);
- house extensions or cosmetic changes to buildings;
- roof mounted solar PV panels (or ground mounted less than 50kW output);
- work to trees;
- variations to planning permissions, or reserved matters applications; and

- small scale residential uses (less than 15 dwellings), or changes of buildings' use (unless it could itself in a cumulative effect, such as a conversion of several barns into a holiday village).

Table 21B-1 - Inter project cumulative effects long list

ID	Planning Authority	Application Reference	Date of Application	Address	National Grid Reference	Description of Development	Application Status in March 2024	Tier	Progress to Stage 2?
HPA	Somerset	n/a Hinkley Point A Decommissioning	n/a	Hinkley Point, Somerset, STA5 1YA	ST 211 460	Hinkley Point A nuclear power station ceased power generation in 2000. The ongoing decommissioning process is being managed by the Nuclear Decommissioning Authority subsidiary, Nuclear Restoration Services (NRS) (formerly Magnox Ltd.). The nuclear power station came into service in 1965 and after 35 years of successful operation, being the first station in the Magnox fleet to generate more than 103TW hours of electricity, the twin reactor station closed in 2000, and was fuel free by 2005. The turbine hall was demolished in 2019. The site is now focused on the safe and secure retrieval, packaging and storing of its legacy waste. Priorities for the site include completing the commissioning of the plant required to process, treat, encapsulate, and store intermediate level waste on site until a UK geological disposal facility becomes available. Significant progress is also being made on asbestos hazard reduction from boiler houses and other areas across the site. The site will then enter a care and maintenance stage until further radioactive decay occurs and the reactors can be demolished before final site clearance.	Decommissioning works commenced	1	Yes – however may form part of existing baseline.
1	Secretary of State for Department of Energy and Net Zero	EN010001 Hinkley Point C New Nuclear Power Station Granted DCO and Non-Material Change	Original Application submitted 2011	Site to the west of TA5 1UD	ST 21043 45928	Proposal for a nuclear power station with two nuclear reactors capable of generating a total of up to 3,260MW of electricity at Hinkley Point C (HPC) and subsequent non-material or material amendments.	Under construction. Unit 1 due to complete end of the decade	1	Yes – however may form part of existing baseline.
2	Somerset West and Taunton Council	3/39/20/003	January 2020	Land to the west of Williton, off Priest Street, Williton	ST 07556 40944	Outline application (with all matters reserved) for the erection of up to 350 dwellings (comprising a mix of dwelling sizes and types and affordable housing), approximately 1,000sqm of flexible uses within Use class E (limited to offices, R&D and light industrial), vehicle access, public open space, sports and recreational facilities, footpaths, cycle ways, enhancements to the Barrows scheduled monument including information boards, landscaping and associated works.	Granted Permission February 2024. Construction not commenced	1	No – due to distance unlikely to share receptors with the Proposed Works
3	Sedgemoor District Council	11/19/00003	January 2019	Land to the East of, Isleport Lane, Highbridge, Somerset	ST 32894 47536	Outline application with some matters reserved, for residential development of up to 248no. dwellings (Use Class C3), community uses/local shop (D1/A1), public open space and green infrastructure, new vehicle access points from Isleport Lane and associated engineering, drainage, landscape and infrastructure works; Access to be determined and all other matters reserved.	Granted Permission Feb 2022 Under construction. Due to complete in advance of Proposed Works commencing.	1	No – due to distance unlikely to share receptors with the Proposed Works
4	Sedgemoor District Council	52/19/00001	January 2019	Land At, Brue Farm, Huntspill Road, Highbridge, Somerset, TA9 3DE	ST 31739 46940	Hybrid (full and outline) application for the erection of 171 dwellings together with associated infrastructure, including provision of roundabout and public open space and seeking outline permission with all matters reserved for the erection of a primary school.	Granted Permission April 2021 Under construction. Due to complete in advance of Proposed Works commencing	1	No – due to distance unlikely to share receptors with the Proposed Works
5	Sedgemoor District Council	28/22/00003	July 2022	Mill Farm Caravan Park,	ST 21964 40884	Development of 58 no. additional touring caravan pitches. Continued use of existing 53 no. touring caravan pitches in Home Meadow for	Granted Permission March 2023	1	No –permission for use to

ID	Planning Authority	Application Reference	Date of Application	Address	National Grid Reference	Description of Development	Application Status in March 2024	Tier	Progress to Stage 2?
				Watery Lane, Fiddington, Bridgwater, Somerset, TA5 1JQ		use by HPC workers until 31 December 2025. Erection of welfare block and relocation of trampoline block adjacent to proposed welfare block. Repositioning of MUGA (previously approved through application reference 28/20/00006).			continue to December 2025 (finished before Proposed Works commence).
6	Sedgemoor District Council	13/19/00023	March 2019	Combwich Wharf, Land To The South Of, Estuary Park, Combwich, Bridgwater, Somerset, TA5	ST 26040 41758	Construction of temporary laydown area for abnormal indivisible loads adjacent to the existing Combwich Wharf access road, including construction of hardstanding, erection of fencing, gates, lighting, CCTV cameras, mobile welfare facilities, landscaping, earthworks and all other associated works in connection with construction of HPC power station.	Granted Permission July 2019	1	No – implemented prior to commencement of Proposed Works
7	Sedgemoor District Council	23/19/00002	March 2019	Land To The South Of, Quantock Road, Bridgwater, Somerset	ST 28466 37016	Hybrid (full and outline) application. Full application for the erection of 114 dwellings, formation of signal-controlled access off Quantock Road with associated infrastructure, landscaping and open space (phase 1). Outline application with all matters reserved for the erection of up to 240 residential dwellings with associated infrastructure, landscaping and open space (phase 2).	Under consideration	1	Yes
8	Sedgemoor District Council	23/18/00013	September 2018	Durleigh Water Treatment Works, Durleigh Reservoir, Enmore Road, Durleigh, Bridgwater, Somerset, TA5 2AW	ST 26217 35923	Demolition of existing buildings and the redevelopment of the site including the erection of a new main treatment building including process hall/welfare area, low lift pumping area, GRP monitoring room kiosk and GRP disinfection static mixer kiosk. Removal of 17.5m of existing hedgerow along Enmore Road and construction of temporary pedestrian footbridge to gain access to temporary construction compound to the East of Enmore Road to facilitate works to be undertaken under Permitted Development Rights. Installation of nesting bank to northern side of Durleigh Reservoir.	Granted Permission May 2019	1	No – considered unlikely to interact with the Proposed Works
9	Sedgemoor District Council	23/18/00016	November 2018	Durleigh Reservoir, Enmore Road, Durleigh, Bridgwater, Somerset, TA5 2AW	ST 26217 35923	Formation of new wetlands on land west of Durleigh Water Treatment Works (WTW) and Reservoir. Erection of 2 No. footbridges to maintain access to public rights of way.	Granted Permission March 2019	1	No
10	Sedgemoor District Council	51/19/00003	March 2019	Land at Cokerhurst Farm South of Wembdon Hill & North of, Quantock Road, Bridgwater, Somerset	ST 27723 37241	Hybrid (full and outline) application. Full application for the erection of 238 dwellings, formation of two new means of access onto A39, pedestrian/cycle link onto Wembdon Hill, public open space, parking and landscaping. Outline application with all matters reserved, for up to 437 dwellings, 500sqm (A1-A5) and/or community uses (D1)), 2.2ha site for up to 2 Form Entry Primary School and bus gate/emergency access via Inwood Road with associated infrastructure, landscaping and works.	Granted Permission August 2023 Not yet commenced	1	Yes
11	Sedgemoor District Council	11/22/00017	March 2022	1 Hooper Close, Highbridge, TA9 4JU	ST 327477	Proposed redevelopment of land for 3no. commercial units (use class B2, B8, Eg(i)) and associated works.	Granted Permission May 2022	1	No – due to low number of properties proposed considered unlikely to

ID	Planning Authority	Application Reference	Date of Application	Address	National Grid Reference	Description of Development	Application Status in March 2024	Tier	Progress to Stage 2?
									interact with the Proposed Work
12	Sedgemoor District Council	13/21/00041	January 2021	The Yeo Valley Organic Company, Cannington, Bridgwater, TA5 2ND	ST 24917 38880	Installation of ground mounted PV (Solar Panels) to provide carbon free electricity.	Granted Permission May 2022	1	No - considered unlikely to interact with the Proposed Work
13	Sedgemoor District Council	13/23/00032	December 2023	Land to the East of Brymore Way, between Withiel Drive and Chads Hill, Brymore Way, Cannington, Bridgwater, TA5	ST251397	Erection of 160no. dwellings, creation of vehicular, pedestrian and cycle access, public open space, landscaping and associated works	Under consideration	1	Yes
14	Sedgemoor District Council	36/23/00011	May 2023	Land At, Cricketer Farm, Cannington Road, Nether Stowey, Bridgwater, TA5 1LL	ST 19580 39908	Erection of 58 dwellings (40% affordable units) with access, landscaping, parking, public open space and associated works.	Under consideration	1	Yes
15	Sedgemoor District Council	28/23/00013	November 2023	Mill Farm Caravan Park, Watery Lane, Fiddington, Bridgwater, Somerset, TA5 1JQ	ST 22018 40822	Change of use to allow all-year round tourism & temporary use, existing caravan storage to 45 pitches for temporary use and change of use of agricultural land for storage of 100 caravans.	Under consideration	1	Yes
16	Sedgemoor District Council	36/22/00024	December 2022	Inwood Farm, Cannington Road, Nether Stowey, Bridgwater, TA5 1HY	ST 20855 39610	Change of use of agricultural field for the provision of caravan pitches and continuation of existing caravan site for use by HPC workers until 31 December 2025. Erection of welfare building and bus shelter. Development of a footpath from site to Nether Stowey village.	Under consideration	1	Yes
17	Sedgemoor District Council	36/22/00026	February 2023	Budley Farm, Cannington Road, Nether Stowey, Bridgwater, TA5 1LL	ST 19835 39661	Erection of replacement livestock building to replace existing fire damaged livestock buildings and change of use of existing B2/B8 building to Class E(d) indoor gymnasium. Retention of two storey extension to west elevation of existing dwelling.	Granted Permission May 2023	1	No – small scale and considered unlikely to interact with the Proposed Works
18	Sedgemoor District Council	39/23/00004	July 2023	Combwich Wharf, Land To The South Of, Estuary Park, Combwich,	ST 26164 42108	Construction of a temporary AIL bypass track within Combwich construction compound, including the modification of existing, and erection of new gates in connection with the construction of Hinkley Point C Power Station.	Granted Permission November 2023	1	No – implemented prior to commencement of Proposed Works

ID	Planning Authority	Application Reference	Date of Application	Address	National Grid Reference	Description of Development	Application Status in March 2024	Tier	Progress to Stage 2?
				Bridgwater, Somerset, TA5					
19	Sedgemoor District Council	45/23/00027	January 2024	Swang Farm, Cannington, Bridgwater, TA5 2NJ	ST 23485 38998	Erection of ground mounted south facing solar panels and associated equipment of 2.029MWp installed capacity for the purpose of providing renewable energy to the Cannington Enterprises Manufacturing Plant.	Under Consideration	1	No - considered unlikely to interact with the Proposed Work
20	Sedgemoor District Council	51/22/00018	July 2018	Model Farm, Waldrons Lane, Wembdon, Bridgwater, TA5 2BA	ST 27568 39274	Change of use of grounds/gardens, including the provision of a pond to be used for public visits, together with the creation of a car park and erection of gardeners shed/ticket office.	Under Consideration	1	No - considered unlikely to interact with the Proposed Work
21	Sedgemoor District Council	51/22/00035	February 2023	Land to the North West of, Waldrons Lane, Wembdon, Bridgwater	ST 28569 40395	Change of use of agricultural land to dog training, including the erection of training shed, equipment store, fencing, parking provisions and landscaping.	Granted Permission May 2023	1	No - considered unlikely to interact with the Proposed Work
22	Sedgemoor District Council	52/23/00010	January 2024	4 Laburnum Lodges, Sloway Lane, West Huntspill, Highbridge, Somerset, TA9 3RJ	ST 30212 45247	Change of use of the site for accommodation of Hinkley Point workers for minimum period of 5 years thereafter reversion to holiday accommodation use only.	Under Consideration	1	No - considered unlikely to interact with the Proposed Work
23	Sedgemoor District Council	41/23/00010	August 2023	Land At, Bristol Road, Pawlett, Bridgwater, Somerset, TA6	ST 30164 42908	Erection of new convenience store and 6no. smaller commerical units, with associated access, parking and landscaping.	Under Consideration	1	No - considered unlikely to interact with the Proposed Work
24	Secretary of State for Department of Energy and Net Zero	EN010074 The West Somerset Tidal Lagoon at pre application stage	n/a	Culvercliff in Minehead to Lilstock, West Somerset	ST 16507 45499	Tidal Lagoon and associated electricity generating infrastructure with a generating capacity of circa 2.8GW per annum. A continuous breakwater wall spanning from Culvercliff in Minehead to Lilstock (approximately 21 km long).	Pre-application stage	3	No - considered unlikely to interact with the Proposed Work
25	Secretary of State for Department of Energy and Net Zero	EN010102 Hinkley Point C New Nuclear Power Station Material Change	n/a	Site to the west of TA5 1UD	ST 21043 45928	Removal of requirement to install Acoustic Fish Deterrent system (associated with cooling water intake heads) amendments to the Interim Spent Fuel Store and Meteorological Mast, addition of new Hinkley Point Substation and Sluice Gate Storage Racks.	Pre-application stage	2	Yes
26	MMO	MLA/2023/00149/1	March 2023	Site to the North of Lilstock	ST 15963 49407	Cefas (on behalf of NNB GenCo (EDF energy)) manage, collect and analyse data from a waverider buoy which is located offshore of the Hinkley Point A, B and C (HPA, HPB, HPC) Nuclear power stations. The waverider buoy provides crucial information about the wave dynamics of the site and is an input into modelling sediment transport and coastal erosion. The information gathered has been historically valuable and is essential for monitoring the site going forwards.	Decided March 2024. Operation ongoing monitoring.	n/a	No – unlikely to interact with the Proposed Works
27	MMO	MLA/2017/00113/2	April 2017	Site to the North of Hinkley Point B	ST 18743 51107	NNB GenCo (HPC) Ltd has a Development Consent Order and Marine Licence to build and operate a twin EPR nuclear power station at Hinkley Point, near Bridgwater in Somerset.	Complete	1	No – forms part of baseline

ID	Planning Authority	Application Reference	Date of Application	Address	National Grid Reference	Description of Development	Application Status in March 2024	Tier	Progress to Stage 2?
						The site will be protected from the sea by a seawall, which will be a mass concrete structure and have rock armour placed at the toe to prevent erosion and undercutting. This application is for a single-point mooring for delivery of the rock armour.			
28	MMO	MLA/2014/00262/2	2014 (and subsequent variations)	Site to the North of Hinkley Point B	ST 21184 46388	A seawall was built around the nuclear power station during its construction in the 1960's to protect it from flooding. The seawall is periodically inspected to ensure that it remains effective. The inspection in 2013 concluded that the integrity of the sea defences is impaired by the profile of the beach in front of the seawall The build-up of sand and cobbles along the base of the wall have blocked surface water drains and changed the profile of the wall. In order to reinstate the original profile of the seawall at Hinkley Point and to ensure that the nuclear power station is protected from flooding in line with the Station's Safety Case as required by the Office for Nuclear Regulation (ONR), EDF Energy propose to remove the built up material and to refurbish the flap valves associated with the drains along the seawall fronting Hinkley Point A and Hinkley Point B. The area where material has been removed would be re-graded to an earlier beach slope. The 'removed' material would be spread across and on similar beach material located to the east of Hinkley Point B.	Complete	1	No – forms part of baseline
29	MMO	MLA/2016/00426	2016	Site to the North of Hinkley Point B	ST 20987 46273	Application - Maintenance of existing works. Drumscreens	Complete	n/a	No – forms part of baseline
30	MMO	MLA/2016/00408	2016	Site to the North of Hinkley Point B	ST 21210 46285	Seal Pit (Syphon recovery chamber) - Hinkley Point B Nuclear Power Station - routine marine activities licence	Complete	n/a	No – forms part of baseline
31	Sedgemoor District Council	52/23/00002 Granted Permission	January 2023	Land At, Brue Farm, Huntspill Road, Highbridge, Somerset, TA9 3DE	ST 31552 46766	Variations of Condition 3 of Planning Permission 52/21/00016 (Variations of Conditions 3, 21, 28, 32 of Planning Permission 52/19/00001 (Hybrid (full and outline) application for the erection of up to 171 dwellings together with associated infrastructure, including provision of roundabout and public open space and seeking outline permission with all matters reserved for the erection of a primary school.) to reduce number of plots to 167 and associated layout changes) to replace screen walls with timber fencing.	Granted March 2023	1	No – due to distance unlikely to share receptors with the Proposed Works
32	Sedgemoor District Council	11/23/00025 Granted Permission	March 2023	41 The Esplanade, Burnham On Sea, Somerset, TA8 2AQ	ST 30366 49469	Change of use of existing guest house to 13no. self-contained residential units, with the erection of two storey rear (East) extension on site of existing store (to be demolished) and associated works.	Granted December 2023	1	No – due to distance unlikely to share receptors with the Proposed Works
33	Sedgemoor District Council	11/23/00101 Under Consideration	October 2023	Beaufort House, 7 Rectory Road, Burnham On Sea, Somerset, TA8 2BY	ST 30665 49973	Demolition of buildings and the erection of 11no. new residential units in association to existing care home (revised scheme).	Not decided	1	No – due to distance unlikely to share receptors with the Proposed Works

ID	Planning Authority	Application Reference	Date of Application	Address	National Grid Reference	Description of Development	Application Status in March 2024	Tier	Progress to Stage 2?
34	Sedgemoor District Council	11/23/00124 Under Consideration	December 2023	19 Oxford Street, Burnham On Sea, Somerset, TA8 1LG	ST 30719 48845	Erection of 70 bed. care home on site of existing (to be demolished) including parking provision and associated works.	Not decided	1	No – due to distance unlikely to share receptors with the Proposed Works
35	Sedgemoor District Council	Planning Allocation D33 in Sedgemoor Local Plan 2011 - 2032	n/a	n/a	n/a	Formal and Informal Recreational Outdoor Spaces Areas include: Steart Marshes WWT & EA Nether Stowey Playing Field Fiddington playing field Otterhampton Primary School Combwich Common	Allocation	3	No – considered unlikely to interact with the Proposed Works
36	Somerset Council	Environment Agency and Somerset Council Bridgwater Tidal Barrier	n/a	A Tidal Barrier structure on the River Parrett next to Express Park, Bridgwater		The Scheme will reduce tidal flood risk to 11,300 homes and 1,500 businesses. The whole scheme comprises of: A Tidal Barrier structure on the River Parrett next to Express Park, Bridgwater. A substantial programme of works to improve existing downstream riverside flood banks and construct new secondary flood banks. Improved fish and eel passage at 12 upstream sites on both the rivers Parrett and Tone.	In 2024, construction will begin on the temporary by-pass channel and barrier foundations. Construction of the western access track (to be known as Barrier Way) is near completion. It is anticipated that it will likely take 4 to 6 years to complete all elements of the scheme	1	Yes
37	Sedgemore District Council	Gravity Local Development Order	n/a	Gravity Enterprise Zone, which is located near Puriton, just off Junction 23 of the M5, previously known as the former Royal Ordnance Factory.		The description of development, is as follows: (a) any operations or engineering works necessary to enable the development of the Site, including demolition, excavation and earthworks, the formation of compounds for the stockpiling, sorting and treatment of excavated materials, import of material to create development platforms, piling, and any other operations or engineering necessary for site mobilisation, office and worker accommodation, communications, drainage, utilities and associated environmental, construction and traffic management. (b) the development of a smart campus including: i. commercial building or buildings with a total Gross External Area of up to 1,000,000m 2 which would sit within current Use Classes E (a)- (g), B2, B8 and sui generis floorspace uses and ii. a range of buildings up to 100,000m 2 within Use Classes C1, C2, E (a) (g), F, B8, including restaurants / cafes, shops, leisure, education, and sui generis uses; and iii. up to 750 homes in Use Class C3. together with associated infrastructure including restoration of the railway line for passenger and freight services, rail infrastructure including terminals, sidings and operational infrastructure and change of use of land to operational rail land, multi-modal transport interchange, energy generation, energy distribution and management infrastructure, utilities and associated buildings and infrastructure, digital infrastructure, car parking, a site wide sustainable water management system and associated green infrastructure, access roads and landscaping.	February 2022. Stage One Strategic Landscaping (95/23/00001) has been accepted on the Somerset Council planning portal. As of 2024, Agratas confirms Gravity as the location of its 40GWh UK Gigafactory. Gravity remains in discussion with existing large-scale occupiers.	2	Yes

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