

Portland
energy recovery
facility

Environmental statement



7 Cultural heritage

Introduction

- 7.1 This chapter has been prepared by Terence O'Rourke Ltd on behalf of Powerfuel Portland Ltd and assesses the likely significant effects of the proposed ERF development with respect to impacts on the historic environment, covering designated and non-designated heritage assets such as archaeological remains, historic buildings and conservation areas. Potential effects on the Dorset and East Devon Coast World Heritage Site (the Jurassic Coast) are considered separately in chapter 13 of this ES. This chapter and its associated figures and appendices should be read in conjunction with chapter 2 (site description and development proposals), chapter 9 (landscape, seascape and visual effects) and the information submitted in support of the planning application.

Legislation and policy

Legislation

- 7.2 National policy recognises the value and significance of cultural heritage, and the public interest in the preservation of particular assets, and sets out mechanisms to ensure that it is taken into account in planning decision-making. Sites and features of identified interest are protected by the Ancient Monuments and Archaeological Areas Act 1979 (as amended), and within the planning system through the Town and Country Planning (Listed Buildings and Conservation Areas) Act 1990.
- 7.3 Section 66(1) of the 1990 act states that, in considering whether to grant planning permission for development that affects a listed building or its setting, the local planning authority or Secretary of State "*shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses*". Section 72(1) in respect of conservation areas states that special attention shall be paid to the desirability of preserving or enhancing the character or appearance of that area. Case law has made it clear that it is necessary to give any harm to the setting of a listed building considerable importance and weight when making planning decisions.

National planning policy and guidance

- 7.4 National planning policy and guidance on conserving and enhancing the historic environment is contained within the National Planning Policy Framework (NPPF), the online National Planning Practice Guidance, and the Good Practice Advice published by Historic England (GPA1 Local plan making, GPA2 Managing significance in decision-taking in the historic environment and GPA3 The setting of heritage assets). Heritage assets are an irreplaceable resource, and should be conserved in a manner appropriate to their significance, so that they can be enjoyed for their contribution to the quality of life of existing and future generations (NPPF, paragraph 184).
- 7.5 The detailed policies in the NPPF on development management concern the need to clearly define the significance of any potentially affected site or area, the pre-application information requirements for any proposals, including for

archaeological field evaluation, and the principles to be considered in determining any proposal for change potentially affecting heritage assets. There is an overall requirement to gather sufficient information to ensure an adequate understanding of the significance of an asset before any decisions affecting its future are made. The objective is to avoid or minimise conflict between a heritage asset's conservation and any aspect of the proposal (paragraph 190).

7.6 Paragraph 192 states that, in determining planning applications:

“Local planning authorities should take account of:

- *The desirability of sustaining and enhancing the significance of heritage assets and putting them to viable uses consistent with their conservation;*
- *The positive contribution that conservation of heritage assets can make to sustainable communities including their economic vitality; and*
- *The desirability of new development making a positive contribution to local character and distinctiveness.”*

7.7 *“Great weight”* should be given to the objective of conserving designated heritage assets, irrespective of the degree of harm, and local planning authorities are required to take the significance of an asset into account when considering proposals (paragraph 193). All harm requires *“clear and convincing justification”* (paragraph 194).

7.8 Paragraphs 195 and 196 define the judgement to be made in cases of harm to designated heritage assets, based on public benefits that could outweigh the harm, taking into account the weight to be given to conservation, and whether the conflict between the provision of such public benefits and heritage conservation is necessary. A key concept in the NPPF is proportionality; that the information required, efforts to preserve, and degree of public benefits necessary to justify any harm or loss of an asset should be based on an understanding of its significance.

7.9 The *National Design Guide: Planning practice guidance for beautiful, enduring and successful places* (Ministry of Housing, Communities and Local Government, 2019) provides the following guidance at C2 in relation to context:

“Value heritage, local history and culture

- *When determining how a site may be developed, it is important to understand the history of how the place has evolved. The local sense of place and identity are shaped by local history, culture and heritage, and how these have influenced the built environment and wider landscape.*
- *Sensitive re-use or adaptation adds to the richness and variety of a scheme and to its diversity of activities and users. It helps to integrate heritage into proposals in an environmentally sustainable way.*
- *Well-designed places and buildings are influenced positively by:*

- *the history and heritage of the site, its surroundings and the wider area, including cultural influences;*
- *the significance and setting of heritage assets and any other specific features that merit conserving and enhancing;*
- *the local vernacular, including historical building typologies such as the terrace, town house, mews, villa or mansion block, the treatment of façades, characteristic materials and details – see Identity.”*

7.10 The setting of an asset is not a heritage asset or a designation in itself, and its importance lies in what it contributes to the significance of the heritage asset. The approach to identifying those heritage assets likely to be affected by a development proposal is given in the guidance by Historic England, which states that *“The setting of a heritage asset is ‘the surroundings in which a heritage asset is experienced’ (NPPF, Annex 2: Glossary). Where that experience is capable of being affected by a proposed development (in any way) then the proposed development can be said to affect the setting of that asset.”* (GPA3, paragraph 20). The guidance aims for a consistent approach to the assessment of setting and the range of historic, visual and functional relationships that can define the contribution of adjoining land to the significance of any single asset or group of assets. These include physical attributes and perceptual values, depending on the nature of an asset and its past and present surroundings. Potentially significant views can be deliberately designed or incidental, or the result of later changes.

Local planning policy

- 7.11 The local planning policy in relation to heritage assets is provided by the Bournemouth, Christchurch, Poole and Dorset Waste Plan (adopted December 2019), policy 19 Historic environment, and the West Dorset, Weymouth & Portland Local Plan (adopted October 2015), policy ENV4 Heritage assets. Relevant policies of the Neighbourhood Plan for Portland 2017-2031 (referendum version January 2020) are Port/EN4 Local heritage assets and Port/EN7 design and character.
- 7.12 The Underhill, incorporating Chiswell, Maidenwell, Fortuneswell and Castletown, conservation area designation was first made in 1976, and there have been subsequent extensions to the boundaries in 1997, 2000, 2014 and 2017. The full appraisal of the conservation areas of Portland, as amended, was adopted in 2017.

Methodology

- 7.13 The chapter assesses the cultural heritage resources of the site⁽¹⁾ and its environs as they are identified through designation, the national or local archaeological record, documentary sources or other studies. The data sources consulted for the assessment are outlined in table 7.1.

¹ The 6.29 ha site comprises two elements: the 2.14 ha main site for the ERF buildings and the 4.15 ha of cable routes to the electricity substation off Lerret Road and to the berths and Queens Pier and Coaling Pier.

- 7.14 The study area for the assessment extends to a 1 km radius from the boundary of the 2.14-hectare main site area on Incline Road and the access to the gate of the port. The site boundary includes the cable lines to the substation and the piers at the port; however, taking the study area radius from the outer edge of these would have resulted in an overly large and unwieldy study area, most of which would have been the sea. The assessment has been extended where necessary to consider individual assets outside the study area to ensure all potential effects are considered and to integrate with the landscape, seascape and visual effects assessment in chapter 9.
- 7.15 The Historic Environment Record (HER) maintained by Dorset Council was consulted⁽²⁾ for information on all known archaeological features and non-designated and designated assets within the site and the 1-km radius study area. The data are presented in figure 7.1, which shows the HER records, figure 7.2 showing the designated heritage assets, and figure 7.3, which gives the Historic Landscape Characterisation data. Historic maps from 1901 and 1973 (figures 7.7 and 7.8) illustrate the development of the area over time, although on both maps some of the detail of military installations or the prison is suppressed. Figure 7.9 shows the detail of the listed structures closest to the site boundary, and figure 7.10 provides a series of photographs illustrating the site, its context and other assets⁽³⁾. The gazetteer in technical appendix H lists the sites and built heritage in the study area and provides extracts from the HER and the National Heritage List for England. The data sources used in this assessment are listed in table 7.1.

² Data received 23 January 2020.

³ The site visit took place on 18 March 2020.

Aecom, 2017, Isle of Portland; Heritage and character assessment
B-Side, 2018, Portland Pathways Research Report
Dorset Council and BCP Council, 2019, Bournemouth, Christchurch, Poole and Dorset Waste Plan
English Heritage, 2008, Conservation principles – policies and guidance for the sustainable management of the historic environment
Evans, D., 2015, Vicissitudes of a viaduct
Historic England, 2015, Good Practice Advice notes GPA1 Local plan making; GPA2 Managing significance in decision-taking in the historic environment
Historic England, 2017, GPA3 The setting of heritage assets
Historic England, 2017, Conservation principles for the sustainable management of the historic environment, consultation draft
Ministry of Housing, Communities and Local Government, 2019, National Planning Policy Framework
Ministry of Housing, Communities and Local Government, 2019, Planning Practice Guidance (online)
Ministry of Housing, Communities and Local Government, 2019, National Design Guide: Planning practice guidance for beautiful, enduring and successful places
Morris, S., 1998, Portland
RPS Planning & Development Ltd, 2009, Port of Portland, Castletown, Isle of Portland, Desk Assessment of the Cultural Heritage Resource
Pevsner, N., 1972, Buildings of England; Dorset
Portland Harbour Authority, 2014, Heritage and Public benefit assessment in support of a Listed Building Consent Application for Inner Breakwater and Camber Area Alterations
Portland Neighbourhood Plan Group, 2020, Portland Neighbourhood Plan Referendum Version
West Dorset District Council, Weymouth & Portland Borough Council, 2015, West Dorset, Weymouth & Portland Local Plan
Weymouth & Portland Borough Council, 2017, Appraisal of the Conservation Areas of Portland
Websites: www.british-history.ac.uk for historic background and documentary sources including Victoria County History and RCHME http://list.historicengland.org.uk for the National Heritage List for England www.pastscape.org.uk/ for records in the Historic England Archives database Encyclopaedia of Portland History www.portlandhistory.co.uk Exploring Portland www.geoffkirby.co.uk
Table 7.1: References and data sources

7.16 This chapter makes use of the zone of theoretical visibility (ZTV), the representative viewpoint photographs and visualisations produced for the landscape, seascape and visual effects assessment in chapter 9, figures 9.16 to 9.35. The methodology for the production of these images is outlined in technical appendix J. All photographs were taken from publicly accessible locations.

Scope of work

7.17 This assessment provides a description of the likely value, extent, state of preservation and potential significance of heritage assets within the site and the study area that could potentially be affected by the proposals. It includes consideration of all nationally and locally identified buildings and areas and their settings.

7.18 A scoping opinion from Dorset Council was issued on 24 February 2020. This accepted the proposed scope of the assessment. The County archaeology officer confirmed there was no potential for archaeology to be present on the

site, given its history and the depth of made ground⁽⁴⁾, so effects on archaeology were therefore scoped out of this assessment. Effects on marine archaeology were similarly scoped out of the assessment (technical appendix A). The heritage officer referred to the need to assess potential effects on the South Dorset AONB. These effects are covered in chapter 9: landscape, seascape and visual effects.

Limitations of the study

- 7.19 Professional judgement is an important consideration in the determination of the overall cultural heritage effects and, even with qualified and experienced professionals, there can be differences in the judgements made.

Assessment of significance

- 7.20 The definitions of the importance or sensitivity of the heritage assets that may be affected by the proposed development, and the magnitude or scale of the predicted change, are shown on figures 7.4 and 7.5 respectively. The generic definitions of the degree of the potential effects can then be generated by feeding the results into the degree of effect matrix (figure 7.6). Effects of moderate degree and above are classed as significant effects for the purposes of the EIA. Chapter 3 explains the assessment methodology used throughout this ES. The assessment in this chapter is a qualitative one, and the evaluation of significance is ultimately a matter of professional judgement.
- 7.21 This chapter first makes an assessment of the components, qualities and level of importance or value of all heritage assets identified within the chosen study area, and the contribution to their significance made by their settings. The contribution of the surroundings in which an asset is experienced and the range of historic, functional or visual relationships, as evident in both physical attributes and perceptual values, to the significance of any single asset or group of assets will depend on the nature of the asset and its past and present setting. The importance of the setting of an asset, or of particular views or vistas (both deliberately designed, and the result of incidental or fortuitous changes over time), to its significance, and to how it is understood and appreciated, can therefore vary greatly.
- 7.22 The assessment of value, coupled with reference to national and local legislation, relevant policy statements and best professional practice, allows a judgement to be made of the significance of the asset and its sensitivity as a receptor.
- 7.23 The judgement of the magnitude of change likely to occur is based on available information on the attributes of the proposed development: for example, immediate changes such as ground disturbance for site preparation and construction, the removal of existing structures, routes or trees; changes to drainage and land form, or the addition of new structures and transport networks; and changes to views of, from or across heritage features, or to perceptions of their priority in the landscape. The likely effects of development on the settings of heritage assets depend primarily on the fundamental

⁴ The depth of made ground across the site varies from around 5 m to 8 m below ground level.

characteristics of the development, although detailed design can also have an influence.

- 7.24 Guidance produced by Historic England (2015, 2017) provides advice on a consistent framework for the assessment of the effects of development on heritage assets and their settings. The assessment in this chapter encompasses the identification of assets that may be affected, of the contribution of setting to the value of those assets, the description of the attributes of the proposed development and the assessment of likely significant effects.

Baseline

- 7.25 A total of 200 records and non-designated assets are listed in the HER data for the site and 1 km radius study area, five of which relate to the former locations of structures within the site boundary. The closest designated heritage assets are the former Dockyard Offices and the inner and outer breakwater, including the coaling shed, storehouse jetty, coaling jetty, inner breakwater fort and outer breakwater fort, which are both listed at grade II.
- 7.26 As noted in the section above describing the scoping stage of the EIA, archaeology is not considered in detail in this chapter; however, the HER records in the study area for the early history of the area are shown for information on figure 7.1 and are briefly listed below. Reference is made to non-designated structures and evidence of the later historic development that appears in the HER where relevant in the following sections.
- 7.27 The HER for the study area includes evidence of the earliest occupation in the form of finds of tools of chert and flint of Upper Palaeolithic date (TOR121) and of a number of Mesolithic artefacts (TOR120, 183). Prior to the construction of The Verne Citadel in the 19th century, there were earthworks of a prehistoric oval enclosure on the hill (TOR106, 172) and construction and quarrying work has uncovered numerous prehistoric artefacts (TOR157, 173) and large numbers of burials, including cist burials and a possible beehive chamber (TOR113, 114, 117, 118, 167, 170, 180). The Roman period is also well represented in the HER data, with pottery and other material (TOR158, 169) and a large number of burials, including one found in a stone sarcophagus (TOR107, 108, 109, 110, 111, 112, 115, 116, 165, 166, 168, 171, 174, 194).

Summary of historic development

- 7.28 Portland is first recorded by name in the mid 9th century, and the Saxon settlement pattern was probably based on Roman origins, and focused on the water sources. The Saxon period also saw the establishment of the open fields divided into a pattern of strip fields, which survives in part at the south of the island, and the distinctive form of inheritance and fragmentation of holdings. The HER data for the study area include a single record of Saxon date, a silver penny of Aethelred II (978-1016) found at Fortuneswell (TOR122). Portland is recorded as part of the royal estates in a charter in the late 10th century and was retained directly by the crown after the Norman Conquest. The Domesday survey records a valuable manor with a large population.

- 7.29 The medieval and later settlement area at Underhill on the north coast was focused on Chesilton, with a smaller group up the slopes of Verne Hill, known as Fortune's Well. The high ground at the north of the island was dominated by the large areas of common land and pasture on Verne Hill and the Weares. The stone quarries were located on the cliff edge on East and West Weares, allowing the stone to be transported by sea, and the waste stone and overburden to be tipped over the cliffs. Portland stone was used for prominent medieval buildings such as Exeter Cathedral and the Palace of Westminster, but from the mid 14th century stone exports ceased and the quarries declined for a long period, serving only local demand in the 16th century. No buildings with medieval fabric are recorded in the study area. The HER records an area of fragmentary banks of medieval to post-medieval field boundaries on Verne Common, aligned generally north-south (TOR28). There was also a chance find of a Hanseatic pewter mug of late 14th or early 15th century date from Chesil bay (TOR123).
- 7.30 Portland Castle (LB1, grade I, LB3, grade II*, SM1015326), built on the shoreline overlooking Portland Roads, was one of the line of 30 new coastal fortifications along the east, south and west coasts, which were constructed rapidly in 1539-40. The artillery fort was paired with Sandsfoot Castle at Wyke, the two designed to be intervisible and to create lines of fire across the bay. The fort is fan-shaped and was originally enclosed by a moat. Changing alliances meant the expected attack did not occur and the fort fell into disrepair, being renovated at the time of renewed invasion fears in the 1580s. The fort saw its main use during the Civil War, when it operated as an ordnance store and prison, but was again described as ruinous by the late 17th century.
- 7.31 The stone quarries recovered in the 17th century, again producing stone for export, especially for the new high status buildings in the classical style being constructed in London. Stone from the royal quarries on Portland was used by the Surveyor of Kings Works Inigo Jones for the Banqueting House, Whitehall, in 1619, and from 1676 the royal quarries supplied the stone for the rebuilding of St Paul's Cathedral by his successor Christopher Wren. In response the quarries were expanded from the traditional areas along the cliffs onto some of the common land at Tophill, and new routes and piers were created. The recorded locations of the early quarries in the study area are at Admiralty or Nicodemus Quarries (TOR2, 5), which were in existence by 1710 and expanded by 1745. King's Pier on East Weare was probably in use by the mid-17th century (TOR84).
- 7.32 The first map depiction of Portland in any detail is in 1710, in Hutchins' history of Dorset 1710⁵. The map marks the location of the quarries on the top of the escarpment at Verne Hill and notes the practice of tipping quarry waste down the cliffs. The villages of Chesilton and Fortuneswell are depicted as small linear areas of houses within groups of small closes on the either side of a main route shown along Chesil and leading east across the centre of the island through Easton to the church at Wakeham. There are extensive areas of commons around the north coast, the cliffs at the edges of East and West Weare and at the edge of Verne Hill. The established military presence is marked at Portland Castle (by that date disused) and a signal station at the top of Verne Hill.

⁵ Reproduced in the conservation area appraisal, page 5.

- 7.33 By the 1780s there were 280 houses on Portland, more than a third of them at Chiswell, which was the largest settlement. The nationally important extant buildings from the 18th century and with probable earlier origins in the study area are a pair of houses of 17th century origin that was refronted later (LB51) and large numbers of stone-built cottages, in rows or in pairs (LB30, 31, 37-39, 43, 54 55), which were formerly set within extensive areas of gardens and farm closes. There were also some higher status houses of more formal appearance, reflecting the profitability of the quarries (LB35, LB36). The best example is just outside the study area, the early 18th century Queen Anne House on Fortuneswell (grade II*).
- 7.34 The OS surveyor's drawing of Portland at the beginning of the 19th century⁽⁶⁾ marks the later location of the breakwater on the north east edge below the escarpment as Portland Nore. The only other feature marked on the north coast is Portland Castle and a long pier. Two tracks lead to the pier across the hill from the villages of Chesilton and Fortuneswell, where the differing development patterns are visible; the very tight layout of Chesilton at the rear of the beach and the more spacious layout of houses and square enclosures on the hillside at Fortuneswell. The villages are separated from the agricultural land across the south of the island by a valley, which is marked as stone quarries that extend in a band around both coasts. On the east coast a small building group overlooking East Weare is named as Quarry Head and, of the three piers shown, two are named, at King's Quay and Folly Pier. The Vern [sic] Signal is shown at the top of the escarpments on the unenclosed commons.
- 7.35 Chesilton declined over the 19th century, particularly after major floods in 1824 destroyed much of the village, and the focus for new development shifted to Fortuneswell higher up the hill, which grew rapidly, particularly from 1839 when the first bridge at Smallmouth was constructed, replacing the ferry. The expanding population at the north end of the island was provided with a new church at Fortuneswell, constructed in 1839-40 (LB46, 47, 48) as a daughter church to St George's Reforne, becoming the church for the new parish of Underhill in 1865. The church of St John is a Commissioners' church, built under the Church Building Acts in 1818 and after, which were designed to fund the construction of new churches in the under-served areas of rapidly changing population, in particular the new industrial towns. The listed buildings in the study area include large numbers of houses of the first half of the 19th century, developed to a denser pattern, infilling the gardens and closes, and following the established vernacular of houses built of squared stone blocks in pairs and short terraces (LB34, 37, 40-42, 44, 50, 52), with some examples of detached houses of visibly higher status (LB38, 49). In addition, the conservation area appraisal lists large numbers of individual buildings and groups of buildings of local interest within the old centres of Chiswell and Fortuneswell.
- 7.36 Portland Castle was owned from 1816 until 1870 by the locally prominent Manning family, who repaired and converted the Henrician fort and constructed a new house in the Gothick style within gardens enclosed by the former curtain wall to the moat. The Captain's House (LB2, grade II*) was returned to the War Office in 1870, and was in use as accommodation for officers of The Verne Citadel, and then remained part of RNAS Portland until 1999.

⁶ This can be viewed at https://commons.wikimedia.org/wiki/Category:Ordnance_Survey_Drawings.

7.37 The HER data on figure 7.1 show the large areas of quarries that developed over the 19th century, merging into each other and removing earlier workings, and encroaching across the former agricultural land of Tophill. Named examples are the Waycroft, Admiralty and Withies Croft quarries (TOR1-5). The problems of transporting the stone from the quarries to the wharf at Castletown or the piers on East Weare (and the long history of landslips destroying piers and lifting gear) led to the development of a network of tramways and railways to transport the stone. The first was the Merchants' Incline, constructed in 1825 as horse-drawn tramway from the quarries to Priory Corner, and a three-stage cable-driven incline down to a new stone pier at Castletown (TOR6-9, related features TOR27, 68-78, and the piers TOR80-84, 175, 176). The HER includes numerous records relating to the operation and later development of the network of minerals railways (TOR15, 63-66). A close group of road bridges were constructed over the mineral railways to the south west of The Verne Citadel between 1875 and 1881, all built in a similar style of rock-faced masonry (LB25-28). The public railway and passenger services were slower to develop and followed after the use for the quarries and the military development of Portland.

The new harbour and naval base

7.38 There is a very large amount of material on the history of the creation and use of the harbour by the Royal Navy until the base closed in 1999 and the subsequent development of the commercial port⁽⁷⁾. The following section therefore gives only a summary of the principal developments.

7.39 The transformation of Portland dated from the initiative to turn the existing natural harbour at Portland Roads into a secure anchorage by constructing the breakwaters. The harbour of refuge was specifically intended as a coaling station for the steam ships that had been introduced into the navy from 1830. It was one of five such stations in total (the others were at Alderney, Holyhead, Dover and Peterhead) and served the section of coast between the naval dockyards at Portsmouth and Devonport.

7.40 A large area of the common land on the north side of the island was acquired, and survey work began in 1844. The preliminary works on a design by the Admiralty Chief Engineer James Meadow Rendel began in 1847. Among the first construction as part of the project was the Dockyard engineer's office (LB8), which was established at the site at Portland Nore. Intended for Rendel, and his successor John Coode, to oversee the construction works, it is an early example of the building type and is distinctive for the canted bay on the east side that allowed views across the works on the breakwater.

7.41 The initial phases of the inner and outer breakwater (LB9) were constructed between 1844 and 1872 in two sections totalling approximately 1.8 km (the alignment changing over the construction). The later north east section and Bingleaves groyne connecting to Newton's Cove on the edge of Weymouth were constructed in 1893-1906.

⁷ See for example Encyclopaedia of Portland History (www.portlandhistory.co.uk) and Exploring Portland (www.geoffkirby.co.uk).

- 7.42 The first section of the inner breakwater was designed to integrate the coaling facilities, an innovative hydraulic system intended to allow the rapid refuelling of ships berthed along the breakwater. The system consisted of the coaling shed on a jetty, an adjacent engine house and railways and 61 storage casements along the lower level of the inner side of the breakwater. However, the mechanised system failed, and was rapidly found to be slower than manual handling, and was modified in 1869. The reversion to a more labour intensive method of refuelling required the construction of additional jetties and the curved Coaling Camber. The elements that became redundant or were repurposed were the Viaduct no 1 from the coaling shed, the adjacent jetty, coaling chute and the coaling railway.
- 7.43 Deeper quarries were established across Tophill to provide material for the breakwater, which was delivered to the site by the cable-driven Incline railway constructed across East Weare in 1849. From the late 1840s, convict labour was used as part of the workforce, run first from a temporary hutted camp that later developed into the Portland Convict Prison, and by 1855 held nearly 2,000 inmates. The prison was made permanent in 1868 and the present buildings at The Grove were constructed in the 1890s.
- 7.44 The breakwaters were already under construction when renewed fear of French invasion resulted in a new programme of construction of a series of coastal defences along the Channel on the recommendations of the Royal Commission on the Defence of the United Kingdom. The naval anchorage was to be defended by the new Verne Citadel and related defences at Tophill and East Weare, which were constructed between 1857 and 1881. The breakwater itself was also provided with two forts; one constructed at the end of the inner breakwater overlooking South Ship Channel in 1859-62 and one at the end of the outer breakwater in 1869-82.
- 7.45 The Verne Citadel (LB14, grade II*, LB15, LB23, grade II*, SMDO780) was an artillery fort that could accommodate a garrison of 3,000. The fort was excavated into the top of Verne Hill, and surrounded by a dry moat 37 m wide and 22 m deep, which was crossed by the roads zig-zagging up the hill in deep cuttings. The excavated material was used for the construction of the breakwater and to infill some older quarry workings to allow the creation of the parade ground to the south. The group of related buildings within the fort included the underground casemates on the south east and south west sides (LB19, grade II*) and a range of other buildings, all designed as a group in c.1865, including a gymnasium, chapel, blacksmith's workshop and a separate house for the governor (LB16-17, 20-22). Set into the outside of the fort were cisterns to provide the water supply (LB29).
- 7.46 On the slopes below the Citadel on the east coast at East Weare, a set of five groups of batteries were constructed in 1862-69 to defend the approaches to the harbour (LB10, SMDO781, LB11, 13). The related defensible barracks at East Weare Camp (LB12) were added in 1870-80. There were frequent changes and adaptations to the structures and weaponry, and significant additional structures, such as the rifle range further south along the coast (TOR59) and the high angle battery constructed to the immediate south of the citadel in 1892 (TOR119, SMDO781).

- 7.47 The long period of the construction of the breakwaters, the Citadel and the related quarries became a significant tourist attraction in itself, and in addition to the workforce and naval personnel, the numbers of visitors were a further catalyst for new commercial building at Underhill and elsewhere. The existing public houses at Fortuneswell (LB45, 53, 62) were expanded, and new hotels were built in 1870 as a focal point of the purpose-built Victoria Square (LB70), and at the entirely new settlement area at Castletown (LB6), which was also provided with a Customs House (LB7, TOR92). A range of other public and commercial buildings were created, such as reading rooms and a masonic hall (TOR94-101, 103), and some buildings of more clearly urban appearance, such as the Post Office of 1892 and adjacent office building (LB32, 33), both built of imported brick. The large complex of the police station and courtroom were constructed at a prominent location on the hillside above Fortuneswell in 1904 (LB57-60).
- 7.48 The Underhill conservation area designation covers the linked historic settlements of Chiswell, Maidenwell, Fortuneswell and Castletown, including the castle and the piers at the entrance to the port, and the alignment of the Merchants' Incline.
- 7.49 The Ordnance Survey map of 1901 (figure 7.7) shows the completed inner and outer breakwaters and the piers and Coaling Camber created when the initial system failed. The site area is named as The Depot, and consists of a large cluster of buildings served by the networks of railway lines. The named functions of the buildings are varied, and include the RN hospital, Admiralty slaughter houses, boathouses and further to the south the Balaclava Bay coastguard station. Two railways are shown extending from the site area south across East Weare; the incline across the cliff, with the drums for the cables and an engine house at The Grove, and another running close to the shoreline along East Weare. The detail of the fortifications is suppressed, leaving only the outline of The Verne Citadel, and excluding the batteries along East Weare. Fortuneswell is identified as the principal settlement, served by the railway station that opened in 1865, and an area of dense linear development is shown at Castletown by the pier, with the buildings of the large navy hospital for infectious diseases and sick quarters on the slope above. To the south the map shows a complex mosaic of quarries and mineral railways.
- 7.50 As the navy moved to using oil instead of coal, in 1905 the tidal inlet at The Mere was infilled to create the fuel farm (TOR11-13). The HER records the former locations of a large number of features relating to the military use of much of the north and east side of Portland from the end of the 19th and into the 20th century, including camps, firing ranges, piers etc. and the seaplane base HMS Seraptia (TOR46). The majority of records relate to operations in WWII (TOR14,17-28 30-19, 41-43, 45-48, 51-53, 57, 58, 128-139 141-151), which include the former locations of anti-aircraft batteries, anti-landing defences, the installation of mines across Balaclava Bay, areas of bomb craters, and large numbers of pillboxes. A heavy anti-aircraft battery was established to the south of the fort in 1939 (SM1459502, TOR14) as an addition to the chain of batteries positioned to defend Portland Harbour. It is near-complete and preserves evidence of fittings and adaptations made through the war.
- 7.51 Within the study area, moored off the pier at Portland Castle, are two components of the floating artificial harbours designed to support the Allied

invasion of Normandy in 1944. The two concrete Phoenix caissons (LB5) remain from the ten that were brought to Portland in 1946, to be used to form an inner harbour.

- 7.52 After the war Portland Castle was transferred to guardianship, and opened to the public in 1952 after repairs, during which a large number of 19th century changes were removed. The garrison at The Verne Citadel also closed and it was converted into a prison that opened in 1949.
- 7.53 In 1950-51 part of the Rotor system of 54 early warning radar stations was constructed to the south of The Verne in a series of underground bunkers, with the above ground features disguised. RAF Portland (TOR16, SM1021302) is little altered, as it was not remodelled when the defence emphasis shifted to the nuclear deterrent after 1957.
- 7.54 The Ordnance Survey map dated 1973 (figure 7.8) shows the site area intensely developed, with the railway lines replaced by two roads and the whole area named as HM Naval Base, with the blocks of the HM Underwater Detection Establishment to the south on Balaclava Bay. Large numbers of military structures are shown across East Weare, including the disused batteries and camp, and at HMS Osprey by King's Pier, which is served by the road on the Line of the former incline railway. The RNAS HMS Osprey helicopter base was created in 1956 at The Mere by the fuel farm, with the related sports facilities and the large buildings of the expanded hospital. At Fortuneswell, housing has spread across the hill under the Verne, leaving clear the line of the Merchants' Incline. The Verne was in use as a prison from 1949, so again the detail of the interior buildings is suppressed.
- 7.55 The closure of the naval base and research departments was announced in 1992 and occurred in phases between 1995 and 1999. Since then large areas of redundant military buildings have been demolished at the port, at HMS Osprey at East Weare and at the former RNAS base, which has been redeveloped as the National Sailing Academy and marina at Osprey Quay. The larger buildings at the site had been demolished by 2005, including the HM Underwater Detection Establishment's North and South buildings, sections of the viaduct and the four storey building used by the Sonar Research Department of AUWE⁽⁸⁾. The desk-based assessment produced in 2009 to support the application for an energy plant⁽⁹⁾ described the buildings then in existence on the site, listing 11 individual structures, mainly single and two storey, some dating to the interwar period, and the majority of 1960s and 1970s date. All have since been demolished, except for the weighbridge, and in 2016/17 the road to Incline Hill was realigned close to the edge of the scree cliff to leave the present open site area.

Future baseline

- 7.56 The site has extant planning permissions for the development of an energy plant fuelled by vegetable oil and waste rubber crumb from end-of-life tyres, which could be implemented in the absence of the proposed development. However,

⁸ For photographs and personal recollections etc. see the Exploring Portland and Encyclopaedia of Portland websites.

⁹ Application reference: 09/00646/FULES.

as discussed in chapter 2, for the purposes of this assessment it has been assumed that the site will remain in its current use in the absence of the proposed development.

Assessment of importance

- 7.57 The site area consists of made ground and the uneven surface where buildings have been cleared (most recently in 2017) to create an open area to accommodate the approved energy plant and for use for cargo handling. The current open and undeveloped condition of the site is thus very recent and is wholly different from its historic character at all phases since the beginning of construction of the breakwaters⁽¹⁰⁾. The closest part of the inner breakwater to the site is the retaining wall of the upper level, known as The Promenade or Prince Consort's Walk, which is divided into bays by stone piers, with the arched coal storage casements below, accessed from the lower level Inner Breakwater Road (see the photographs in figure 7.10). The first seven bays of the curved section beginning at a set of steps are of varying widths, without casements. Some of the casements have either been fully or partially bricked up. Related features of the use of the breakwater include the railings and a number of visible sections of railway lines at both levels, some obscured by tarmac.
- 7.58 The significance of the inner and outer breakwater and associated buildings and former dockyard offices (LB8, 9, see figure 7.9) relates primarily to the historic and architectural interest of the fabric of the original construction of the breakwaters for the harbour for use as a coaling station, and the innovative (though unsuccessful) mechanised coaling facility that was integrated into the inside of the breakwater and operated from the coaling shed. The buildings were subject to rapid modification and a sequence of changes and additional structures over time for the varied functions present in this part of the naval base. The original form of the Dock Office in particular is partially obscured by large later additions, especially to the bay on the east side that gave views over the breakwater under construction. The use of the breakwater as part of the port operations means that changes continue to be made, most recently to allow use of the crane berth.
- 7.59 The immediate setting of the listed structures (see the photographs in figure 7.10) is characterised by the port access road and the utilitarian sheds of the surrounding industrial uses, though the former coaling shed and adjacent jetty continues to be in use by the Ministry of Defence. The landform of the adjacent cliff rising to the Verne Citadel, with visible rooftops and structures within the prison above, is a dominant presence in the setting, seen across the open site area. The very expansive natural setting contributes to the appreciation of the monumental scale of the breakwaters and the harbour, and the related fortifications high above, and is enhanced by the interest of the activity of the range of shipping using the port. It is also of value to the legibility of the group value of the assets of the naval base and the related coastal defences, despite the restricted access across large areas of the north and east coasts because of the secure estates of the port and HMP The Verne (see VPs 1, 2, 3 figures 9.18-9.20, chapter 9: landscape, seascape and visual effects).

¹⁰ See the DAS for photographs of the buildings formerly at the site.

- 7.60 The fortifications provided to defend the new secure anchorage, The Verne Citadel and the series of batteries on East Weare, were established as part of the original construction phase, and were then subject to frequent updating and re-arming through the first half of the 20th century, including during both world wars. They are part of the extended group of military sites that illustrate the strategic significance of Portland Harbour over a long period.
- 7.61 The Verne Citadel (LB14, grade II*, LB15, LB23, grade II*, SMDO780) and the internal buildings (LB19, grade II*, LB16-17, 20-22) are of exceptional architectural and historic interest for the fabric, architecture and quality of construction. The historic interest relates to the military importance, and also to the scale of the project for its construction set into Verne Hill and the creation of the artificial landforms of the surrounding dry moat and glacis⁽¹¹⁾. The citadel itself is enclosed and is largely inaccessible because of its use as a prison, though the natural setting at the high point on the escarpment and the expansive views across the harbour can be seen from points on the approach road, and can be appreciated in views from around the fort, for example by the Naval Cemetery (see photographs, figure 7.10).
- 7.62 The setting is of value to the appreciation of the functional aspect of the defences and the relationship to Nothe Fort across the harbour at the other end of the breakwater. Although the majority of the fort is hidden, it is a dominating presence in many views of and across Portland, and the dark mouth of the north entrance gate has a dramatic landmark role seen above the town in views from approaches along the A354 Portland Beach Road and from many areas to the north, for example by the marina (see VP3, figure 9.20, chapter 9: landscape, seascape and visual effects).
- 7.63 Of the related series of batteries on East Weare (LB10, SMDO781, LB11, 13) only the most northerly one is accessible by the public footpath, though the others within the secure port estate are visible from the land above (see VP1 and 2 figures 9.18, 9.19, chapter 9: landscape, seascape and visual effects). The battery is almost entirely obscured by the established vegetation across this area of the cliffs, and is included in the Heritage at Risk register maintained by Historic England because of its condition. The significance is primarily in the fabric of the structures and archaeological potential. The value of the setting to the legibility of the scale of the group of batteries and their function to overlook the approaches to the harbour and the breakwaters is now much diminished by the encroachment of vegetation, which obscures views out to sea.
- 7.64 Major later additions to the defences are the WWII heavy anti-aircraft battery (TOR14, SM1459502), and the underground bunkers and surface features of the Cold War RAF Portland early warning radar station (TOR16, SM1021302) to the south of the Verne Citadel. The significance of these features relates primarily to the archaeological potential and historic interest of the physical range of structures and features, their relative completeness and the evidence of use and changing technology. The assets are visible as above ground networks of earthworks in an area that has been subject to later quarrying activity, and are publicly accessible by the many footpaths across the area. The setting and the visual connections across the publicly accessible land at the centre of the island are of value to the legibility of the assets as part of the defences of the harbour

¹¹ A bank sloping down from a fort that exposes attackers to the defenders' missiles.

and the group value of the military sites across Portland (see photographs, figure 7.10).

- 7.65 The Henrician artillery fort at Portland Castle (LB1, grade I, LB3, grade II*, SM1015326) was the earliest permanent fortification by the Crown, built as one of the pair intended to defend the harbour at Portland Roads, and later converted to a residence (LB2, grade II*). The principal significance derives from the exceptional architectural and historic interest of the fabric, and the archaeological potential of the surrounding area. The marine setting is essential to the legibility of the functional relationship to the bay to the north east, and to Sandsfoot Castle. The immediate setting is enclosed within the walled courts at the castle entrance, the domestic gardens, and the beach to the north (see photographs, figure 7.10). This area is of particular value to the appreciation of the buildings, as it is part of the presentation of the castle to the public. Beyond the walls, the setting consists of the mixed development in the approach on Castle Road, which includes some very large scale buildings and areas of open land awaiting redevelopment. The castle appears as a landmark on the shore in public views from walks around Portland Marina, with Verne Hill and the dramatic north gateway of the Verne Citadel above (see VP3, figure 9.20, chapter 9: landscape, seascape and visual effects). The contribution of the setting is enhanced by the interest of the activity of the range of shipping using the port and marina.
- 7.66 The Underhill conservation area designation includes the majority of the listed and locally important buildings in the older settlement areas at Chiswell and Fortuneswell on the west side of the island and the later linear area at Castletown at the entrance to the port. The significance of the listed buildings derives principally from the architectural and historic interest of the fabric, and the contribution to the character and appearance of the historic centre. The local vernacular of stone houses and the predominant terrace forms creates a distinctive common character, alongside some larger scale or more formal compositions, such as the unlisted late 19th century three-storey townhouses on Ventnor Road above the church. The later public and commercial buildings are often located at focal points within the intricate and steep street patterns or to take advantage of the sea views. The Castletown area is distinctive for its rapid development at a later date, and the dominance by the pubs and hotels built to serve the port.
- 7.67 The adopted conservation area appraisal describes the expansive setting of the conservation area and the value of the views from high ground across Underhill towards Chesil and the coastline to the north. A number of key gateways are identified that are important to the setting of the conservation area. These include the approach along the A354 Portland Beach Road and the views of the Verne and the cliffs above the terraces of housing, and Victoria Square marking the beginning of the main street of Chiswell. The setting is changed from that described in the appraisal by the continuing redevelopment of the former air station. The harbour and the related development of Castletown is also recognised as a gateway. The setting of this part of the conservation area is dominated by the very large structures of the Atlantic House apartments and the concrete structure of the former navy accommodation blocks (see the photographs, figure 7.10). The marine industries, and related slipways and wharfs at Castletown and the port itself, are important to both the visual and the functional character of this part of the conservation area.

- 7.68 The site area is a peripheral part of the setting of the conservation area at Chiswell and Fortuneswell, and does not form part of the setting of the majority of the listed buildings and the buildings of local interest within the study area, or contribute to their significance. The closest section of the conservation area at Castletown is separated from the site by the long access road within the secure port boundary, which curves around the north east coast, and the large structures housing the range of industrial and marine uses across the port. The setting of the listed buildings is defined by the restrictions of the topography, the road layout and the dominant orientation of the buildings onto the shoreline, and the functional continuity of the marine activity and shipping. The secure entrance at the former Custom House (LB7) preserves the clear division between the naval and port estate and the public and commercial uses at Castletown.
- 7.69 The two moored Phoenix sections of the Mulberry harbours (LB5), which were reused to provide additional protection for vessels in the harbour, are historically significant as examples of the technical innovation supporting the 1944 invasion. They remain in use as part of the port operations and appear within the setting of the adjacent piers and the marina, and the changing shipping at the port which preserves the value as part of the naval base and the related defences. The site at the edge of the breakwater is visually and physically separated from the moored caissons beyond the multiple piers across the port and the marina.
- 7.70 In accordance with figure 7.4, the scheduled monuments and listed buildings are of high importance, the conservation area is of medium importance, and non-designated assets are of low importance. Table 7.2 summarises the importance of the heritage assets within the site and study area.

Receptor	Importance of receptor
Listed buildings	High
Scheduled monuments	High
Conservation area	Medium
Non-designated assets (buildings of local interest)	Low

Table 7.2: Summary of importance

Potential effects

- 7.71 The proposed development could be a source of impacts on the cultural heritage value or significance of heritage assets within the application site and the surrounding area through:
- Effects of construction processes e.g. visual presence, noise, vibration, potential damage to adjacent structures
 - The presence of the new built form, its siting, scale, extent, appearance and character
 - Changes to the visual qualities of the site
- 7.72 The cable routes to the substation and to the piers will be underground within the existing roads or port access routes, and any associated infrastructure such as junction boxes would be very small structures. It is considered that because of the nature of the works and the existing context there is no potential for effects on heritage assets from this aspect of the proposals, which is not considered further.

- 7.73 Chapter 11: traffic and transport predicts a negligible increase in traffic as a result of the proposed development. The potential for effects on heritage assets because of changes to the levels or composition of traffic are therefore not considered further in this assessment.
- 7.74 Mitigation of adverse effects through the developing scheme design is integral to the iterative process of EIA; these primary mitigation measures are included in the proposals described in chapter 2, and shown in the detailed plans in figures 2.3 – 2.8, and are summarised in chapter 2 and in paragraphs 9.108 and 9.109 in chapter 9, while the design intentions and quality are described in more detail in the design and access statement. The standard construction measures proposed to avoid potential effects on heritage assets during construction are outlined in the framework construction environmental management plan (CEMP) covering all construction activities (technical appendix C). Measures are included to avoid the potential for accidental damage to the adjacent listed structures, particularly the commemorative datestone at the end of the upper level of the breakwater, which is surrounded by a crash barrier, either by collision by construction vehicles or by excavation.
- 7.75 The assessment of effects considers the effects without additional secondary mitigation. An appropriate programme of mitigation could reduce the severity of an adverse effect or remove it completely; however, potential for mitigation may be limited where impacts are caused by fundamental issues such as the proximity, location, scale, or prominence of a development (GPA3, Historic England 2017).

Effects during construction

- 7.76 The site area excludes all of the listed structures and there will be no physical change to the fabric of the breakwater and the dock office fabric during construction. The mitigation measures noted above will prevent accidental damage to the listed structures during the 24-month construction period. The physical changes to the site area, and the presence of the works in proximity to the listed buildings will be experienced in the context of the present setting of the active industrial and port uses, and the works will not prevent or obstruct the continued use of the buildings and the breakwater. The alteration to the significance of the breakwater structures because of the changes to the qualities and character of the setting during construction will be a negligible magnitude of change to an asset of high importance, which will result in a temporary slight adverse effect that is not significant.
- 7.77 The visible construction activity, and related noise, and other disturbance, will be evident in those parts of the study area in closest proximity to the site. A large part of this is the secure port estate and the effects of the construction phase will be experienced in the context of the existing port activity, which includes the use of cranes and the movements of shipping at berths, and the port traffic. The site is remote from the concentration of heritage assets at Chiswell and Fortuneswell on the west side of the island. The construction of the proposed development will not alter the qualities or character of the setting of heritage assets in the study area and no significant effects are predicted.

Effects post-construction

- 7.78 The assessment that follows considers the inner and outer breakwater and associated buildings and the former dockyard offices (LB8, 9) as a group, as well as individually.
- 7.79 The vacant site area was formerly occupied by buildings at all phases of the historic use of the area by the navy and until recently by the port. Its current open aspect is of no value as part of the setting of the breakwater structures and there is historic precedent for other buildings of significant size in close proximity. The site layout (figure 2.3) shows how the ERF buildings have been located closest to the cliffs, with areas of car parking and landscaping at the edges of the site closest to the sea. The buildings, although large, and ranging between 19 m and 47 m in height for the ERF building and between 6 m and 17 m in height for the office building, are not uncharacteristic of the operational port and the scale of the range of industrial buildings, cranes, other structures and ships either berthed or in motion. However, the 80 m high stack will appear as a new landmark on the edge of the port.
- 7.80 The immediate setting of the end of the breakwater is necessary for allowing the remaining legibility of the connections between the structures and the intended functioning of the coaling operation and later modifications. The development does not interrupt these connections and will not affect this important aspect of the significance of the breakwater structures. It also will not obstruct the line of view from the former dockyard office towards the breakwater that, although now prevented by the later additions to this building, is an important aspect of its significance.
- 7.81 Beyond the port, from the higher ground at East Weare above the site, the visual changes as a result of the development will be experienced in the context of the monumental scale of the two sections of the breakwater, the expansive natural setting of the sea and the harbour the breakwater was built to enclose, and the adjacent landform of Portland and the cliffs rising to The Verne. In approaches to the harbour from the sea, the ERF will appear as an addition to the developed shore of the port, below the dominating landform of the cliffs and escarpment of The Verne.
- 7.82 The alteration to the significance of the breakwater structures because of the changes to the qualities and character of the setting will be a small magnitude of change to an asset of high importance, which will result in a long-term moderate adverse effect that is significant.
- 7.83 The closest of the fortifications constructed at the same time as the harbour breakwaters is the northernmost of the series of batteries on East Weare (LB10, SMD0781) set below the escarpment and the Verne Citadel. The close functional relationship to the harbour and the breakwaters they were positioned to defend is no longer legible, because of the overgrown condition of the batteries and of the whole section of the cliffs beyond the Naval Cemetery, which prevents views out to sea. Any views that were possible in this area would be experienced in the context of the expansive setting of the harbour to the north.

- 7.84 The presence of the development will not affect the functional aspect of the relationship of the batteries to the wider setting of the harbour or the group value of the structures of the naval base. Any potential views towards the site from the batteries (located between the 65 m and 70 m contours) would look down towards the roof of the ERF, with the narrow form of the 80 m high stack as a new feature. The visual changes would be localised and affect a very small part of the views.
- 7.85 The alteration to the significance of the batteries because of the changes to the qualities and character of the setting will be a negligible to small magnitude of change to an asset of high importance, which will result in a long-term slight to moderate adverse effect that is significant.
- 7.86 The other batteries in the sequence and the former camp around the cliff on the east coast (LB11-13), do not have the same close functional relationship to the harbour, being positioned to defend the more distant approaches. These features are within the secure estate of the port and can only be experienced in views from the cliffs above. Any visual changes as a result of the proposed development will be localised and affect a very small part of the views. The alteration to the significance of these assets because of the changes to the qualities and character of the setting will be a negligible magnitude of change to an asset of high importance, which will result in a long-term slight adverse effect that is not significant.
- 7.87 The Verne Citadel (LB14, grade II*, LB15, LB23, grade II*, SMDO780) and the internal buildings (LB19, grade II*, LB16-17, 20-22) are excavated and integrated into the top of Verne Hill using the natural escarpment reinforced by the artificial landforms. Its character is enclosed and inaccessible by both the original design intentions and the modern use as a prison. The former artillery fort and garrison is a constant and often dominating presence in views above the port, the town and in distant views of the Portland peninsula. The proposed development at the site under the cliffs to the north east will be a localised addition to the very extensive setting, both on land and as it appears in views from the sea. The stack at 80 m is significantly lower than the fortress on the 125 m contour. The appearance of the development in some views from areas on the north east side of the citadel and to the south will not affect the overall perception of dominance of the citadel across a wide setting, or the legibility of the functional relationship to Nothe Fort at the other side of the harbour.
- 7.88 The alteration to the significance of the large number of designated assets at the Verne Citadel because of the changes to the qualities and character of the setting will be a negligible to small magnitude of change to assets of high importance, which will result in a long-term slight to moderate adverse effect that is significant.
- 7.89 The later military sites, the WWII heavy anti-aircraft battery (TOR14, SM1459502), and the underground bunkers and surface features of the Cold War RAF Portland early warning radar station (TOR16, SM1021302) at the centre of the island, have little connection to the site area, except for their history as part of the overall group of military sites established across Portland in the 19th and 20th centuries. The site is not part of the setting of these assets and the ZTV (figures 9.16 and 9.17) predicts no visibility of the ERF development. No effects are predicted on these assets.

- 7.90 The ERF development will not be visible from any of the spaces around Portland Castle (LB1, grade I, LB3, grade II*, SM1015326) and the 19th century house (LB2, grade II*), including the gardens and the adjacent shoreline (see the ZTV, figures 9.16 and 9.17). The views that allow appreciation of the functional connection to Sandsfoot Castle to the north east across the harbour are also unchanged. The ERF will appear as part of the wider developed setting of the castle set low on the shore as experienced in views from the marina and from the public gardens at Sandsfoot Castle (see VP3 and VP9, figures 9.20 and 9.26 in chapter 9: landscape, seascape and visual effects).
- 7.91 The alteration to the significance of the assets at Portland Castle because of the changes to the qualities and character of the setting will be a negligible to small magnitude of change to assets of high importance, which will result in a long-term slight to moderate adverse effect that is significant.
- 7.92 The majority of the listed buildings and the buildings of local interest in the study area are within the Underhill conservation area, which is physically and visually separate from the site within the secure port estate on the other side of Verne Hill. As shown on the ZTV (figures 9.16 and 9.17) the development will not be visible across any of this part of the conservation area and will also not appear in the important views across the town and its setting, to Chesil and the coastline to the north from the high ground on Verne Hill, or from the alignment of the Merchants' Incline railway. There will be very minor changes to the composition of views in the more distant approach on the A354 Portland Beach Road.
- 7.93 The Castletown area of the conservation area adjoins the site boundary and the entrance of the port. Once beyond Portland Castle, the character of the setting is defined by the linear development form of the sequence of tall late 19th and early 20th century former hotels and pubs (LB6) orientated towards the sea to the north and the narrow funnelled views along the road. The development will appear as an addition into these views of the mixed groups of buildings and security features at the port entrance. Further west, the curve of the road will prevent visibility of the building once beyond the turning to Dock Road, and the stack will be visible from only a short section of the road at the front of the row of pubs and hotels. The visibility of the ERF development will be experienced within the context of the large scale marine uses across this area, and will not affect the dominant orientation of views north towards the sea or the functional aspect of the setting of this part of the conservation area.
- 7.94 The alteration to the significance of the Underhill conservation area because of the changes to the qualities and character of the setting will be a small magnitude of change to an asset of medium importance, which will result in a long-term slight adverse effect that is not significant.
- 7.95 The historic buildings at Castletown form a group within a setting that is restricted by the topography, the road layout and the predominant orientation of the buildings onto the shoreline. The setting is of value for the functional continuity of the marine activity and shipping, as well as the visual qualities of the line of tall buildings and shared hotel function (LB6), and the secure port entrance marks the clear division at the former Custom House (LB7).
- 7.96 The development will appear as an addition in the narrow funnelled views at the port entrance, both building and stack up to the turning for Dock Road, and the

stack alone for a short section of the road further west. The visibility of the ERF development in the funnelled views along Castletown Road will be experienced within the context of the large scale marine uses and will not affect the dominant orientation of views north towards the sea or the functional aspect of the setting of the listed buildings. The role of the former customs house in marking the entrance to the port and the former naval base will also be unchanged.

- 7.97 The alteration to the significance of the listed buildings at Castletown because of the changes to the qualities and character of the setting will be a negligible magnitude of change to assets of high importance, which will result in a long-term slight adverse effect that is not significant.
- 7.98 The ZTV predicts some visibility of the ERF building and the stack from the piers and the sea at the two moored Phoenix caissons (LB5), and from the adjacent shoreline at Osprey Quay. The addition of the new development into some views of the caissons will be experienced in the context of the port activities and the range of vessels using the piers and will not alter the relationship of the assets to their setting within the former naval base and present day port. The predicted visibility of the development does not alter the qualities and character of the setting and no effects are predicted on these assets.

Mitigation and monitoring

- 7.99 At all stages of the iterative design development, the objective was to avoid or reduce potential adverse effects through the primary mitigation that is incorporated in the plans that formed the basis of the above assessment of effects. The measures outlined in the design and access statement on the response to the site context and dominating landforms, the evolution of the form and scale, and the materiality of the proposals were informed by the heritage and landscape sensitivity, as well as the geological and topographical setting. However, the predicted change will occur as a result of the fundamental characteristics of the proposed development, its location and siting, and of its form and scale. It is therefore not considered appropriate to monitor these effects.

Residual effects

- 7.100 Table 7.3 summarises the significant residual effects predicted to remain after the application of the mitigation measures.

Topic	Significant residual effect	Receptor importance	Impact magnitude	Nature	Duration	Degree of effect	Level of certainty
Cultural heritage	Effects on the breakwater and former dock office (LB8, 9) because of changes to the setting	High	Small	Adverse	Long-term	Moderate	Reasonable
	Effects on the East Weare batteries (LB10, SMDO781) because of changes to the setting	High	Negligible to small	Adverse	Long-term	Slight to moderate	Reasonable
	Effects on the Verne Citadel (LB14, grade II*, LB15, LB23, grade II*, SMDO780) and the internal buildings (LB19, grade II*, LB16-17, 20-22) because of changes to the setting	High	Negligible to small	Adverse	Long-term	Slight to moderate	Reasonable
	Effects on Portland Castle (LB1, grade I, LB3, grade II*, SM1015326) and the 19th century house (LB2, grade II*), because of changes to the setting	High	Negligible to small	Adverse	Long-term	Slight to moderate	Reasonable

Table 7.3: Significant residual effects

Cumulative effects

7.101 For the purposes of assessing the cumulative effects, consideration has been given to all approved developments, and additional developments scoped in, that have the potential to result in a significant cumulative effect alongside the proposed development. Full details of all the cumulative schemes are given in chapter 3 (table 3.3 and figure 3.2).

7.102 There is no potential for the proposed development to result in cumulative effects on heritage assets in combination with a number of these schemes, if they proceed, because of their location and distance from the site, their scale, or the nature of the developments. The developments that are not considered further for these reasons are the small residential schemes on brownfield sites more than 2 km to the south of the site, as follows:

- Royal Manor Arts College, Weston Road, Portland
- Redundant buildings at Bumpers Lane, Portland
- Southwell Primary School, Sweethill Lane, Portland

7.103 A small residential scheme of a similar scale and nature to those discussed above is located on land to the south of The Verne, namely the Verne Common Road and Ventnor Road, Portland development. The proposed ERF site is physically and visually separate from this consented scheme, which is situated within an area of modern development above the historic settlement focus on the western side of the island at Chiswell and Fortuneswell and close to the boundary of the Underhill conservation area. It appears as part of the setting of The Verne Citadel, as seen in views from the south from New Road and New Ground.

- 7.104 The ZTV (figures 9.16 and 9.17 in chapter 9) predicts no visibility of the ERF development in this area. As a result of the predicted effect of the ERF development on the setting of the Verne Citadel, there will be a negligible to small cumulative change to the setting of these assets, leading to a slight to moderate, significant adverse cumulative effect. There is no potential for cumulative effects on any of the other assets affected by the proposed development alone.
- 7.105 The residential development on the A354 to the north at Ferrybridge Inn, Portland Road, Weymouth is over 2 km from the site, integrated into the existing development edge at the beginning of Portland Beach Road. There is no potential for effects on any of the heritage assets affected by the proposed development alone and no significant cumulative effects are predicted.
- 7.106 Two of the identified schemes are part of the ongoing development of the RNAS helicopter base at Osprey Quay. Of these, one is immediately adjacent to Portland Castle (Plot X, Mulberry Avenue, Portland). The development will occupy an area of open land alongside the castle and has been designed to respect the visually sensitive boundary and to minimise effects on the immediate setting of the heritage assets. The predicted effects of the ERF on the setting of these heritage assets, in combination with the approved development, will be a negligible to small change, leading to a slight to moderate, significant adverse cumulative effect. The other approved development (Plot M1B, Hamm Beach Road, Portland) is integrated within the surrounding development and there is no potential for significant cumulative effects should that development proceed.
- 7.107 The implementation of the proposed conversion of the former naval accommodation block (Ocean Views, Hardy Complex, Castle Road, Portland, phase 2) would be a positive change to the appearance of a derelict large scale structure that is recognised as a detracting feature in the setting of a number of heritage assets and the conservation area. The predicted effects of the ERF on the setting of these assets, in combination with the approved development, will be a negligible to small change, leading to a slight to moderate, significant adverse cumulative effect.
- 7.108 Most of the significant amount of development permitted under the 1997 and 2010 Portland Harbour Revision Orders relates to the port operations and the construction of additional pontoons, linkspans etc. These will not change the character, appearance or function of the port setting of the surrounding heritage assets, so there is no potential for cumulative effects with the proposed ERF in combination with any of the works permitted under the 2010 Order or the High Speed Ferries operation permitted under the 1997 Order.
- 7.109 There is the potential for cumulative effects on the listed structures of the breakwater and dock office (LB 8,9) through the development of the adjacent berths (Project Inner Breakwater and Camber Area Alterations). The works to the listed inner breakwater and adjacent structures to enable the use of the crane berth have been completed under application 14/01071/LBC and are part of the baseline (see photographs in figure 7.10). The predicted effect of the ERF on the setting of these assets, in combination with the continued development of activity in this area of the port and the presence and movement of shipping at the berths around the inner breakwater will be a small cumulative change, leading to a moderate, significant adverse cumulative effect.

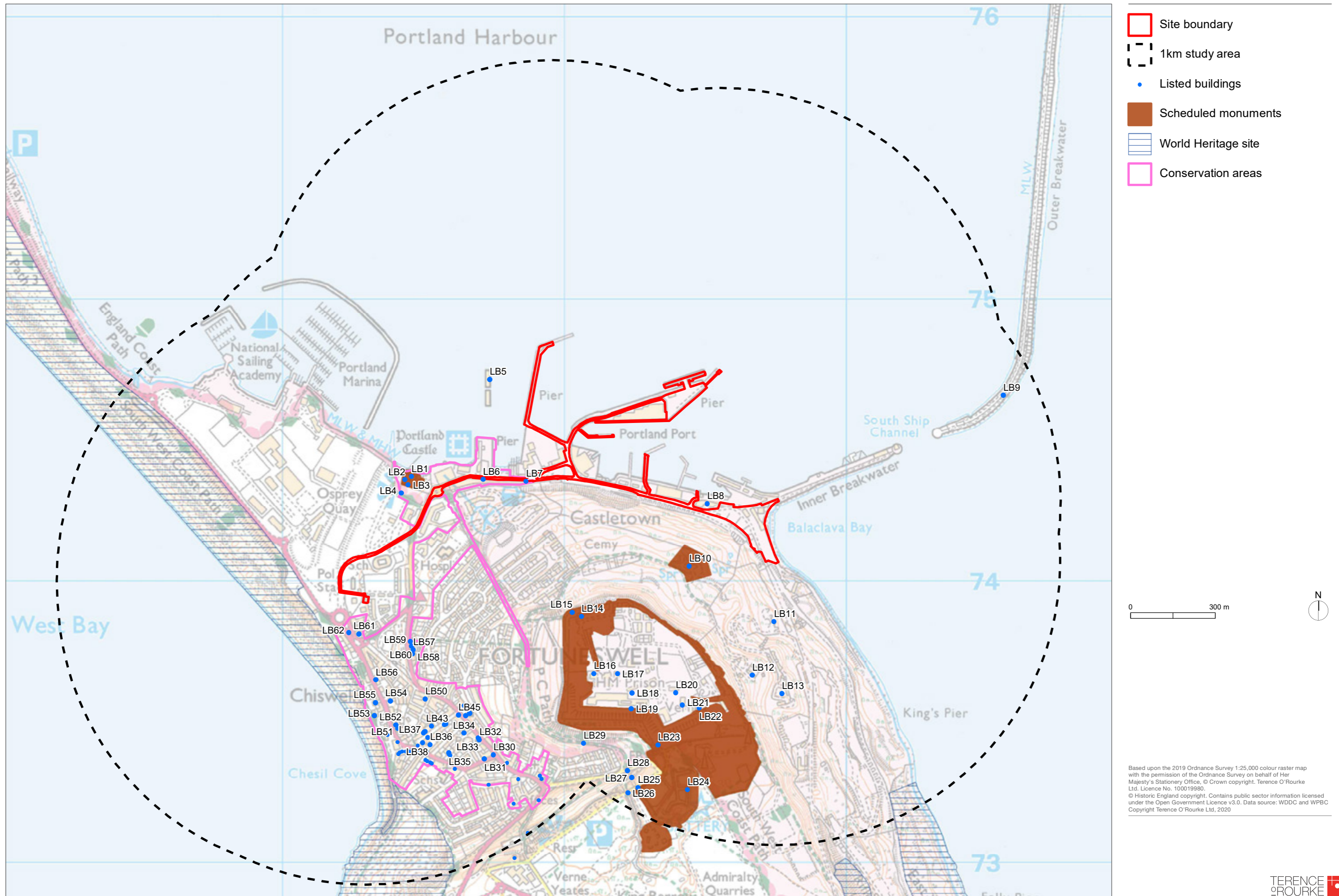
- 7.110 The other development permitted under the 1997 Portland Harbour Revision Order pertains to several areas of commercial and industrial development at locations along East Weare that were previously occupied by naval buildings and the large complex at HMS Osprey. These include the following:
- Project Osprey, which is currently under construction
 - Open storage of waste products, including waste wood and metal, on the Parade Ground area of the Rifle Range
 - Permitted development rights for B1 / B2 / B8 development on several areas of land at the port that have yet to be developed (areas Port 2 and 5-7 on figure 3.2)
 - Landside aquaculture
- 7.111 The development will form part of the setting of the batteries at East Weare and The Verne Citadel, as experienced in public views from the high ground to the east and south. The predicted effects of the ERF on the setting of these assets, in combination with the approved development, will be a negligible to small change, leading to a slight to moderate, significant adverse cumulative effect.

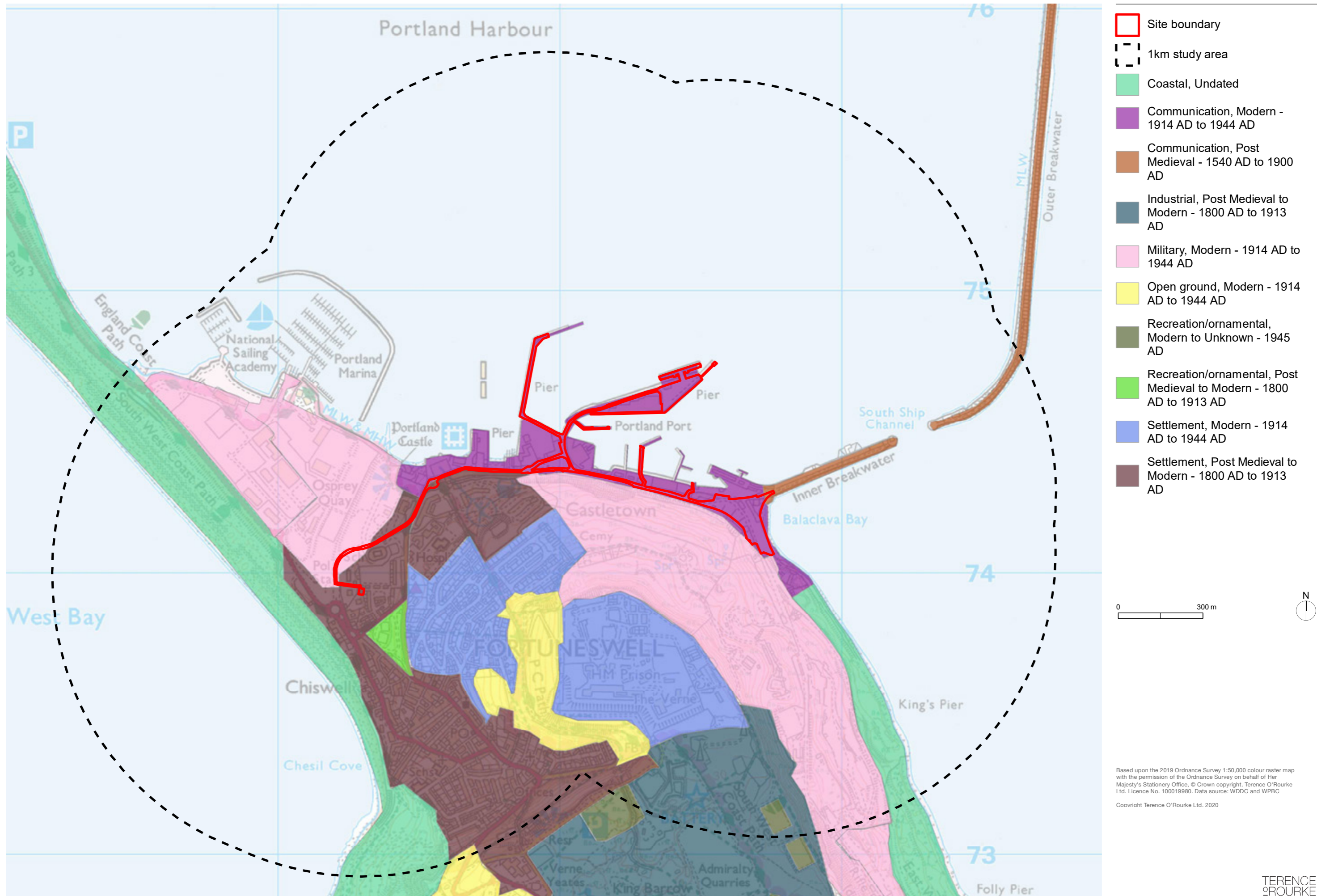


- Site boundary
- Monument point
- Monument line
- Monument area



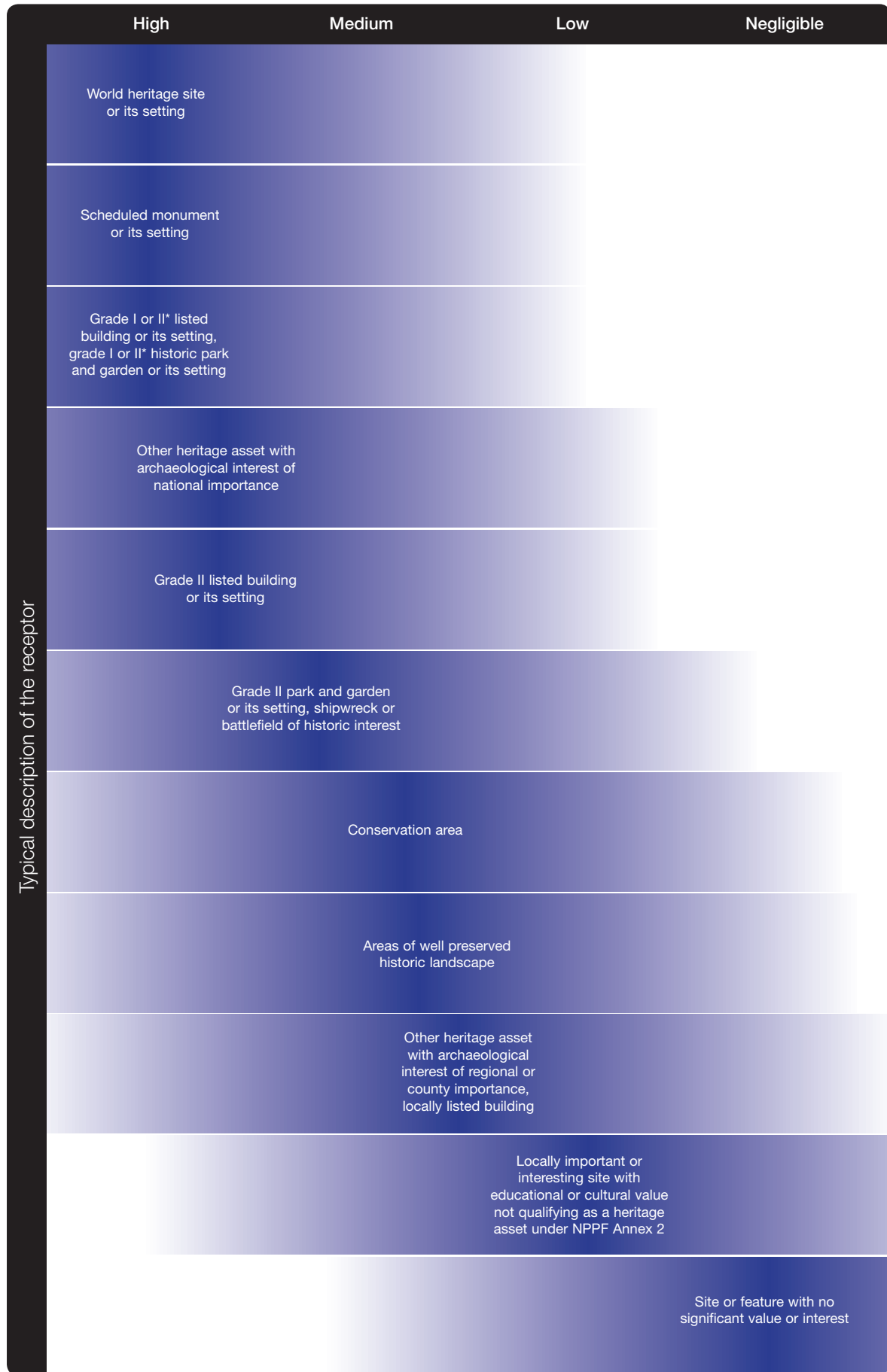
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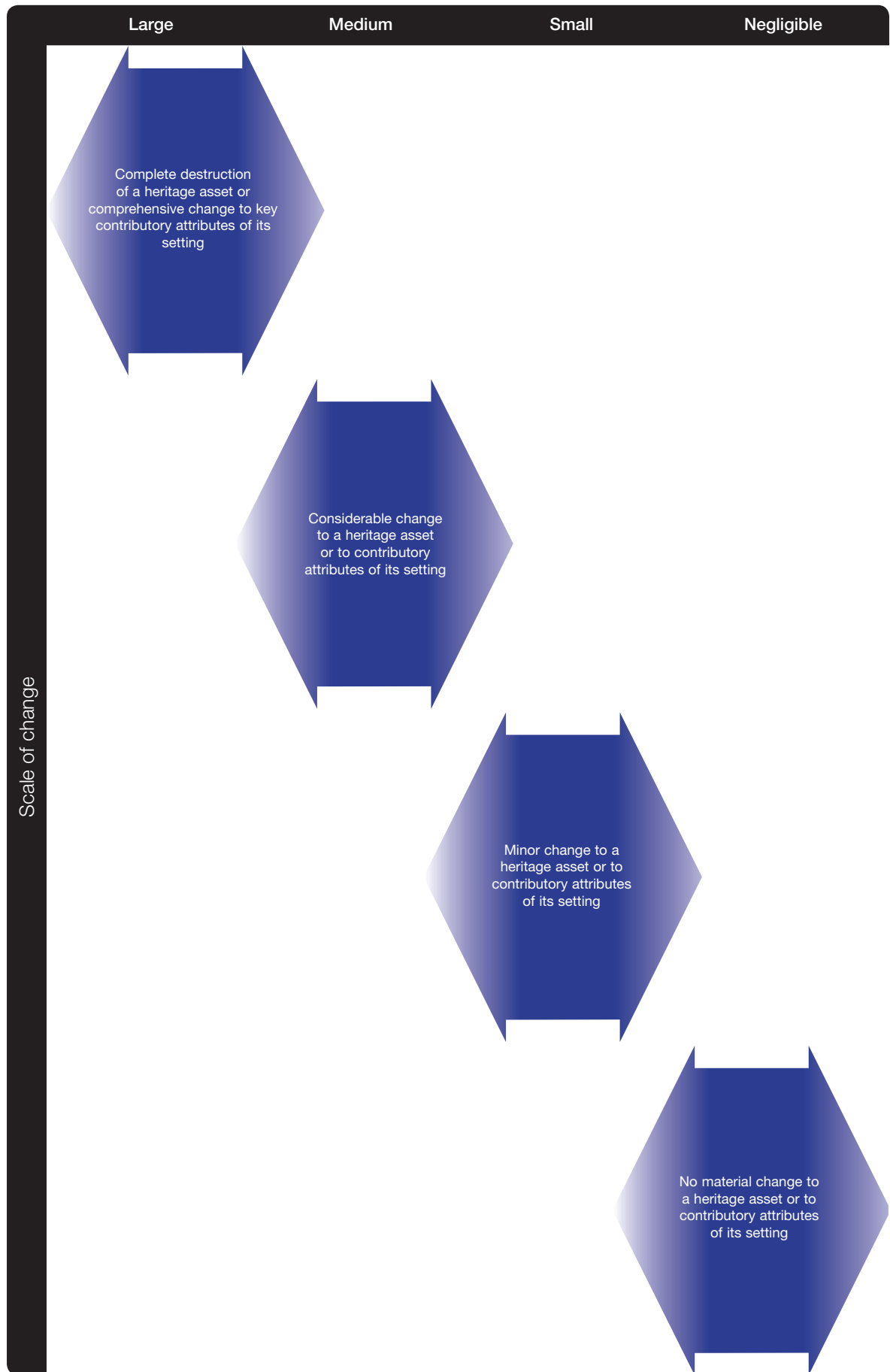


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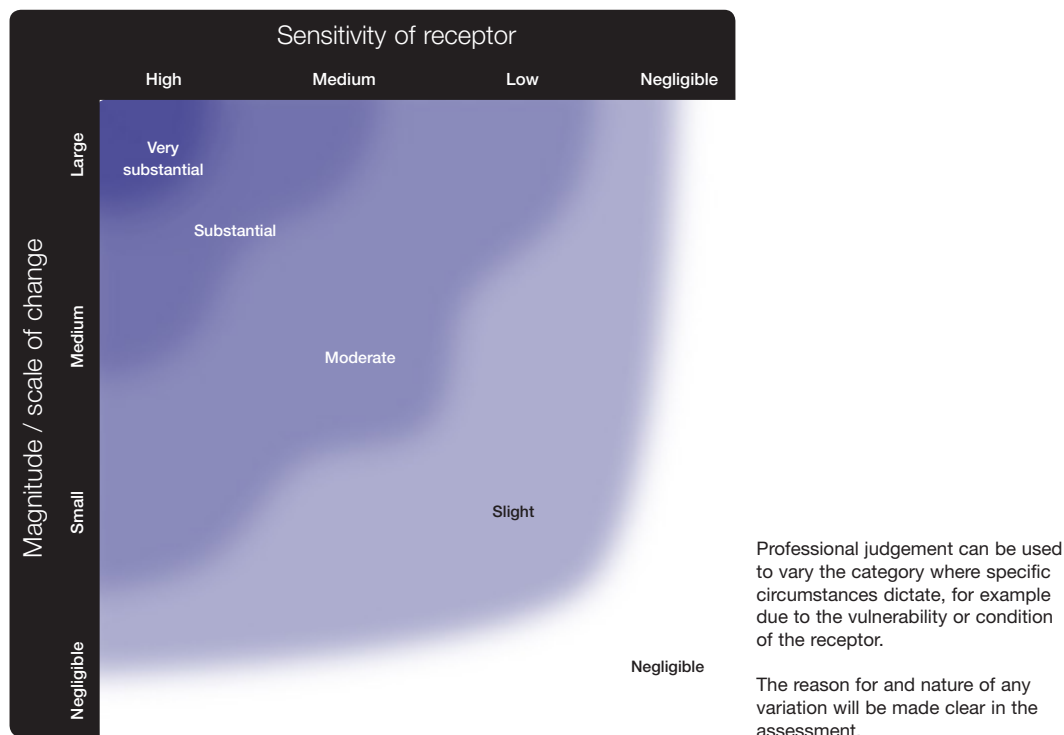
Sensitivity of receptor – Cultural heritage



Magnitude of change – Cultural heritage



Determination of significance matrix – Cultural heritage



Degree of effect

Very substantial

Adverse effects: Complete destruction of a heritage asset of high importance, or comprehensive change to its setting, so that the significance of the asset, or the ability to understand and appreciate that significance, are greatly altered or lost.

Beneficial effects: Major restoration or enhancement of a heritage asset of high importance, or comprehensive positive change to its setting, so that the significance of the asset, or the ability to understand and appreciate that significance, are revealed or greatly enhanced

Substantial

Adverse effects: Complete destruction of a heritage asset of less than high importance, or comprehensive change to its setting, or considerable change to an asset of high importance or its setting, so that the significance of the asset, or the ability to understand and appreciate that significance, are greatly altered or lost

Beneficial effects: Major restoration or enhancement of a heritage asset of less than high importance, or comprehensive positive change to its setting, so that the significance of the asset, or the ability to understand and appreciate that significance, are revealed or greatly enhanced

Moderate

Adverse effects: Considerable change to a heritage asset or its setting so that the significance of the asset, or the ability to understand and appreciate that significance, are altered

Beneficial effects: Considerable positive change to a heritage asset or its setting so that the significance of the asset, or the ability to understand and appreciate that significance, are enhanced

Slight

Adverse effects: Minor change to a heritage asset or its setting so that the significance of the asset, or the ability to understand and appreciate that significance, are altered

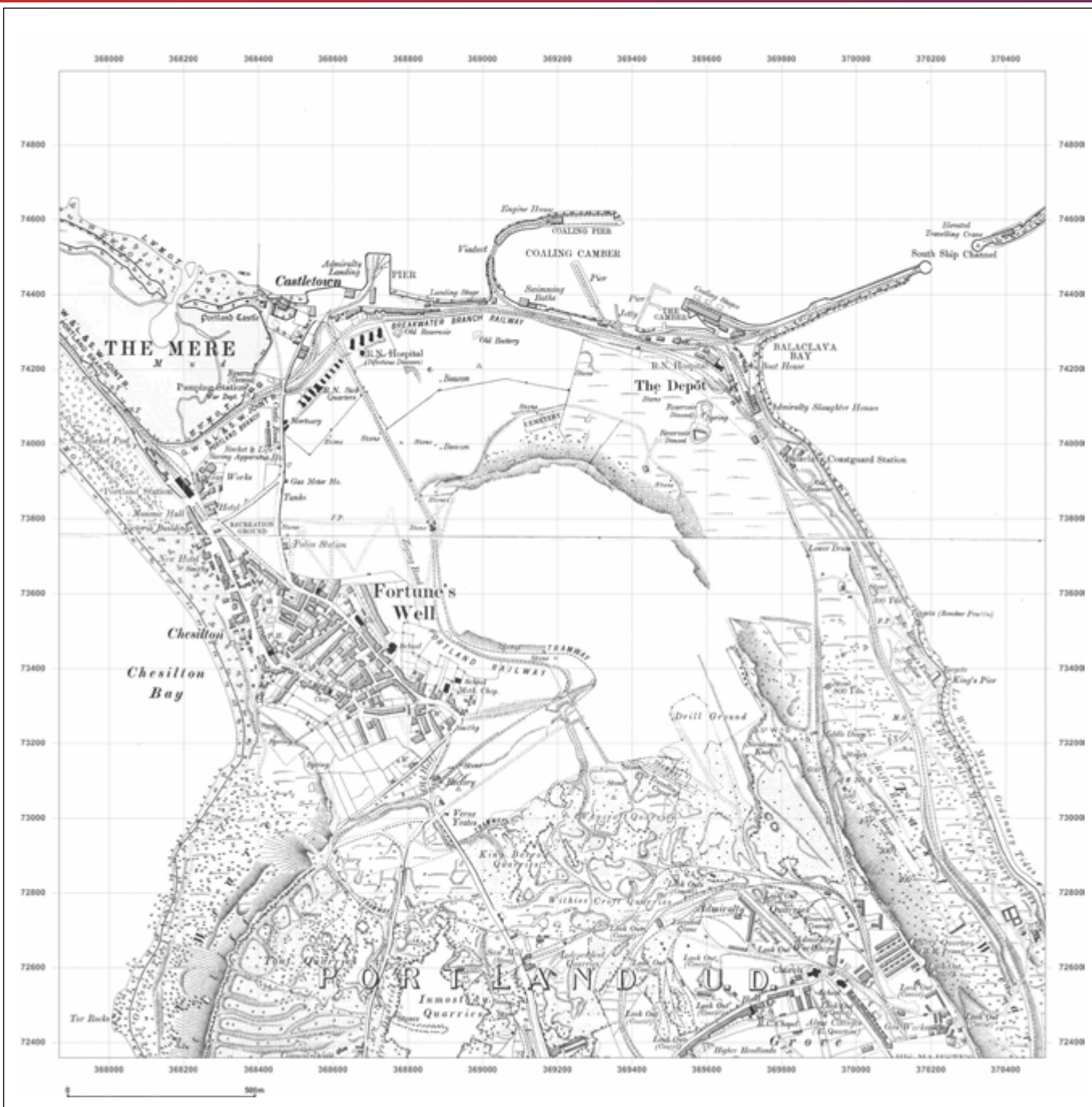
Beneficial effects: Minor positive change to a heritage asset or its setting so that the significance of the asset, or the ability to understand and appreciate that significance, are enhanced

Negligible

No material change to a heritage asset or its setting or to the ability to understand and appreciate its significance

Significance of effects

If the degree of effect is moderate or above, then the effect is considered to be significant. When adverse these effects correspond to substantial or less than substantial harm as defined in the NPPF.



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 Revised 1901
 Edition N/A
 Copyright N/A
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Surveyed 1882
 Revised 1901
 Edition N/A
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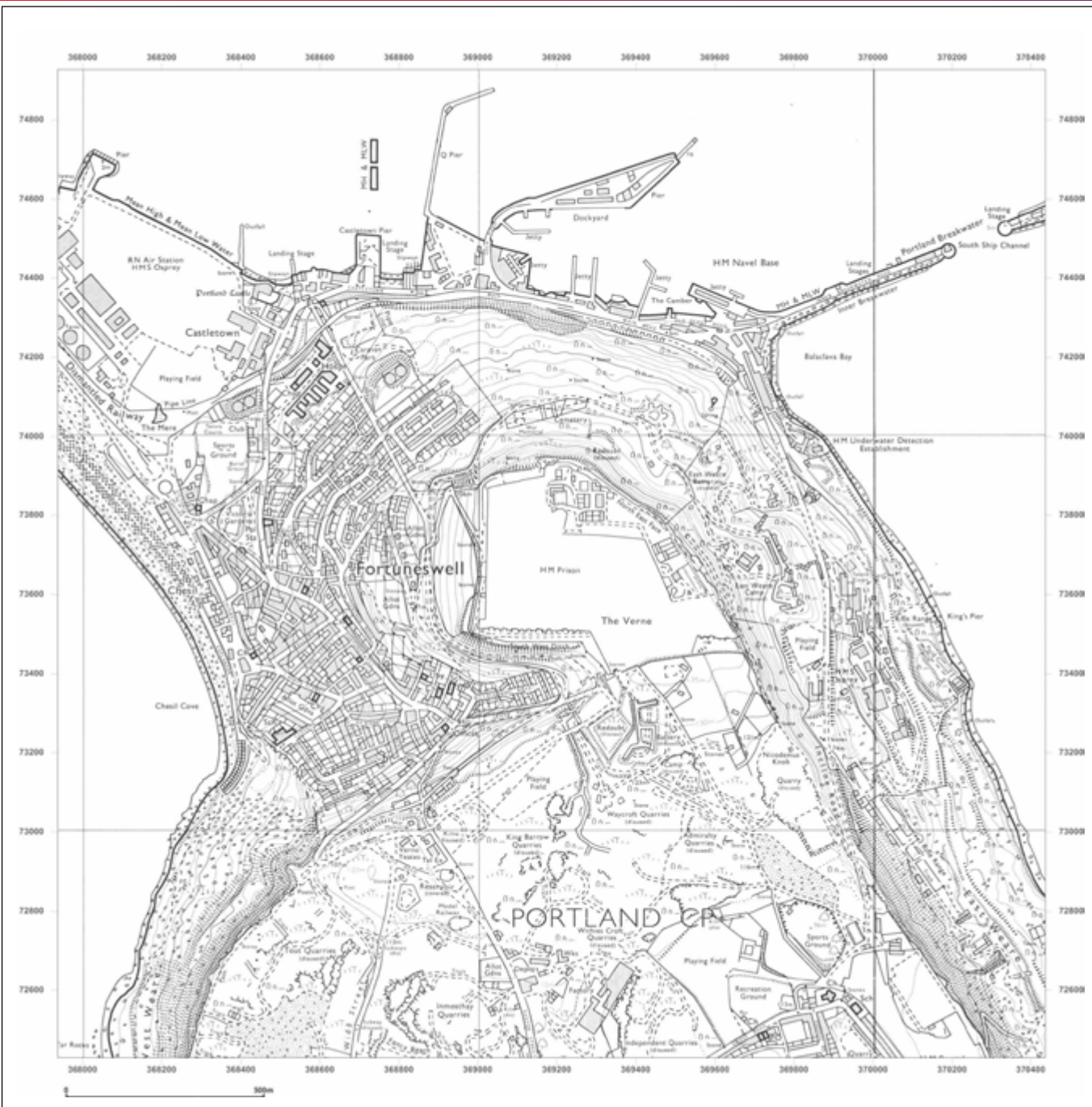


Portland
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Environmental
statement

Figure 7.7
1901 OS map





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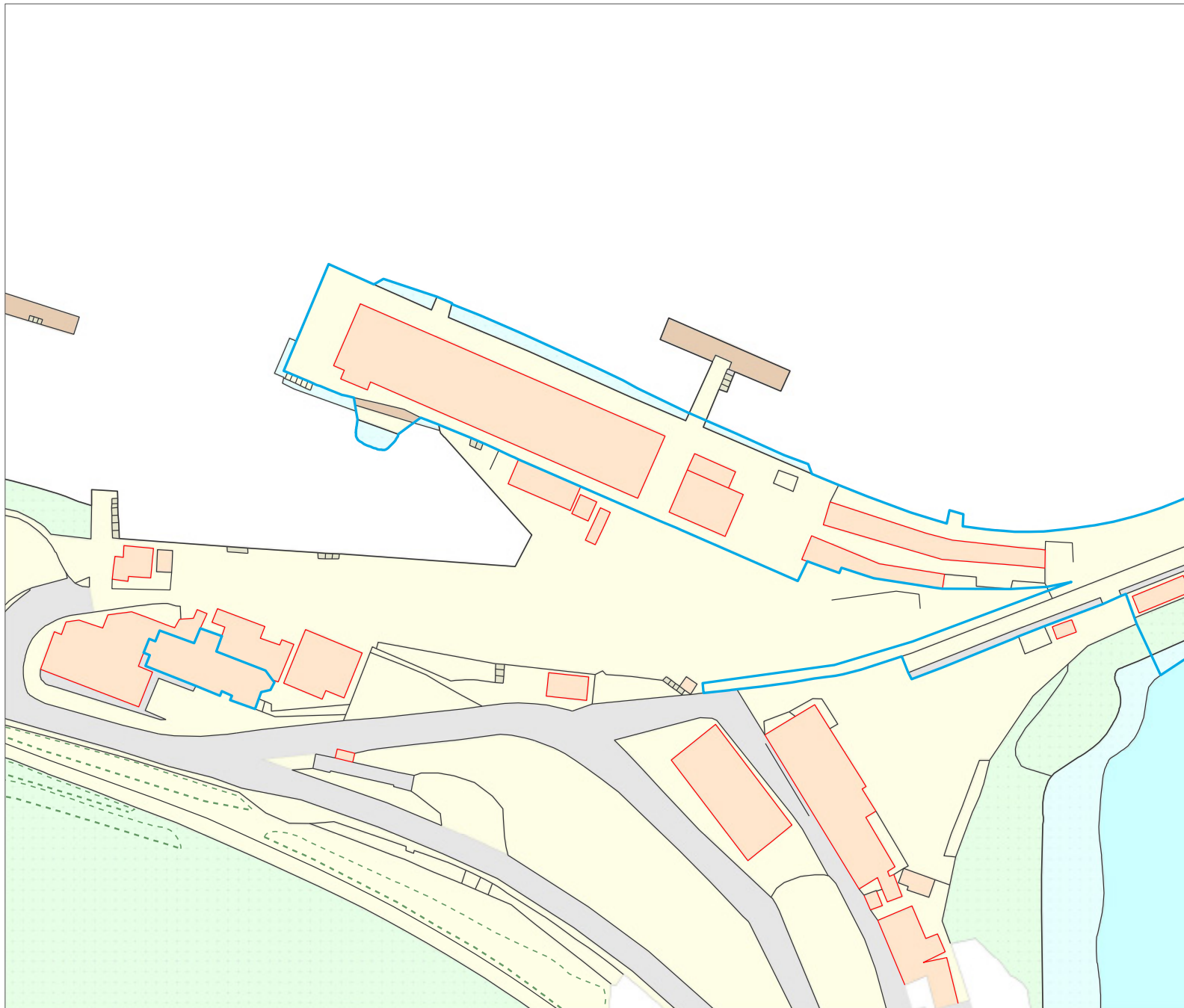
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Figure 7.8
 1973 OS map



□ Listed building

0 25 m



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Figure 7.9 Listed areas
closest to the site boundary

POWERFUL



View across the site looking east



View along the upper level of the breakwater



View back along the breakwater towards the coaling shed, with HMP The Verne at the top of the cliff above



Two views along the lower level of the breakwater showing the coal storage casements



The former Dockyard office



Two views of the port entrance at Castletown



View towards the harbour and the breakwater from the Naval Cemetery



View towards the harbour down the alignment of the Merchants' Incline



View across East Weare from the south, by The Grove



View from Verne Common



The entrance to the castle



View from the car park



View along the shoreline



View from Osprey Quay