

10 HISTORIC ENVIRONMENT

Introduction

- 10.1 This chapter of the ES assesses the effects of the proposed scheme on all aspects of the historic environment, including buried archaeological remains, historic buildings, historic areas and marine heritage.
- 10.2 In particular, this chapter:
- Sets out the existing and future environmental baseline conditions, established from desk studies and site visits;
 - Presents the potential environmental effects on all aspects of the historic environment arising from the proposed scheme, based on the information gathered and the analysis and assessments undertaken;
 - Identifies any assumptions and limitations encountered in compiling the environmental information; and
 - Highlights any necessary monitoring and/or mitigation measures that could prevent, minimise, reduce or offset the possible environmental effects identified in the EIA process.

Assessment Methodology

Legislation and Planning Policy Context

- 10.3 Legislative frameworks provide protection to the historic environment while planning policy guidance provides advice concerning how the historic environment should be addressed within the planning process.
- 10.4 Statutory protection for archaeology is principally enshrined in the *Ancient Monuments and Archaeological Areas Act* (1979) amended by the *National Heritage Act* (1983) and the *National Heritage Act* (2002). Nationally important archaeological sites are listed in a Schedule of Monuments and are accorded statutory protection.
- 10.5 For other components of the historic environment, the Planning (Listed Buildings and Conservation Areas) Act (1990) and the Town and County Planning Act (1971) provide statutory protection to listed buildings and their settings and present measures to designate and preserve the character and appearance of Conservation Areas.
- 10.6 The *Historic Environment (Wales) Act* became law after receiving Royal Assent in March 2016. It gives more effective protection to listed buildings and scheduled monuments, improves the sustainable management of the historic environment, and introduces greater transparency and accountability into decisions than on the historic environment.
- 10.7 Historic Parks, Gardens and Landscapes are described on a Register maintained by Cadw (and others) for Welsh Government, but such designation does not afford statutory protection. However, the *Historic Environment (Wales) Act* (2016) included a provision for historic parks and gardens to

- be placed on a statutory register and this is due to come into force in 2020. This statutory register will not include historic landscapes.
- 10.8 The principal national planning policy relevant to this assessment is *Planning Policy Wales Edition 10* (PPW10) (Welsh Government, December 2018). Chapter 6 of PPW10 (Distinctive and Natural Places) establishes the Welsh Government objectives with regard to the protection of the historic environment.
- 10.9 PPW10 sets out the policies which apply to the consideration given to historic assets within the planning process, emphasising the need to understand, protect and enhance the special qualities of such assets. It also recognises that in some circumstances there can be a pressing need for development even if that development results in harm to aspects of the historic environment. For example, PPW10 advises that *‘There is a strong presumption against the granting of planning permission for developments, including advertisements, which damage the character or appearance of a conservation area or its setting to an unacceptable level’* (paragraph 6.1.15). However, the policy goes on to say *‘In exceptional cases, the presumption may be overridden in favour of development considered desirable on public interest grounds’*.
- 10.10 Detailed guidance on the implementation of the policies on planning and the historic environment is provided in *Technical Advice Note 24: The Historic Environment* (TAN24) (Welsh Government, 2017). The TAN includes specific guidance on how each aspect of the historic environment should be considered and protected within the planning process, but also contains the following statement *‘Changes in the historic environment are inevitable. This can be the result of decay caused by natural processes, damage caused by wear and tear of use, and the need to respond to social, cultural, economic and technological changes’* (paragraph 1.8). In a section regarding climate change, the TAN identifies that *‘The public benefit of taking action to reduce carbon emissions, or to adapt to the impact of climate change, should be weighed against any harm to the significance of historic assets’* (paragraph 1.9).
- 10.11 *Planning Pembrokeshire’s Future* is the Pembrokeshire County Council Local Development Plan (up to 2021) (the LDP) and was adopted in February 2013. Policies relevant to this chapter of the ES include *GN.2: Sustainable Design* and *GN.38: Protection and Enhancement of the Historic Environment*.
- 10.12 Further details of national and local planning policies can be found in Appendix 10.1 of this ES.

Relevant Guidance

- 10.13 Guidance on *Heritage Impact Assessment in Wales* has been published by Cadw (2017a) on behalf of Welsh Government. This document advises that a heritage assessment should *‘take into account sufficient information to enable both the significance of the asset and the impact of change to be understood. It should be proportionate both to the significance of the historic asset and to the degree of change proposed’* (Page 5).
- 10.14 The overall assessment of impacts and effects presented within this chapter of the ES is in line with the former and current iterations of the *Design Manual for Roads and Bridges* (DMRB, Highways Agency et al. 20019a; b). It is acknowledged that the proposed development is not a highways scheme, however DMRB provides a robust and tested methodology for the assessment of

- environmental effects, including advice on determining the magnitude of impacts and the significance of effects.
- 10.15 Additional guidance on how to identify and appraise the values associated with historic assets is presented in the document *Conservation Principles for the Sustainable Management of the Historic Environment in Wales* (Welsh Assembly Government, 2011). This document provides guidance on understanding heritage values and also includes a section advising on how to assess heritage significance.
- 10.16 According to the guidance published in *Conservation Principles*, heritage values fall into four inter-related groups:
- Evidential value – the potential of a place to yield evidence about past human activity;
 - Historical value – this derives from the ways in which past people, events and aspects of life can be connected through a place to the present. This value tends to be illustrative (providing insights into past communities and their activities) or associative (association with a notable family, person, event or movement);
 - Aesthetic value – this derives from the ways in which people draw sensory and intellectual stimulation from a place; and
 - Communal value – this derives from the meanings of a place for the people who relate to it, or for whom it figures in their collective experience or memory.
- 10.17 In this document, setting was defined as ‘*The surroundings in which an historic asset is experienced, its local context, embracing present and past relationships to the adjacent landscape*’ (Welsh Assembly Government, 2011). This definition has been updated thus in TAN24: ‘*The setting of a historic asset includes the surroundings in which it is understood, experienced and appreciated, embracing present and past relationships to the surrounding landscape. Its extent is not fixed and may change as the asset and its surroundings evolve. Setting is not itself a historic asset, though land within a setting may contain other historic assets*’ (Welsh Government, 2017, Annex D). The definition is repeated in recent guidance regarding the issue of the settings of historic assets in Wales (Cadw, 2017b), which makes the following points:
- Setting usually extends beyond the property boundary of an individual historic asset.
 - Intangible factors such as function, sensory perceptions or historical, artistic, literary and scenic associations can be important in understanding settings, as well as physical elements within the surroundings of the asset.
 - When development is proposed there is a need to assess the historic assets that may be affected and understand how their settings contribute to the significance of these assets.
- 10.18 The Cadw document (Cadw, 2017b) goes on to provide advice on a staged approach to decision-taking by outlining a four-stage approach:

- Identify which historic assets and their settings could be affected by a proposed development;
 - Define and analyse the setting of each historic asset and assess whether, how and to what degree the setting makes a contribution to the significance of the asset;
 - Evaluate the effects of the proposed development, whether beneficial or harmful, on that significance; and
 - Consider options to mitigate or improve potential impacts on that significance.
- 10.19 Although assessments of changes within the settings of historic assets can involve non-visual issues such as noise, it is more usually the visual aspects of a development that form the major part of the assessment.
- 10.20 The existence of direct lines of sight between the historic asset and the proposed development is an important factor in judging the visual impact of the development. However, it is possible for changes within the setting to occur even when such a relationship does not exist. For example, views towards a listed building from a frequently visited location, such as a park or a public footpath, may be affected by the presence of a larger development, even if the development is not directly visible from the building itself.
- 10.21 The assessment then needs to balance the impact of these various considerations on the basis of informed professional judgment. Assessment of visual impacts can be undertaken in accordance with the procedures expressed in the *Guidelines for Landscape and Visual Impact Assessment* (3rd Edition) (Landscape Institute, 2013). If there is the potential for changes within the setting of historic assets due to noise or other impacts than these would be considered using appropriate procedures.
- 10.22 There should also be consideration of the sensitivity to change of the setting of a historic asset. This requires examination of the current setting with regard to identifying elements that contribute to the significance of the asset, elements that make a neutral contribution to the significance of the asset and elements that make a negative contribution to (i.e. detract from) the significance of the asset.

Study Area

- 10.23 The study area for historic environment data collection has comprised an area measuring approximately 1,800 m x 1,700 m centred on Pembroke Port.
- 10.24 For designated historic assets that could be affected by a change within their settings, the study area includes all such assets regardless of distance. The identification of such assets was principally based on the Zone of Theoretical Visibility established as part of the landscape and visual assessment (Chapter 14, Figure 14.5).

Baseline Methodology

- 10.25 Data regarding known historic assets (designated and undesignated) were sought from a number of sources, including the Regional Historic Environment Record (HER) maintained by Dyfed Archaeological Trust (DAT), the National Monuments Record for Wales, the Royal Commission on

the Ancient and Historical Monuments of Wales (RCAHMW) and the Pembrokeshire Archives and Local Studies (Haverfordwest).

- 10.26 MHPA maintains a collection of previously commissioned bespoke studies, which includes reviews of the historic background to the establishment, development and use of the port. These studies included research undertaken in relevant archives including the National Archives (Kew). This database has been examined as part of the current study leading to the production of the Historic Environment Desk-Based Assessment (Appendix 10.1 of the ES).
- 10.27 In addition to the above, the following guidance document has been utilised within the programme of baseline data gathering:
 - *Standard and guidance for historic environment desk-based assessment* (Chartered Institute for Archaeologists, 2014).
- 10.28 Several site visits have been undertaken in order to assess the condition of built historic assets and also the current settings of historic assets that could be affected by the proposed development.

Consultation

- 10.29 A comprehensive and iterative programme of consultation has been undertaken with Cadw (Welsh Government’s historic environment service) and Pembrokeshire County Council during the design of the proposed scheme. This has included the commissioning and review of several technical reports to inform the consultation process. Appendix 10.4 of this ES provides details of this programme of consultation in the form of copies of meeting minutes and notes, and also presentations made by the design team to the consultees. The technical reports commissioned and reviewed within the consultation process are presented as Appendices to Chapter 2: Project Description of this ES.
- 10.30 Appendix 10.4, along with the text presented in this chapter of the ES, demonstrates how the project design has evolved to take account of the need to avoid or reduce impacts on historic assets wherever this is possible, whilst maintaining the overall requirements for the proposed development in terms of business needs.
- 10.31 Table 10.1 below provides a summary of the consultation process undertaken to date in relation to the historic environment.

Table 10.1: Consultation Responses Relevant to this Chapter

Date	Consultee and Issues Raised	How/ Where Addressed
20th February 2018	Pembrokeshire County Council (PCC) Pre-application Advice Meeting General discussion regarding the nature of, and need for, the proposed development.	Conservation Area Consents and Listed Building Consents will be submitted as part of the application for the proposed development.

Conservation Area which are greater than 115 cubic metres, also that Listed Building Consent would be required for any works that physically affected a Listed Building.

PCC advised that the application would need to include details of the proposed infilling of the graving dock and similarly all works to other listed buildings.

MHPA advised that there was some consideration of moving the Grade II listed Former Foreman's Office as part of the proposed mitigation.

PCC advised that an ASIDOHL report would be required given the scheme's location within a Registered Historic Landscape.

Details of works to listed buildings are provided in this chapter of the ES and in the Technical Appendices and in the Listed Building Consent applications.

The Former Foreman's Office is now to be retained in situ (and restored) following additional scheme design within this part of the proposal site.

The ASIDOHL report is presented as Appendix 10.2 of this ES.

Cadw
Request for EIA Scoping Opinion

The scheme needs to be fully evaluated through a comprehensive impact assessment which takes due account of PPW paragraph 6.11.

The ES needs to address both the direct effects on historic assets within the immediate locale and the effects on the settings of historic assets both within the Dockyard and within a buffer zone around the development. We advise application of a 3 km buffer which can be refined for detailed analysis.

Consideration needs to be given to the impact of the proposed scheme on the Registered Historic Landscape by application of the ASIDOHL2 process.

It is recommended that contact be made with Cadw at the start of the process to agree appropriate key viewpoints and key built heritage elements to take account of in support of the assessment of the scheme within both the immediate and wider historic environment.

The comprehensive impact assessment is presented within this chapter of the ES, supported by Appendices 10.1 - 10.4.

This chapter of the ES addresses direct (physical) effects and also effects arising from changes within the settings of historic assets. This latter element covers assets within 3 km and beyond where appropriate.

A full ASIDOHL2 report is presented as Appendix 10.2 of the ES.

There has been extensive consultation with Cadw throughout the process of scheme development and assessment. This has included discussion of key viewpoints and key built heritage elements.

23rd July 2018

Pembrokeshire County Council
(PCC)
Request for Scoping Opinion

In support of the comments of Cadw, there is a clear need for an in-depth Heritage Impact Assessment including the effects on the Grade I

A comprehensive assessment of impacts and effects on historic assets is presented within this chapter of the ES, supported by Appendices 10.1 –

31st July 2018

	<p>listed Paterchurch tower, the infilling of the Grade II* listed graving dock, the demolition of the Grade II listed Former Foremen's Office, the infilling and covering of the Grade II listed pickling pond as well as other historic buildings within the Conservation Area, the removal of the central section of the two Grade II listed slipways, and the cumulative effect on the settings of other listed buildings within the Dockyard and on the character and appearance of the Conservation Area. These effects require particular justification having regard to relevant planning policy and legislation relating to the historic environment.</p>	<p>10.4. This includes effects resulting from changes within the settings of historic assets and changes to the character and appearance of the Conservation Area. The Grade II Former Foremen's Office is retained within the updated scheme design rather than being demolished as described in the Scoping Report.</p>
	<p>Cadw Agreed notes resulting from a meeting held on 20th September between Cadw and MHPA.</p>	
21st September 2018	<p>The Heritage Impact Assessment process that leads to the preparation of a Heritage Impact Statement should be started a.s.a.p to show the iterative process the design team have gone through to come up with the proposed scheme, and to ensure that the development of proposals is informed by an understanding of the significance of historic assets and seeks to minimise impacts on their significance.</p>	<p>The iterative design process is described in the Needs and Alternatives chapter of the ES (Chapter 3). The Historic Environment chapter of the ES represents the Heritage Impact Assessment referenced by Cadw.</p>
	<p>Design team meeting with Cadw and PCC</p>	
19th December 2018	<p>Design team presented overview of updated scheme design showing proposed retention of Grade II listed Former Foremen's Office, also advised on the instruction of concept feasibility studies for the infilling of the Grade II* listed Graving Dock and the Grade II listed Timber Pond. The DeMontfort University digital fly-through of the historic dockyard was also presented. The refurbishment of the annexes to the Grade II listed flying boat hangars was discussed.</p>	N/A
	<p>Design team meeting with Cadw and PCC</p>	
18th March 2019	<p>Design team advised on instruction of concept feasibility study for the 'mega slipway' with maximised retention of historic fabric, also that the slipway crest had been moved inland and the projection seawards beyond the current quay wall had been reduced to half the size as in the previous design. Cadw advised that the</p>	<p>The detailed drawings for the work to establish the 'mega slipway' show which elements of the historic building slips would be removed and which would be retained.</p>

drawings would need to show clearly which elements of the historic slips were to be removed and which were to be retained.

Design team stated that the Grade II listed timber pond could be infilled and a building erected over it such that there would be minimal damage to the structure. Cadw advised that the impact on the timber pond, and any mitigation measures proposed, would need to be captured within the Heritage Impact Assessment.

Impacts on the timber pond, along with any mitigation through design, are presented within this chapter of the ES.

Design team stated that the Grade II* listed graving dock could be infilled in such a way that there would be minimal damage to the structure.

The issue of the dock caisson was discussed and various options for retention and/or relocation were raised. Cadw advised that they would wish to see a detailed survey of the caisson undertaken as part of the options appraisal. The design team agreed that some form of survey would be carried out but would be in accordance with relevant health and safety concerns.

A visual and camera survey of the caisson has been carried out.

An initial visual image showing the proposed Buildings A and B was presented in order to inform a discussion about the likely changes within the settings of historic assets.

Photomontages showing how the proposed scheme would look from several agreed viewpoints are presented within Chapter 14 of the ES.

Cadw requested information regarding the views from the Defensible Barracks towards the project site.

The change within the setting of the Defensible Barracks is described within this chapter of the ES.

Design team meeting with Cadw and PCC

Design team advised on options appraisal for amendments to scheme design, including alternatives to the 'mega slipway'. The caisson inspection report was circulated and the options for removal and relocation were discussed.

05th September 2019

Cadw advised that the plate thickness of the caisson could be restored and that the timber decking was replaceable. Cadw asked if the caisson could be dated.

Caisson is likely to date directly to the rebuilding of the graving dock in 1858 – no evidence to suggest that it is a later replacement.

Images of the proposed 'mega slipway' were presented and

discussed. Cadw asked if the 'mega slipway' is the minimum size required for the scheme.	The current proposal for the 'mega slipway' is the minimum size required for the scheme. The design ensures the retention of the outermost flanking walls of the Grade II listed building slips.
Design options for Buildings A and B were also presented, showing building design and architectural treatment types. PCC observed that the proposed Buildings A and B are quite large and that justification would be required as to the buildings could not be reduced in size.	The required dimensions of Buildings A and B are discussed in Chapter 3 of the ES.
PCC also asked if the graving dock could be retained and reused for building and/or repairing vessels.	The reuse of the graving dock has been considered but it would need to be modified to the extent that this would result in considerable damage to the historic fabric, hence infilling is a better solution in terms of conservation. This is addressed in Chapter 3 of the ES.
PCC asked about the impact on Paterchurch Tower.	The impact and effect of the proposed development on the significance of Paterchurch Tower are addressed in this chapter of the ES.
Cadw asked about the visual impact in views towards the scheme from the Defensible Barracks.	The impact and effect of the proposed development on the significance of the Defensible Barracks are addressed in this chapter of the ES.

Assessment Criteria and Assignment of Significance

10.32 The significance of an effect is determined based on the sensitivity or value of a receptor and the magnitude of an impact. This section describes the criteria applied in this chapter to characterise the sensitivity of receptors and magnitude of potential impacts. The terms used to define sensitivity/value (of receptors) and magnitude (of impact) are based on, and have been adapted from, those used in the previous and current iterations of the DMRB methodology (Highways Agency *et al.*, 2019a; b), which are described in further detail in Chapter 4: Environmental Assessment Methodology.

Receptor Sensitivity/Value

10.33 Table 10.2 presents the definitions of sensitivity or value which are applied to historic assets.

Table 10.2: Sensitivity/Value Criteria

Sensitivity	Typical Descriptors
Very High	World Heritage Sites, including nominated sites and structures or landscapes coherence, time-depth or other critical factor(s) inscribed as being of universal value. Other historic assets of recognised international importance, including historic landscapes.
High	Scheduled Ancient Monuments (including proposed sites). Undesignated historic assets of schedulable quality and importance. Grade I and II* listed buildings.

Other listed buildings that can be shown to have a level of importance not adequately reflected in their listing.
 Undesignated structures of clear national importance.
 Grade I and II* registered parks and gardens of historic interest.
 Other registered parks and gardens of historic interest that can be shown to have a level of importance not adequately reflected in their listing.
 Undesignated parks and gardens of clear national importance.
 Conservation Areas which contain several Grade I and II* listed buildings along with other listed and unlisted historic buildings.
 Designated historic landscapes of outstanding or special interest.
 Undesignated historic landscapes of clear national importance.
 Well-preserved historic landscapes with exceptional coherence, time-depth or other critical factor(s).

Medium	Designated or undesignated historic assets that contribute to regional research objectives. Grade II listed buildings. Unlisted buildings that can be shown to have exceptional qualities. Grade II registered parks and gardens of historic interest. Undesignated parks and gardens of historic interest of regional importance. Conservation Areas which contain one or two Grade I and II* listed buildings, along with other listed and non-listed historic buildings. Undesignated historic landscapes of clear regional importance. Averagely well-preserved historic landscapes with reasonable coherence, time-depth or other critical factor(s).
Low	Undesignated historic assets of local importance. Locally listed buildings. Unlisted historic buildings of local importance. Robust undesignated historic landscapes. Historic landscapes with importance to local interest groups.
Negligible	Undesignated historic assets with little or no surviving archaeological interest. Buildings or no architectural or historic note. Landscapes with little or no historic interest.
Unknown	The importance of the historic asset has not been ascertained.

Magnitude of Impact

- 10.34 The magnitude of an impact is assessed without reference to the sensitivity or value of the historic asset. In terms of the judgement of the magnitude of impact, this based on the principle that preservation of the significance of the asset is preferred, and that total loss of significance (including loss resulting from substantial change within the setting) of the asset is least preferred.
- 10.35 Regarding buried archaeological remains, it is not always possible to assess the physical impact in terms of percentage loss, and therefore it can be important in such cases to try to assess the capacity of the historic asset to retain its character and significance following any impact. Impacts resulting from changes within the setting of buried archaeological remains may also be difficult to assess as they do not involve physical loss of the asset.
- 10.36 Table 10.3 presents the criteria used to assess the magnitude of impact on historic assets.

Table 10.3: Impact Magnitude Criteria

Sensitivity	Typical Descriptors
High	Change to most or all key elements of the historic asset, or changes within the setting of the asset, such that the significance of the asset is lost or substantially harmed (Adverse). Change to most or all key elements of the historic asset, or changes within the setting of the asset, such that the significance of the asset is substantially enhanced (Beneficial).

Medium	Change to elements of the historic asset, or changes within the setting of the asset, such that the significance of the asset is clearly harmed (Adverse).
	Change to elements of the historic asset, or changes within the setting of the asset, such that the significance of the asset is clearly enhanced (Beneficial).
Low	Change to elements of the historic asset, or changes within the setting of the asset, such that the significance of the asset is slightly harmed (Adverse).
	Change to elements of the historic asset, or changes within the setting of the asset, such that the significance of the asset is slightly enhanced (Beneficial).
Negligible	Change to elements of the historic asset, or changes within the setting of the asset, such that the significance of the asset is barely affected (Adverse).
	Change to elements of the historic asset, or changes within the setting of the asset, such that the significance of the asset is barely affected (Beneficial).
No change	No changes to elements of the historic asset, or within the setting of the asset.

Significance of Effects

- 10.37 The significance of the effect upon the historic environment has been determined by considering the sensitivity or value of the receptor and the magnitude of the impact. The method employed for this assessment is presented in Table 10.4. Where a range of significance levels are presented, the final assessment for each effect is based upon expert judgement.
- 10.38 In all cases, the evaluation of receptor sensitivity or value, impact magnitude and significance of effect has been informed by professional judgement and is underpinned by narrative to explain the conclusions reached.

Table 10.4: Assessment Matrix

Sensitivity or Value	Magnitude of Impact				
	No Change	Negligible	Low	Medium	High
Negligible	No change	Negligible	Negligible or Minor	Negligible or Minor	Minor
Low	No change	Negligible or Minor	Negligible or Minor	Minor	Minor or Moderate
Medium	No change	Negligible or Minor	Minor	Moderate	Moderate or Major
High	No change	Minor	Minor or Moderate	Moderate or Major	Major or Substantial
Very High	No change	Minor	Moderate or Major	Major or Substantial	Substantial

- 10.39 Where a choice of significance levels is presented, the final assessment for each effect is based upon expert judgement.
- 10.40 For the purpose of this assessment, any effects with a significance level of minor or less are not considered to be significant in terms of the EIA Regulations. Effects should be considered to be adverse unless explicitly stated otherwise.
- 10.41 A description of the significance levels is provided in the bullet points below:
- **Substantial:** Only adverse effects are normally assigned this level of significance. They represent key factors in the decision-making process. These effects are generally, but not exclusively, associated with historic assets of international, national or regional importance that are likely to suffer a most damaging impact and loss of significance.
 - **Major:** These beneficial or adverse effects are likely to be very important considerations and are likely to be material in the decision-making process.

- Moderate: These beneficial or adverse effects may be important but are not likely to be key decision-making factors. The cumulative effects of such factors may influence decision-making if they lead to an increase in the overall adverse effect on a particular historic asset or group of assets.
- Minor: These beneficial or adverse effects may be raised as local factors. They are unlikely to be critical in the decision-making process, but are important in enhancing the subsequent design of the project.
- Negligible: No effects or those that are beneath levels of perception, within normal bounds of variation or within the margin of forecasting error.

Limitations of the Assessment

- 10.42 All readily available data required for the assessment have been acquired and examined.
- 10.43 No purposive archaeological fieldwork (intrusive or non-intrusive) has been undertaken in connection with the proposed development. This is because it is considered that previous activities associated with the construction and use of the dockyard are likely to have impacted on any buried archaeological remains (of pre-dockyard date) that may have been present. It is possible that fragmentary archaeological remains could still be present within the proposal site boundary, however the proposed works are likely to have a limited impact on such remains.
- 10.44 The information gathered to date is considered to provide sufficient information to form the basis of the assessment for EIA purposes.

Baseline Environment

- 10.45 A detailed account of the archaeological and historical background of the proposal site and its setting is presented in the Historic Environment Desk-Based Assessment (Appendix 10.1 of this ES).
- 10.46 Further information regarding the nature and significance of individual structures within and adjacent to the former naval dockyard is provided in a separate Built Heritage Statement of Significance (Appendix 10.3 of this ES) which itself builds on a previous report prepared on behalf of the applicant (Turley Heritage, 2016).
- 10.47 Pembroke Port lies wholly within the Milford Haven Waterway Landscape of Outstanding Historic Interest (LOHI). The Summary description published in the Register (Cadw *et al*, 1998) states: *'The classic ria, drowned valley and estuary in Wales, with an unsurpassed concentration of remains reflecting maritime conquest, settlement, commerce, fishing, defence and industry spanning the prehistoric to modern periods. The area includes: Iron Age promontory forts; Early Christian and Viking placenames; Norman coastal castle-boroughs; medieval castles and later gentry residences; Milford and Pembroke Dock planned settlements; recent and modern quays, jetties and landing places, coal mines, limestone quarries, military and naval fortifications, oil terminals, jetties, refineries and power station'*.

10.48 The Milford Haven Waterway LOHI is subdivided into forty-eight Historic Landscape Character Areas (HLCAs). Pembroke Port lies wholly within the Pembroke Dock HLCA (Figure 10.1). Full descriptions of each HLCA that may be affected by the proposed development are provided in the report on the results of the Assessment of the Significance of the Impact of Development on the Historic Landscape (the ASIDOHL report) which is presented as Appendix 10.2 of this ES.

10.49 The majority of the proposal site lies within the Pembroke Dock Conservation Area (Figure 10.2), for which a *Character Appraisal and Management Plan* was adopted by Pembrokeshire County Council in September 2017. This document identifies the following as key characteristics which contribute toward the special interest of the conservation area:

- *“Long maritime history with the establishment of a Royal Navy Dockyard and the subsequent Victorian development initiated by the Admiralty;*
- *The only Royal Dockyard in Wales;*
- *Historic former admiralty buildings in the former dockyard;*
- *Military base established at Llanion Hill from 1905-67;*
- *Strategic position in relation to links to Ireland;*
- *Architecturally distinctive landmark buildings;*
- *Significant views into, out of, and within the Conservation Area;*
- *Mix of building styles with the majority comprising 19th century buildings;*
- *Listed Buildings and many other buildings which add to the interest and character of the Conservation Area;*
- *Grid pattern street layout, which adds to the ‘special interest’ of the town;*
- *A number of well-preserved Victorian shops with living accommodation over;*
- *The presence of buildings relating to the three armed forces gives the town added significance in a regional and a national context;*
- *Military cemetery – unique to Wales;*
- *Medieval tower which is a vestige of the former Paterchurch Farm on which Pembroke Dockyard stands; and*
- *Defensible barracks structure of national architectural importance.”*

10.50 The information quoted in the above paragraphs regarding the designations provides a basic introduction to the historical background of Pembroke Port and indeed of Pembroke Dock. The town and port are located on the southern side of a watercourse which represents the principal element

- of a ria – a drowned river valley flooded at the end of the last ice age which now forms one of the deepest natural harbours in the world. Pembroke Port was developed as a naval dockyard from the second decade of the 19th century and the adjacent settlement of Pembroke Dock was established from the same time in order to accommodate the growing workforce required in the dockyard.
- 10.51 The naval dockyard was one of the most prolific shipbuilding yards in Great Britain, with more than 250 vessels launched from the slipways between 1816 and 1922. This covered the period from wooden ships under sail, through to wooden steamships, ironclads and then full steel vessels, with the dockyard adapting to all of these changes in technology. The dockyard closed in 1926 but then was reused from 1931 by the Royal Air Force as a base for flying boats, eventually becoming the largest such base in the world. Flying boats from Pembroke Port played a crucial role in the Second World War, providing convoy escorts in the Atlantic and air sea rescue duties as well as hunting enemy submarines. Part of the dockyard was retained by the Admiralty during this period, and was used for vessel maintenance and refuelling, as well as convoy support and other wartime activities. The RAF finally left in 1959 since when the dockyard has acquired several new users and tenants, including the Irish vehicle ferry service operating between Pembroke Dock and Rosslare.
- 10.52 There is no evidence for prehistoric, Roman or early medieval activity within the area now occupied by Pembroke Port. Prior to the establishment of the dockyard, the land here appears to have been farmland with a small manorial complex known as Paterchurch and centred around a medieval tower that may have originally functioned as a lookout.
- 10.53 In the middle part of the 18th century an area of land at Paterchurch Point was acquired by the Ordnance Department for the construction of a substantial fort. Work on what was referred to as Pater Fort commenced in 1758 but the structure was never finished.
- 10.54 Following an issue with the commissioning by the Navy Board of ships from yards on the northern side of the waterway, a naval dockyard was established in 1812 at what was then known as Pater Yard (later Pembroke Dockyard), taking in much of the area of the earlier Pater Fort but excluding the surviving elements of the Paterchurch manorial complex.
- 10.55 The adjacent town of Pembroke Dock was established to provide accommodation and services for the growing dockyard workforce. Construction of houses started as early as 1814 with the town being laid out on a regular grid.
- 10.56 The dockyard was extended in 1844 to include the Paterchurch manorial complex, of which only the tower survives, as well as some land to the west which contained further elements of the 18th century Pater Fort. At this time the extended dockyard had a dry dock (the graving dock) along with 13 shipbuilding slips, an enclosed quay or ‘camber’, and a timber pond (the pickling pond). There were many buildings within the dockyard including a chapel (built 1834-35), several sheds for the storage of timber required for shipbuilding, general stores, sawmills, smithies, a mould loft, a suppling kiln, a fire engine house and a surgery. A larger open area in the western part of the dockyard was used as a ‘Parade Ground’ for the military personnel based at the remnant of Pater Fort (now Pater Battery). A broad avenue extended west from the chapel; buildings to the south of this were houses for officers and other senior dockyard personnel.

- 10.57 A substantial defensible barracks was built on the higher ground to the south of the dockyard in the period 1840-46, whilst two Cambridge gun platforms were constructed in the mid-19th century, outside the south-west and north-east corners of the dockyard (these are often referred to as Martello towers). The barracks and the gun towers, along with the Pater Battery, provided the defensive cover for the dockyard.
- 10.58 A connection to the mainline railway had been made in 1871 and by the beginning of the 20th century the dockyard had been fully adapted for the construction of some of the largest steel warships built at that time. New or remodelled buildings included smitheries, steam hammer shops and foundries and a substantial jetty (the Carr Jetty) was built extending from the north-western corner of the dockyard.
- 10.59 Shipbuilding for the navy ceased in 1926 and the yard remained closed until 1930. At this point the site entered a new era when a substantial part of the dockyard was taken over by the Air Ministry and used by the RAF as a base for flying boats. During the Second World War, RAF Pembroke Dock became the largest flying boat base in the world, with seaplanes providing convoy escorts and carrying out submarine hunting sorties in the Atlantic. The last squadrons operating from RAF Pembroke Dock were disbanded in 1957 and the base closed in 1959.
- 10.60 The Admiralty had retained land within the western side of the dockyard, and this was used as a base for vessel maintenance and refuelling. During the Second World War the Admiralty provided support for convoys and the base at Pembroke Dock was also the centre for anti-submarine measures along the west coast of the UK.
- 10.61 Pembroke Dock remained an official naval dockyard until 2008 and was used by the Royal Maritime Auxiliary Service (RMAS) until that time, following the sale of the freehold of this part of the site in 2007 to the Milford Haven Port Authority (MHPA). Current operational uses include the terminal of the vehicle ferry from here to Rosslare in the Republic of Ireland (Irish Ferries).
- 10.62 There have been major changes to the layout of the dockyard in recent years. Dock Gate 1 has been established to provide access to the eastern side of the port. This is immediately north of the former railway access point and is itself accessed via a new road (Western Way) which required the removal of an area of historic residential development between Front Street and King Street. The rail line into the dockyard passed out of use in 1969. Vehicular traffic using the ferry passes into the dockyard through another new entrance in the south-eastern corner, then along Meyrick Owen Way. This later road within the dockyard has severed the broad avenue (now known as The Terrace) that formerly extended west from the chapel, which is now the Pembroke Dock Heritage Centre.
- 10.63 At the waterfront within the former naval dockyard, a substantial jetty has been constructed for the ferry operations and most of the historic building slips have been infilled over a period of time. The former graving dock and timber pond are still present but are not in use. Many of the buildings constructed for RAF use have been demolished although surviving examples include two 'B' type hangars and also a T2 hangar (in a modified form). Some modern buildings have been constructed whilst older ones have been repurposed.

- 10.64 The brief history presented above, along with the more detailed history presented in Appendix 10.1: Historic Environment Desk Assessment, demonstrates how the port has evolved over time, responding to the changing requirements of users and to the wider society. Originally established as a Royal Dockyard building a variety of wooden vessels, it then moved into the construction of ironclad and fully steel ships for the navy. Much of the dockyard then passed into the hands of the Air Ministry and for a while it was a major RAF seaplane base, with some land retained by the Admiralty. Later 20th and early 21st century changes have included the establishment of the Irish sea ferry and a deep-water port facility.
- 10.65 A great number of buildings have been constructed within the port in order to facilitate these activities. Many have since been removed to make way for subsequent developments, although some have been repurposed with amendments to layouts and fabric where necessary. New roads have been built to provide access as required for the emerging uses, and with these have come the establishment of new openings within the enclosing dockyard wall.
- 10.66 Detailed descriptions of the buildings within and adjacent to the proposal site are provided within the Built Heritage Statement of Significance (Appendix 10.3 of this ES). Table 10.5 below identifies those buildings which have some level of designation in response to their significance. The locations of these designated historic assets is indicated on Figure 10.2, whilst the structure numbers should be cross-referenced against the Building Phase Plan (Figure 10.3).

Table 10.5: Designated Historic Assets

SM = Scheduled Monument

LB = Listed Building

Name Structure No.	Description	Designation
Medieval		
Paterchurch Tower Structure 1.1	Medieval tower representing surviving element of former manorial complex.	SM (PE380) LB Grade I
18th century		
Pater Fort South-West and West Walls Structure 1.2	Located at north-west corner of dockyard, predominantly mid-19th century remnant of 18th century fort.	LB Grade II
19th century		
Dockyard Walls Structure 2.1	Surrounding the historic dockyard on east, south and most of west side.	LB Grade II
Entrance Piers and Lodges and Dockyard Gates Structure 2.2	Formal entrance to dockyard, built c. 1817-18. Gates no longer present.	LB Grade II*
Former Captain Superintendent's House Structure 2.3	Located in southern part of dockyard, built 1832-34 as Captain Superintendent's House, later Port Hotel. Now in poor state of repair.	LB Grade II*
Long Stable Range to south of former Captain Superintendent's House Structure 2.4	Stable range built c. 1832-34 for the Captain Superintendent's House.	LB Grade II*
No. 1 The Terrace Structure 2.6	Located in south-east part of dockyard, built c. 1818 as house for the Fleet	LB Grade II*

	Surgeon with accommodation for the police at the western end.	
Nos. 2 and 3 The Terrace Structure 2.7	Located in south-east part of dockyard, built c. 1818 as accommodation for Master Shipwright and Clerk of the Cheque.	LB Grade II*
Coach-house to rear of Nos. 1 and 2 The Terrace Structure 2.8	Located in south-east part of dockyard, at south end of gardens.	LB Grade II
Coach-house to rear of No. 3 The Terrace Structure 2.9	Located in south-east part of dockyard, at south end of garden.	LB Grade II
Garden Walls to rear of Nos. 1-3 The Terrace Structure 2.10	Located in south-east part of dockyard, between the gardens of Nos. 1 and 2 The Terrace, Nos. 2 and 3 The Terrace and east of garden of No. 3 The Terrace.	LB Grade II
Former Dockyard Chapel Structure 2.11	Located in south-east part of dockyard, built 1830-32, now flying boat heritage centre	LB Grade II*
The Old Storehouse Structure 2.12	Located in central part of dockyard, built c. 1822 as main dockyard storehouse. Central clock tower demolished 1944.	LB Grade II*
Sunderland House Structure 2.13	Located in central part of dockyard, built c. 1822 as dockyard office and extended in 1880s.	LB Grade II
Timber Pond (pickling pond) Structure 2.14	Located in south-west corner of dockyard, built 1844 for preserving or 'pickling' elm timber for masts.	LB Grade II
Building Slip No. 1 Structure 2.15	Located in north-west part of dockyard, built c. 1845 and extended 1891.	LB Grade II
Building Slip No. 2 Structure 2.16	Located in north-west part of dockyard, built c. 1845.	LB Grade II
Graving Dock including capstans and bollards Structure 2.17	Located in north-west part of dockyard - original main dock from c. 1814, enlarged 1858-61. The caisson which formerly sealed the dock entrance is now retained within the southern end of the dock.	LB Grade II*
Western Camber Structure 2.18	Located in north-west part of dockyard, initially a building slip constructed 1st part of 19th century but altered in 19th and 20th centuries.	LB Grade II
Building Slip No. 4 Structure 2.19	Located in north-west part of dockyard, built first part of 19th century with later amendments.	LB Grade II
Former Guard House Structure 2.20	Located in central part of dockyard, built c. 1840-45.	LB Grade II*
Former Captain Superintendent's Office Structure 2.21	Located in central part of dockyard, built c. 1847-48 as office and surgery.	LB Grade II
Former Oakum Store Structure 2.22	Located in north-west part of dockyard, built 1856.	LB Grade II
Former Foremen's Office Structure 2.23	Located in north-west part of dockyard, built mid-19th century as 'Detached Guard House' and used as Foremen's Office from 1870s.	LB Grade II
South-West Gun Platform Structure 2.24	Offshore defensive tower built 1848-51.	SM (PE332) LB Grade II*

North-East Gun platform Structure 2.25	Offshore defensive tower built 1848-51.	LB Grade II*
Defensible Barracks Structure 2.26	Located to south of, and overlooking, the dockyard. Built 1841-46 as barracks for troops defending the naval dockyard.	SM (PE379) LB Grade II*
Nos. 4 and 5 The Terrace Structure 3.1	Located in south-east part of dockyard, pair of houses built c. 1877 for Constructor and Chief Engineer	LB Grade II
Carr Jetty Structure 3.3	Located at north-west corner of dockyard, built 1898 and approached by six-arch bridge from main quayside.	LB Grade II
20th century		
Western hangar and annexes Structure 4.1	Located in eastern part of dockyard, large B type hangar built 1938 for maintenance of seaplanes.	LB Grade II
Eastern hangar and annexes Structure 4.2	Located in eastern part of dockyard, large B type hangar built 1934-35 for maintenance of seaplanes.	LB Grade II
Former Bomb Store Structure 4.11	Just beyond south-west corner of dockyard, built Second World War for Air Ministry operations.	SM (PE570)
Former Bomb Store Structure 4.12	Just beyond south-west corner of dockyard, built Second World War for Air Ministry operations.	SM (PE570)

- 10.67 Not all of the designated historic assets identified above in Table 10.5 are owned by the applicant. Outside of the former dockyard, the Defensible Barracks (Structure 2.26), the two offshore gun platforms (Structures 2.24 and 2.25) and the two Bomb Stores (Structures 4.11 and 4.12) are all owned by third parties, as are the former Dockyard Chapel (Structure 2.11), the former Captain Superintendent's House and adjacent stable block (Structures 2.3 and 2.4), Nos. 2 and 3 The Terrace (Structure 2.8) and Nos. 4 and 5 The Terrace (Structure 3.1) which are all within the former dockyard.
- 10.68 More significantly, the Grade II listed Former Foremen's Office (Structure 2.23) is within the proposal site but also within a triangular area of land which is currently in third party ownership. This area includes other buildings of later date, including some very recent examples, and is predominantly used for the breaking and repair of vehicles. The Former Foremen's Office is in reasonable but deteriorating condition and its setting is degraded by the modern buildings and scrap metal related activities in the immediate vicinity.

Future Baseline Conditions

- 10.69 Changes to the baseline conditions in the future could include amendments to the list of designated assets, e.g. additional designations of scheduled monuments, listed buildings (including locally listed buildings), Registered Parks and Gardens, Conservation Areas, or amendments to the extent and description of any of these asset types.
- 10.70 Additional changes could occur as a result of archaeological investigations undertaken with regard to other developments within the study area or as part of more extensive programmes of research in the area.

- 10.71 Work has been undertaken to consider the likely effects of climate change on the historic environment (Powell *et al.*, 2012). This identified historic assets lying below the 1 metre contour as at risk from rising sea levels and more frequent storm surges. At the port this may affect historic structures such as the Carr Jetty (Structure 3.3) and adjacent quayside wall, Building Slips Nos. 1, 2 and 4 (Structures 2.15, 2.16 and 2.19), the Western Camber (Structure 2.18) and the former Graving Dock (Structure 2.17) along with its caisson which is currently located at the southern end of the dock.
- 10.72 The future baseline also includes the likely deterioration of historic assets in the event of the proposed development not proceeding (i.e. a Do Nothing scenario). Notwithstanding the general statutory obligation placed on owners of listed buildings regarding maintenance of fabric etc, the situation at the port (as described above) is that one of the listed buildings within the proposal site (the Former Foremen's Office – Structure 2.23) is in third party ownership and does not appear to have benefitted from any form of active maintenance or repair. Other structures within the proposal site have no current or perceived future use that would require or encourage active maintenance, these include the Grade II listed Timber Pond (Structure 2.14) and the Grade II* listed former Graving Dock (Structure 2.17) along with its caisson. The caisson in particular is at risk; it is currently in a location that is inundated regularly as part of the tidal regime and is showing clear signs of deterioration, but it is not currently accessible and would be very difficult to repair or maintain unless it is moved.

Mitigation Measures Adopted as Part of the Project

- 10.73 A considerable amount of mitigation has been provided within the iterative scheme design process, much of this is evidenced within the consultation documents presented in Appendix 10.4.
- 10.74 The Scoping Report submitted for consultation envisaged the demolition of the Grade II listed Former Foremen's Office (Structure 2.23) in order to establish adequate space for the proposed activities in this area. Subsequently a detailed swept-path analysis was undertaken, and the initial transportation corridor proposals were amended to ensure that the building could actually be retained in situ. As well as its retention, the proposed development would result in the Grade II listed structure being sensitively restored and returned to use, thereby providing for its future maintenance.
- 10.75 Another mitigation measure described in Appendix 10.4 is the recovery and conservation of the caisson from the Grade II* listed graving dock (Structure 2.17). The preferred option (subject to further detailed survey) is for the caisson to be refloated and then removed from the dock so that it can be further examined and conserved using appropriate techniques. It would be relocated to a position where it is permanently out of the water and close to its former position at the entrance to the graving dock, and also visible to users of the waterway and passengers on the Irish vehicle ferry. Access would be available on request to interested groups or individuals.
- 10.76 The development of appropriate potential architectural treatments for new buildings has also been undertaken. A proposed design scenario for Buildings A and B is indicated on the photomontages presented as Appendix 14.1 of this ES. The design reflects the form(s) of the large ship-building sheds (slipway covers) which formerly extended along the northern edge of the dockyard. The

- design also reflects the form of very large airship hangars such as those at Cardington (Bedfordshire) and therefore have some design links to the two large 'B' type hangars in the dockyard which were constructed for the repair and maintenance of Sunderland seaplanes (flying-boats).
- 10.77 Where mitigation measures through scheme design affect individual historic assets, these are discussed below in the assessment of impacts and effects on those assets.
- 10.78 Further general mitigation regarding direct physical impacts on built historic assets (i.e. demolition or infilling) would be in the form of a programme of historic building recording to be carried out ahead of any works to the building. The nature and extent of the recording would be appropriate to the significance of the building or structure that would be affected, and this would be agreed in advance with PCC and Cadw.
- 10.79 The extent of below-ground impacts within the proposal site is relatively limited. Strip footings may be required for new buildings (in addition to piles), but are unlikely to reveal anything other than small remnants of the foundations of previous dockyard buildings, most of which are known from historic maps and plans.
- 10.80 The one area of higher potential and greater impact is at the southern end of the proposed 'mega slipway'. Work here to move the crest of the slipway landwards (i.e. to the south) could expose the remains associated with the mid-18th century Pater Fort; the full extent of the fort remains unknown, but the only surviving part is located just to the west of this proposed area of ground reduction. A programme of archaeological work would be required in connection with the works at this location, initially as a watching brief during construction but with the potential to move to a more detailed investigation if necessary.
- 10.81 The programme of historic building recording, and of archaeological work, are not strictly 'mitigation' as they do not remove or reduce the impact of the proposed scheme. However, these programmes should be seen as 'offsetting' the impact and effect on historic assets.
- 10.82 This 'offsetting' should also be viewed in the context of the overall contribution of MHPA to the historic environment of Pembroke Port. MHPA has a very good track record of renovating and maintaining historic assets within the Port's estate. Some of the important Georgian buildings along The Terrace and elsewhere within the eastern part of the dockyard have been restored to a high standard and are now in commercial use. These include No. 1 The Terrace (Structure 2.6), The Old Storehouse (Structure 2.12) and the Former Guard House (Structure 2.20), all of which are listed at Grade II*, as well as Sunderland House (Structure 2.13) and the former Captain Superintendent's Office (Structure 2.21) which are both listed at Grade II.
- 10.83 A current programme of work involves the substantial renovation of contemporary annexes attached to the Grade II listed Western and Eastern Hangars (Structures 4.1 and 4.2); these annexes are being brought back into use and their long-term future is secured. One of the annexes had been previously modified to the extent that it could not be renovated; this has been removed and will be replaced with a new annex of similar form and scale. This work has received the relevant planning consents (Ref. 18/0660/PA and 18/0661/PA) and listed building consents (Ref. 18/0658/LB).

- 10.84 Another proposed workstream for which funding has recently been sought is the enhancement of the former carriage drive, part of which survives as The Terrace, along with the restoration of the Grade II* listed former Captain Superintendent's House and adjacent stable block (Structures 2.3 and 2.4). This latter project would be subject to collaboration with interested parties, planning consents and conservation gap funding.
- 10.85 The carriage drive formerly comprised the northern edge of a landscaped buffer between the officers' houses and the working dockyard, with planting within oval areas established to the south of the drive (see Figure 14 in Appendix 10.1 of the ES). Although the eastern end of the former carriage drive is now severed by the insertion of Meyrick Owen Way, the design and planting in the western part survives and it is here that enhancement is proposed. This would include better management of the vegetation and the establishment of additional amenity space, along with the provision of information about the historic assets in this part of the dockyard. Intervisibility between the assets would be improved as a result of thinning and raising of the trees.
- 10.86 Examination of the proposed development site has established that a section of wall to the west of the former Captain Superintendent's House (Structure 2.3) is likely to represent the enclosing element of a former paddock for the horses that were available for use of the officers at the dockyard. It is also possible the western part of this wall (Structure 2.5) represents a surviving part of an earlier dockyard wall established prior to the mid-19th century expansion of the facility. The western part of the wall would be retained within the proposed development, with the new scheme providing the opportunity to clear current vegetation allowing for further examination of the wall and also the appreciation of the wall as a historic boundary.
- 10.87 The detailed archaeological building recording to be undertaken ahead of infilling and demolition provides the opportunity to establish digital records of historic assets which could be used in a Virtual Reality (VR) or Augmented Reality (AR) experience, enhanced where appropriate by similar digital modelling of retained structures. This could then be developed into an educational tool providing information on the development and use of the historic dockyard over the last two centuries. A recent digital model of the historic dockyard prepared with the support of MHPA can be seen at:

<https://youtu.be/XQEm9TTbljE>

Assessment of Construction Effects

- 10.88 This section describes the impacts and effects that would occur during the construction phase. This includes impacts such as the infilling and/or dismantling (total or partial) of historic assets, as well as effects resulting from changes within the settings of historic assets and with defined historic areas.
- 10.89 The assessment takes account of the maximum design envelope as described in Chapter 2: Project Description. This assumes the following maximum dimensions for the new buildings:
- Building A: 170 m x 70 m and 40 m high;
 - Building B: 75 m x 65 m and 40 m high;

- Building C: 129 m x 20 m and 10 m high.
- 10.90 The potential architectural design and treatment of Buildings A and B is indicated on the photomontages presented as Appendix 14.1 Figures 9a to 9e in Chapter 14: Landscape and Visual Impact.
- 10.91 The temporal variation of effects is identified using the following defined terms where appropriate:
- Short-term: A period of months, up to one year;
 - Medium-term: A period of more than one year, up to five years; and
 - Long-term: A period greater than five years.
- 10.92 The key effects are summarised below in Table 10.6.

Buried Archaeological Remains

- 10.93 As described above, the potential for impacts on buried archaeological remains within the proposal site is relatively limited. No proposed works are likely to impact upon remains associated with the medieval manorial complex in the vicinity of Paterchurch Tower. Strip footings which may be required with regard to new buildings but are unlikely to reveal anything other than small remnants of the foundations of previous dockyard buildings.
- 10.94 Work to move the crest of the new 'mega slipway' southwards could expose the remains associated with the mid-18th century Pater Fort. If present, such remains would be considered to be of Medium value or sensitivity. The magnitude of impact has been assessed as Low (the significance of the asset would be slightly harmed) and the consequent level of effect is Minor and permanent. This is not a significant effect in terms of the EIA. The effect would be partially offset through inclusion within a programme of archaeological work that would be undertaken during construction.

The Graving Dock

- 10.95 The graving dock (Structure 2.17) was originally constructed in c. 1820 but was remodelled and extended in the period 1858-61. It is a Grade II* listed building – the listing includes the cast iron bollards (12 along each side) and the capstans (one to the northeast and one on each side at the southern end) which are all damaged to some extent. The dock has five step levels (altars) in limestone ashlar blocks with granite copings. The southern end has been extended in mass concrete, whilst the northern (seaward) end is narrower than the dock and has battered walls and a slot for the caisson which was used to seal the dock when it was in use. With the caisson no longer in place, the dock is inundated with water in accordance with the tidal flow within the estuary.
- 10.96 The caisson is currently situated in the southern end of the dock and has been at this location for the last 30-40 years, during which time the dock has not been used. Recent examination of the caisson suggests that it is likely to date to the mid-19th century refurbishment and enlargement of the graving dock.
- 10.97 Chapter 3: Need and Alternatives Considered explains the process of feasibility studies and options appraisal which has resulted in the current design for the proposed development, i.e. the infilling of

- the graving dock and the construction of Building B at this location. A recent technical report (Arcadis, 2019a) has been prepared which provides further options appraisal for the infilling, whilst a second report (Arcadis, 2019b) describes the options for the removal and relocation of the caisson.
- 10.98 The preferred option for the infilling of the graving dock would see the careful removal of the caisson from its current location followed by the removal of silt and other debris from within the dock. The dock structure would then be subject to detailed recording including a digital scan. A mass concrete wall would be constructed near to the dock entrance, set back slightly so that the architectural details of the mid-19th century dock entrance (including the slots for the caisson) would remain visible.
- 10.99 The mass wall would be constructed directly on the existing invert at the base of the dock without any damage to the existing structure. Once the mass wall is in place, the dock can be drained of any residual water and the infilling can be carried out in the dry.
- 10.100 The capstans and the majority of the bollards would be removed, with the bollards possibly being utilised on either side of the proposed 'mega slipway' (see below). It may be possible to retain the bollards closest to the dock entrance in situ.
- 10.101 The granite coping around the edge of the dock is generally slightly lower in height than the adjacent ground. This means that the coping can be left in situ and carefully covered as part of the infilling. The exception to this is at the southern end of the dock where the extension in mass concrete is slightly higher and this would need to be reduced.
- 10.102 The infilling would commence with a layer of sand placed on the existing limestone ashlar base. This would then be covered by layers of a suitable granular fill, compacted during placement to ensure settlement is minimised and that the material has a suitable load-bearing capacity. Any drains that are considered to be live would need to be blocked up or run through the compacted fill to a new outfall set within the mass wall at the entrance. It is possible that the fill would become saturated with groundwater, therefore an appropriate drainage solution would need to be established.
- 10.103 Building B will be designed and constructed such that no deep piles would be required within the graving dock. The footings for this building, and the design of the floor slab, would need to take account of the presence of the infilled dock as well as the potential for the ground on either side of the dock to be poorly compacted and variable.
- 10.104 The caisson inspection report (Arcadis, 2019b) identified several options for the removal of the caisson and these were subsequently assessed by the design team. The results of the assessment were presented to Cadw and PPC on 5th September 2019. The preferred option is for the caisson to be floated out of its current position and then moved to a nearby slipway (probably Building Slip No. 1 or Building Slip No. 2), where it can be placed into a cradle and transported to a location within Pembroke Port for conservation and restoration before being moved to an agreed destination.
- 10.105 The design team has also examined several options for the final destination of the restored caisson. The preferred option, based on land ownership, maintenance, visibility and clear association with

the graving dock, is to place the caisson just to the east of the entrance to the graving dock, on the land between the retained dock entrance and the Grade II listed Western Camber (Structure 2.18). Although this area is not publicly accessible (access would be by permission), the caisson would be very visible to persons participating in the heritage-based marine tours of the waterway which the applicant operates, where it would be seen adjacent to the retained dock entrance.

- 10.106 In summary, the graving dock would be covered over but would remain intact, with the exception of the very upper parts of the mass concrete extension at the southern end of the dock. Retained visible elements would comprise the dock entrance including the caisson slots (with mass wall behind), the caisson relocated to a position adjacent to the dock entrance, and possibly the seaward bollards closest to the dock entrance. A new building straddling the buried dock would be up to 40 m high.
- 10.107 The graving dock is a historic asset of High sensitivity or value. The complete loss of an asset would represent a High magnitude of impact (i.e. its significance would be lost or substantially harmed). However, the reversibility of the impact, along with the retained visibility of the dock entrance and the relocation and restoration of the caisson, means that the magnitude of impact is Medium (the significance of the asset would be clearly harmed) and the assessed level of effect is Major and long-term. This is a significant effect in terms of the EIA. The effect would be partially offset through inclusion within a programme of historic building recording that would be undertaken ahead of works.

The Timber Pond

- 10.108 The timber pond (Structure 2.14) was constructed in 1844 on land then outside the dockyard, incorporating an existing inlet. The dockyard was subsequently extended such that the dock wall ran along the western side of the timber pond and the pond was thereby incorporated into the dockyard. It was used to soak or 'pickle' timbers to prevent drying and splitting, particularly the masts that were used on the ships built at the dockyard.
- 10.109 It is square in plan and has limestone retaining walls with granite copings on the south, west and north sides, with a sloping paved revetment on the east side. In some places there are iron rings set into the top surface of the granite copings. There is a culvert with tidal flap and sluice gate on the west side to allow water to drain into and out of the timber pond, also a culvert outlet on the north wall which links through to the former graving dock (Structure 2.17). The base of the timber pond is made of puddled clay.
- 10.110 Chapter 3: Need and Alternatives explains the process of feasibility studies and options appraisal which has resulted in the current design for the proposed development, i.e. the infilling of the timber pond and the construction of Building A at this location. A recent technical report (Arcadis, 2019a) has been prepared which provides further options appraisal for the infilling.
- 10.111 The selected option for the infilling of the timber pond graving dock would seek to retain the upper part of the western wall as a visible point of reference, possibly through the provision of a walkway just inside the western wall and slightly lower than the top of the wall. Elsewhere the coping stones would be covered over as part of the infilling, thereby allowing for their preservation. The pond would need to be dredged of any sediment which is currently present, with existing drainage blocked

- up or rerouted as appropriate. A protective layer of sand would then be placed over the puddling clay and over the pitched limestone blocks on the eastern side of the pond, followed by the placement of granular fill. This would be subject to a detailed method statement once the characteristics of the fill material are identified.
- 10.112 The existing outfall in the western wall of the pond would be reconfigured such that it provides drainage from the pond into the estuary but does not allow water movement in the opposite direction.
- 10.113 The foundations for the proposed Building A would need to be designed such that no piles would impact directly on the walls of the timber pond. Piles are proposed to be inserted through the pitched limestone on the eastern side of the pond, and through the puddled clay base, but the methodology for construction of these piles would need to demonstrate how the impact on the historic assets had been considered. There are some areas of modern repair within this pitched section, and these would be identified in the programme of recording undertaken ahead of the burial of the structure, so may be the most suitable location for the placement of piles.
- 10.114 In summary, the timber pond would be wholly covered over but would remain substantially intact, although some piles may penetrate the structure at selected locations. Retained visible elements would comprise the upper part of the western wall. A new building straddling the covered pond and surrounding land would be up to 40 m high.
- 10.115 As a Grade II listed structure, the timber pond would usually be ascribed a Medium sensitivity or value. However, its value is enhanced by the contribution that it makes to the combined group value of the surviving elements of the 19th century dockyard and a High sensitivity or value is more appropriate. The complete loss of an asset would represent a High magnitude of impact (i.e. its significance would be lost or substantially harmed). However, the reversibility of the impact, along with the retained visibility of the upper part of the western wall, means that the magnitude of impact is Medium (the significance of the asset would be clearly harmed) and the assessed level of effect is Major and long-term. This is a significant effect in terms of the EIA. The effect would be partially offset through inclusion within a programme of historic building recording that would be undertaken ahead of works.

Building Slips Nos. 1 and 2

- 10.116 Building Slip No. 1 (Structure 2.15) and Building Slip No. 2 (Structure 2.16) are located just to the west of the graving dock. Originally there were eleven building slips at the dockyard, all to the east of the graving dock and numbered 1-11 from west to east. When the dockyard was extended in 1844-45 these two new slips were added to the west of the graving dock - they were numbered 1 and 2, with the earlier ones now renumbered as 3-13.
- 10.117 Both of the building slips are listed at Grade II. At the time of listing all 13 buildings slips were present (and listed), but the subsequent construction of the Irish Ferry Terminal and the deepwater quay at Gate 1 removed Nos. 5-13 completely, leaving just Nos. 3 (the Western Camber - Structure 2.18) and No. 4 (Structure 2.19) of the original ones along with Nos. 1 and 2 from the mid-19th century expansion of the dockyard.

- 10.118 Building Slips Nos. 1 and 2 have been extended on at least one occasion. Both have limestone ashlar stepped sides with granite coping and stairs, and a concrete base. At the landward end the later extensions have battered walls in mass concrete. The iron and timber slipway covers (the shipbuilding sheds) have not survived.
- 10.119 The proposed works to create the 'mega slipway' would require the removal of the ground between the two existing slipways, along with the eastern flank wall of Building Slip No.1 and the western flank wall of Building Slip No. 2. The gradient would be amended by extending the crest landward by approximately 36 m. The retained flank walls would have to be underpinned or retained in such a way that the historic fabric is not impacted and remain visible and clearly different to the new materials. Disturbance to the fabric of the quay wall west of Building Slip No. 1 and east of Building Slip No. 2 would need to be kept to a minimum.
- 10.120 Some of the bollards currently located adjacent to the graving dock would be relocated to each side of the 'mega slipway'. Where appropriate and necessary, materials from the removed parts of Building Slips Nos. 1 and 2 may be used for repairs to the retained elements of these slipways, or elsewhere within the dockyard, or retained on site for future repair and restoration works.
- 10.121 However, there would also considerable change within the setting of the building slips, which would have an adverse effect on their significance. This change includes the loss of the visible nature of the graving dock and timber pond (both would be carefully infilled and have new buildings constructed over them), along with the loss (through removal) of a number of buildings associated with the mid-19th century expansion of the dockyard and the transition to the construction of steam-powered iron-clad vessels. These buildings include the Former Shed for Docking Gear (Structure 3.4), the Former Battery Room & c (Structure 3.10), the Former Iron Store (Building 3.6), the Former Pattern and Gunnery Fitting Shop (Structure 3.7) and the Former Testing House (Structure 3.8). However, one benefit of the proposed scheme is that it would allow an enhanced visual appreciation of the restored Former Foremen's Office (Structure 2.23). The careful preservation of the slipway flank walls and their incorporation into the revised structure, and the retention and reuse of the bollards from the graving dock, are also benefits which need to be considered within the overall assessment of impacts and effects.
- 10.122 As a Grade II listed structure, Building Slips Nos. 1 and 2 would usually be ascribed a Medium sensitivity or value. However, their value is enhanced by the contribution that they make to the combined group value of the surviving elements of the 19th century dockyard and a High sensitivity or value is more appropriate. The assessed magnitude of impact on these assets is Medium (their significance would be clearly harmed) and the assessed level of effect is Moderate and permanent. These are significant effects in terms of the EIA. The effects would be partially offset through inclusion within a programme of historic building recording that would be undertaken ahead of works.

Enclosing Wall to West of the Former Captain Superintendent's House

- 10.123 This surviving L-plan section of boundary wall (Structure 2.5) formerly enclosed a paddock associated with the stables (Structure 2.4) located just to the south of the Former Captain Superintendent's House (Structure 2.3), adjacent to the main dockyard entrance. The east-west aligned section of wall is physically separated from the Grade II* listed Former Captain

Superintendent's House, but the north-south aligned section is attached to the Grade II listed Dockyard Walls (Structure 2.1) therefore the enclosing wall is regarded as curtilage-listed.

- 10.124 It is possible that the north-south aligned section of wall represents a surviving element of early 19th century dockyard wall. Plans of the early dockyard show that the main southern dockyard wall was in this location prior to the extension of the dockyard in the mid-19th century (see Figures in Appendix 10.1 of the ES for sequence of dockyard evolution). The east-west aligned section of wall was added sometime between 1830 and 1850 in order to create an enclosed paddock for the exercise of the horse stabled at the dockyard. There is a gateway at the western end of the east-west aligned section of wall.
- 10.125 Currently the land enclosed by the wall is overgrown with scrub vegetation and there is no access into this area, hence nothing is known about the fabric of the interior wall faces. The exterior faces of the wall are almost completely covered in vegetation and very little of the fabric of these exterior faces is visible in views towards the wall from the north and the west.
- 10.126 The east-west aligned section of wall would be removed in order to facilitate the construction of Building C and associated external storage area C1. The north-south aligned section of wall would be retained within the development site. The vegetation which currently covers much of the wall would be cleared, allowing for detailed examination and recording ahead of any works here. This would enable a better understanding of the date(s) and history of the enclosing wall, whilst allowing appreciation of the retained section of wall to a much greater extent than at present. This retained section would be conserved and maintained in accordance with its potential significance.
- 10.127 However, changes within the setting of this retained section of wall would detract from its significance. Principally these changes would include the construction of Building C (up to 10 m high), which would not only be visually dominant and quite close to the wall but would also sever the current intervisibility between the wall and the Former Captain Superintendent's House and the associated stable block, both of which are listed at Grade II*.
- 10.128 As a Grade II curtilage-listed structure, the enclosing wall would usually be ascribed a Medium sensitivity or value. However, its value is enhanced by the contribution that it makes to the combined group value of the surviving elements of the 19th century dockyard and a High sensitivity or value is more appropriate. The assessed magnitude of impact on this asset as a result of its partial demolition and the changes within the setting of the retained section is Medium (its significance would be clearly harmed) and the assessed level of effect is Moderate and long-term. This is a significant effect in terms of the EIA. The effect would be partially offset through inclusion within a programme of historic building recording that would be undertaken ahead of works.

Former Shed for Docking Gear

- 10.129 This building (Structure 3.4) is located just to the south-west of the graving dock. It was built around 1868-77 for the storage of equipment used for dry-docking vessels in the adjacent graving dock. Only the south, east and north walls of this stone-built structure have survived; the roof and much of the west wall are no longer present. The building is not a designated historic asset but forms part of a group of surviving structures in the north-west part of the dockyard that are associated with the

mid-19th century expansion of the yard and the transition to the construction of steam-powered iron-clad vessels.

- 10.130 The building would be wholly dismantled as part of the proposed development. As a non-designated historic asset, the Former Shed for Docking Gear would usually be ascribed a Low sensitivity or value. However, its value is enhanced by the contribution that it makes to the combined group value of the surviving elements of the 19th century dockyard and a Medium sensitivity or value is more appropriate. The magnitude of impact on the asset would be High and the assessed level of effect is Moderate. This is a significant effect in terms of the EIA. The effect would be partially offset through inclusion within a programme of historic building recording that would be undertaken ahead of dismantling.

Former Iron Store

- 10.131 This building (Structure 3.6) is located just to the south-east of Building Slip No. 1. It was built before 1877 for the storage of iron plates used for shipbuilding. It is stone-built with wrought-iron trusses, purlins and rafters. The building is not a designated historic asset but forms part of a group of surviving structures in the north-west part of the dockyard that are associated with the mid-19th century expansion of the yard and the transition to the construction of steam-powered iron-clad vessels.
- 10.132 The building would be wholly dismantled as part of the proposed development. As a non-designated historic asset, the Former Iron Store would usually be ascribed a Low sensitivity or value. However, its value is enhanced by the contribution that it makes to the combined group value of the surviving elements of the 19th century dockyard and a Medium sensitivity or value is more appropriate. The magnitude of impact on the asset would be High and the assessed level of effect is Moderate. This is a significant effect in terms of the EIA. The effect would be partially offset through inclusion within a programme of historic building recording that would be undertaken ahead of dismantling.

Former Pattern & Gunnery Fitting Shop

- 10.133 This building (Structure 3.7) is located to the south of Building Slip No. 2. It was built before 1877 and was associated with the construction and repair of iron-clad warships in the nearby graving dock and building slips. The building comprises two parallel ranges in stone with raised louvred ridges. The building is not a designated historic asset but forms part of a group of surviving structures in the north-west part of the dockyard that are associated with the mid-19th century expansion of the yard and the transition to the construction of steam-powered iron-clad vessels.
- 10.134 The building would be wholly dismantled as part of the proposed development. As a non-designated historic asset, the Former Pattern & Gunnery Fitting Shop would usually be ascribed a Low sensitivity or value. However, its value is enhanced by the contribution that it makes to the combined group value of the surviving elements of the 19th century dockyard and a Medium sensitivity or value is more appropriate. The magnitude of impact on the asset would be High and the assessed level of effect is Moderate. This is a significant effect in terms of the EIA. The effect would be partially offset through inclusion within a programme of historic building recording that would be undertaken ahead of dismantling.

Former Testing House

- 10.135 This stone building (Structure 3.8) is located to the south of Building Slip No. 2. It was built before 1877 and was associated with the construction and repair of iron-clad warships in the nearby graving dock and building slips. The building is not a designated historic asset but forms part of a group of surviving structures in the north-west part of the dockyard that are associated with the mid-19th century expansion of the yard and the transition to the construction of steam-powered iron-clad vessels.
- 10.136 The building would be wholly dismantled as part of the proposed development. As a non-designated historic asset, the Former Testing House would usually be ascribed a Low sensitivity or value. However, its value is enhanced by the contribution that it makes to the combined group value of the surviving elements of the 19th century dockyard and a Medium sensitivity or value is more appropriate. The magnitude of impact on the asset would be High and the assessed level of effect is Moderate. This is a significant effect in terms of the EIA. The effect would be partially offset through inclusion within a programme of historic building recording that would be undertaken ahead of demolition.

Former Battery Room &c

- 10.137 This building (Structure 3.10) is located to the south-west of the graving dock. It was built before 1909 (and after 1877) and was associated with the servicing and charging of lead-acid batteries of warships in the in the nearby graving dock. The building is in stone but externally cement-rendered. The building is not a designated historic asset but forms part of a group of surviving structures in the north-west part of the dockyard that are associated with the mid-19th century expansion of the yard and the transition to the construction of steam-powered iron-clad vessels.
- 10.138 The building would be wholly dismantled as part of the proposed development. As a non-designated historic asset, the Former Battery Room &c would usually be ascribed a Low sensitivity or value. However, its value is enhanced by the contribution that it makes to the combined group value of the surviving elements of the 19th century dockyard and a Medium sensitivity or value is more appropriate. The magnitude of impact on the asset would be High and the assessed level of effect is Moderate. This is a significant effect in terms of the EIA. The effect would be partially offset through inclusion within a programme of historic building recording that would be undertaken ahead of dismantling.

Non-designated former Air Ministry buildings within the development site to be dismantled

- 10.139 The former Air Ministry Ready Use Pyrotechnics Store (Structure 4.7) was erected by the Air Ministry in around 1940-41 as a small magazine for the storage of distress flares carried on the flying boats that operated from the base established at the dockyard. It is built in brick or concrete and has steel blast doors on the west side and a tall lightning conductor on the roof.
- 10.140 To the south-west of this building (and just to the north of the timber pond) is a brick structure that probably represents the remaining element of the former Air Ministry 25 yard Rifle Range, constructed around 1936 (Structure 4.8). It now comprises a flat-roofed garage with separate small office at to the southern end, both of which are attached to a substantial buttressed brick wall on their western side.

- 10.141 South of the timber pond is the former Air Ministry Loco Shed (Structure 4.9), constructed c. 1940-41 as a maintenance and storage facility for the shunting locomotives used on the internal dockyard railway network during the period of Air Ministry occupation. This is in rendered brick with roof supported by steel trusses, and still has some rail tracks within the floor.
- 10.142 The three buildings described above comprise a small group of surviving Air Ministry buildings within the western part of the dockyard. Together with the contemporary Admiralty buildings in this area, they represent the remaining elements of the infrastructure that was established at the dockyard during the Second World War, when the flying boat base and the naval support section played a crucial role with regard to convoy escorting and submarine hunting.
- 10.143 These three buildings would be wholly dismantled as part of the proposed development, as would a number of contemporary Admiralty buildings in this area. The only retained Air Ministry building in the western part of the dockyard would be the former Catalina T2 Type hangar (Structure 4.6) which has been substantially altered. Retained Air Ministry buildings in the eastern part of the dockyard include the pair of Grade II listed Sunderland hangars (Structures 4.1 and 4.2) and associated Repair Workshop (Structure 4.3), along with a small pier (Structure 4.4) and a disused former substation (Structure 4.5). Just beyond the south-west corner of the dockyard are the fairly well-preserved remains of two bomb stores which are also of Second World War date and which are now Scheduled Monuments (Structures 4.11 and 4.12). These would also be retained.
- 10.144 As non-designated historic assets, the former Air Ministry buildings would usually be ascribed a Low sensitivity or value. However, their individual value is enhanced by the contribution that they make to the combined group value of the surviving elements of the Air Ministry occupation of the dockyard (and the role of the dockyard during Second World War) and a Medium sensitivity or value is more appropriate. The magnitude of impact on these historic assets would be High and the assessed level of effect in each case is Moderate. This is a significant effect in terms of the EIA. The effects would be partially offset through inclusion within a programme of historic building recording that would be undertaken ahead of dismantling.

Non-designated former Admiralty buildings (1926-1945) within the development site to be dismantled

- 10.145 Located to the north-east of the timber pond is a small former Sentry Pillbox (Structure 4.10). This is brick-built with a flat roof in reinforced concrete and gun embrasures to the north, west and south. It is of wartime date and is placed at the boundary between the retained Admiralty land and the rest of the dockyard which had been leased to the Air Ministry.
- 10.146 Just to the south of the timber pond is the former Admiralty Trailer and Tangye Pumps store (Structure 4.14) which was built c. 1940-41 for the storage of mobile fire-fighting pumps. This is in rendered brick or blockwork and the roof has been re-clad with modern profiled steel sheets.
- 10.147 To the south of Building Slip No. 2 is a former Admiralty substation building, later used as a storage facility (Structure 4.17). It was constructed around 1940 for the supply of electrical power to the retained Admiralty dockyard and comprises a rendered brick or blockwork structure with six windows infilled with glass bricks.

- 10.148 Located immediately to the south-west of Building Slip No. 2 is a former Admiralty Air Compressor House (Structure 4.18). This was built post-1926 and is in brickwork that has been painted white. It was originally a small shipwrighting store, later adapted to be a compressor house.
- 10.149 To the south is a larger building which is the former Admiralty Net Shed (Structure 4.19) which was built c. 1940-41 for the manufacture and/or storage of anti-submarine, anti-torpedo and anti-torpedo-boat boom nets. It was later used by the Admiralty as a workshop. The building is a large steel-framed shed that has been reclad in modern materials.
- 10.150 Adjacent to the south-west corner of the former Admiralty Net Shed is a smaller building (Structure 4.20) which was probably originally an office associated with the net shed and other Admiralty activities in the area, later used by the Admiralty Warship Support Agency (WSA). This is in rendered brick or block and has a pent-roofed lean-to on the north side; it is possibly of immediate post-war date.
- 10.151 To the south of the former Admiralty Net Shed is a former Admiralty Store (Structure 4.21) comprising a large rendered shed with windows that have either been infilled or are now louvred. No further information is known regarding the original use of this building however it is visible on aerial images of the dockyard during the Second World War.
- 10.152 Immediately to the west is another former Admiralty Store (Structure 4.22) which is a rendered shed with steel double doors on the south and north sides. As with Structure 4.21, no further information is known regarding the original use of this building however it is visible on aerial images of the dockyard during the Second World War.
- 10.153 Further to the south is a former Admiralty Stores and Workshops building (Structure 4.23) in red brick with an open-fronted lean-to on the western side. As with Structures 4.21 and 4.22, no further information is known regarding the original use of this building however it is visible on aerial images of the dockyard during the Second World War.
- 10.154 Located immediately north of the timber pond is the former Admiralty Boom Shed (Structure 4.24). This is a large steel-framed shed with a distinctive sawtooth profiled north-lit roof. It was constructed c. 1940-41 for the storage, repair and possibly manufacture of components for the anti-submarine, anti-torpedo and anti-torpedo-boat booms that protected the UK's estuaries and harbours from the Solway to Portland. Subsequently the building was used by the Admiralty as a Rigging Shed and then as a sand-blasting and spray-painting shop.
- 10.155 To the south-west of the graving dock is the former Admiralty Canteen (Structure 4.25) which was built c. 1940-41 as a 'Workmen's Mess'. It is L-shaped in plan and timber-framed and is clad in modern profiled sheet steel; it is currently used for the storage of books.
- 10.156 The 14 buildings described above would be wholly dismantled as part of the proposed development, as would a number of contemporary Air Ministry buildings in this area. The only retained Admiralty buildings of this period within the entire dockyard would be the former police hut in the south-western corner (Structure 4.13) along with the former Signal Tower (Structure 4.15) on the Carr Jetty and the former Trailer House and Latrine building (Structure 4.16) adjacent to the Grade II listed Pater Fort walls.

10.157 As non-designated historic assets, the former Admiralty buildings would usually be ascribed a Low sensitivity or value. However, their individual value is enhanced by the contribution that they make to the combined group value of the surviving elements of the Admiralty use of the dockyard (and the role of the dockyard during Second World War) and a Medium sensitivity or value is more appropriate. The magnitude of impact on these historic assets would be High and the assessed level of effect in each case is Moderate. This is a significant effect in terms of the EIA. The effects would be partially offset through inclusion within a programme of historic building recording that would be undertaken ahead of dismantling.

Non-designated former Admiralty buildings (post-war) within the development site to be dismantled

10.158 A total of four former Admiralty buildings of post-war date would be wholly dismantled as part of the proposed development. These comprise: a winch house (Structure 5.14) just to the south of Building Slip No. 2; an office building (Structure 5.15) to the west of the former Pattern and Gunnery Fitting Shop; a former Blast/Spray Shop Annexe (Structure 5.16) attached to the west side of the former Admiralty Boom Shed; and a former Compressor House (Structure 5.17) immediately to the east of the former Admiralty Boom Shed and to the north of the timber pond. The winch house contains an electric slipway winch of Second World War date.

10.159 These four buildings have some significance as they represent physical evidence of the continued use of the western end of the dockyard by the Admiralty in the post-war period. However, there is limited coherence to the group and their individual and collective value remains Low. The magnitude of impact on each of these historic assets is High and the assessed level of effect in each case is Minor. This is not a significant effect in terms of the EIA. The effects would be partially offset through inclusion within a programme of historic building recording that would be undertaken ahead of dismantling.

Non-designated civilian buildings (post-war) within the development site to be dismantled

10.160 A total of five civilian buildings or structures of post-war date would be wholly dismantled as part of the proposed development. Two of these are associated with the Hayes Shipyard which operated here following a reduction of Admiralty use of this part of the dockyard. A canteen building (Structure 5.42) was constructed in the mid-1950s adjacent to the former Admiralty canteen (Structure 4.25). This latter building is two storeys in rendered brick and was presumably erected to augment or replace the earlier canteen. The second Hayes building (Structure 5.43) is again of mid-1950s date and was a Stores comprising a roof supported on metal trusses which spanned the gap between the south wall of the Former Pattern & Gunnery Fitting Shop (Structure 3.7) and the north wall of the Former Testing House.

10.161 The individual and collective value of these Hayes buildings is Negligible. The magnitude of impact on each of these historic assets is High and the level of effect in each case is Minor. This is not a significant effect in terms of the EIA. The effects would be partially offset through inclusion within a programme of historic building recording that would be undertaken ahead of dismantling.

- 10.162 The remaining three civilian buildings or structures of post-war date to be dismantled comprise: a scrapyards workshop built around 2006-2009 (Structure 5.44); the recently installed Bombora Wave Energy Test Tank (Structure 5.45); and a Waste Oil Point in the south-west corner of the dockyard.
- 10.163 The individual and collective value of these three structures is Negligible. The magnitude of impact on each of these assets is High and the level of effect in each case is Minor. This is not a significant effect in terms of the EIA. No historic building recording would be required for these three structures.

Former Foremen's Office

- 10.164 The Former Foremen's Office (Structure 2.23) was constructed in the mid-19th century as a Guard House, but was used as a Foremen's Office from the 1870s. It dates to the period at which the dockyard was extended westwards with new building slips (Nos. 1 and 2) and a refurbished and enlarged graving dock, as well as new buildings associated with the transition to the construction of steam-powered iron-clad vessels. As a Guard House this building would have been part of the security arrangements for this newly established part of the dockyard. It is a Grade II listed building and is just one storey with a hipped roof.
- 10.165 The building is within an area known as 'the triangle' which is not currently owned by MHPA. The buildings here are a mixture of more historic structures (such as the Former Foremen's Office and more modern ones including very recent additions and insertions. The predominant use of the land and buildings in this area is the scrapping of vehicles and there is a considerable amount of scrap metal here which obscures any views of the listed building, which appears to be deteriorating.
- 10.166 The proposed development has been designed to allow the retention of the Former Foremen's Office. All other buildings in this area would be dismantled, leaving the listed building as the only structure within a large area of hardstanding to the south of the new Building B.
- 10.167 The Former Foremen's Office would be restored, with historic material retained and repaired where necessary. The unsympathetic extension (later 20th century) would be removed, along with other later material. The building would be brought back into use, potentially some form of administrative role, allowing for appropriate future maintenance.
- 10.168 The setting of the Former Foremen's Office would be greatly altered by the dismantling of the surrounding buildings, the infilling of the graving dock, the establishment of the 'mega slipway' and the construction of Buildings A and B. Some of this change, particularly the removal of some of the surrounding modern buildings and the associated scrap metal, would be beneficial, as would the establishment of a much more open aspect which reflects the nature of this part of the dockyard at the time when the building was initially constructed (see Figure 14 in Appendix 10.1: Historic Environment Desk Based Assessment). This open aspect would also allow for an increased ability to experience and understand the Former Foremen's Office; it is currently very difficult to see the building or understand its relationship with any other structure or the dockyard in general.
- 10.169 The works to Building Slips Nos. 1 and 2 and the infilling of the graving dock would represent a negative change within the setting of the Former Foremen's Office, as would the dismantling of the Former Shed for Docking Gear (Structure 3.4), the Former Battery Room & c (Structure 3.10), the Former Iron Store (Building 3.6), the Former Pattern and Gunnery Fitting Shop (Structure 3.7) and

the Former Testing House (Structure 3.8), all of which are associated with the later 19th century extension of the dockyard and the transition to the construction of steam-powered iron-clad vessels.

10.170 The Former Foremen's Office, although repaired and restored to use, would be left as an isolated historic building within a substantial area of hardstanding and large structures including the new Buildings A and B. As a Grade II listed structure, the Former Foremen's Office would usually be ascribed a Medium sensitivity or value. However, its value is enhanced by the contribution that it makes to the combined group value of the surviving elements of the 19th century dockyard and a High sensitivity or value is more appropriate. On balance, the assessed magnitude of impact on this asset is Negligible (its significance would be barely affected) and the consequent level of effect is Minor and long-term. This is not a significant effect in terms of the EIA.

The Dockyard Walls

10.171 The walls that enclose the former naval dockyard are listed at Grade II (Structure 2.1). The western wall and the western end of the southern wall date to the mid-19 century and are related to the extension of the dockyard at that time. Parts of the southern and eastern dockyard wall may be of earlier date(s) (back to c. 1830).

10.172 No part of the dockyard wall would be physically impacted by the proposed development. However there would be both adverse and beneficial change within its setting. Changes include the infilling of the timber pond (which is directly adjacent to the dockyard wall) and the graving dock, the establishment of a 'mega slipway' at the location of two historic building slips, the dismantling of a number of non-designated historic buildings, and the construction of two new large buildings (one of which would be directly adjacent to the dockyard wall) and a new smaller building (Building C) which would be up to 10 m high and close to the dockyard wall.

10.173 It is acknowledged that some changes within the setting of the dockyard wall would have an adverse effect on its significance, principally through the change in the ability to appreciate the scale of the wall as a result of the construction of the new buildings, which would be considerably higher than the wall itself. Building C (at maximum 10 m high) would be the same height as the Grade I listed Paterchurch Tower (Structure 1.1), thus giving some idea of how visible this new building would be in views from Fort Road or the more elevated land just to the south of the dockyard. The proposed Building A, at maximum 40 m high, would dominate the dockyard wall in views from the south and west.

10.174 There would also be some beneficial changes within the setting of the dockyard walls, including the dismantling of the derelict garages just to the north of the southern part of the wall (Structure 5.36) and some other modern buildings that detract from the historical significance of the dockyard, and the establishment of the ecology corridor directly adjacent to the same part of the wall.

10.175 As a Grade II listed structure, the Dockyard Walls would usually be ascribed a Medium sensitivity or value. However, their value is enhanced by the contribution that they makes to the combined group value of the surviving elements of the historic dockyard and a High sensitivity or value is more appropriate. The assessed magnitude of impact on this asset is Medium (its significance would be clearly harmed) and the assessed level of effect is Moderate and long-term. This is a significant effect in terms of the EIA.

Paterchurch Tower

- 10.176 The tower (Structure 1.1) is one of only two pre-dockyard buildings that are present within the walled enclosure. The tower represents the surviving part of a medieval manorial complex, all other parts of which have been removed. The tower is a Grade I listed building and is also a Scheduled Monument.
- 10.177 The proposed development would not have any direct physical impact on any part of the fabric of the tower. However, there would be changes within its setting which would detract from its significance. These changes principally comprise the construction of Building A (to the west) and Building C (to the east).
- 10.178 At a maximum height of 40 m, Building A would be almost four times taller than Paterchurch Tower at a distance of approximately 100 m away. One possible function of the tower may have been to provide a lookout for observing vessels within the Milford Haven waterway. Building A would obstruct views of much of the waterway and would therefore affect appreciation of this possible function, whilst Building B would also impact on views north to the waterway. Building C at a maximum of 10 m high would be c. 130 m from the tower and around the same height, but with a greater massing and scale due to its much larger footprint.
- 10.179 Some of the changes within the setting of Paterchurch Tower would be beneficial regarding its significance. These include the dismantling of the derelict garages to the east (Structure 5.36) and other modern structures in the vicinity (e.g., Structure 5.45). The establishment of the ecology corridor around three sides of the tower would also represent a beneficial change within its setting.
- 10.180 The tower is a historic asset of High value. On balance, the assessed magnitude of impact on this asset is Low (its significance would be slightly harmed) and the assessed level of effect is Minor and long-term. This is not a significant effect in terms of the EIA.

Pater Fort South West and West Walls

- 10.181 This Grade II listed building (Structure 1.2) represents the surviving remnants of the mid-18th century Pater Fort, constructed as part of a series of planned defensive works and possibly never finished. The eastern part of the former fort is within the historic dockyard and some (possibly most of) the completed parts of the fort may well have been reused in the construction of the dockyard. The western part of Pater Fort was remodelled several times in the 19th century and the surviving walls may date wholly to these remodelling events, but there is still the possibility that some parts of the listed structure are of mid-18th century date. In the 19th century the former fort walls were part of a gun battery established as part of the dockyard defences.
- 10.182 The proposed development would not have any direct physical impact on any part of the fabric of the walls of the former fort; those parts which are currently in disrepair (as a result of being exposed to the elements) would be restored and made good. However, there would be changes within the setting of the walls of the former fort that would detract from their significance. These changes principally comprise the establishment of the 'mega slipway', the dismantling of a number of historic buildings to the east of the walls, and the infilling of the graving dock and the subsequent construction of Building B.

- 10.183 Building Slips Nos 1 and 2 (Structures 2.15 and 2.16) and the graving dock (Structure 2.17) are associated with the 19th century gun battery established at the western end of the mid-18th century Pater Fort, as they are all part of the mid-19th century expansion of the dockyard and the transition to the construction of steam-powered iron-clad vessels. The same is true for some of the buildings to the east of the fort walls which would be dismantled, including the Former Shed for Docking Gear (Structure 3.4), the Former Battery Room & c (Structure 3.10), the Former Iron Store (Building 3.6), the Former Pattern and Gunnery Fitting Shop (Structure 3.7) and the Former Testing House (Structure 3.8).
- 10.184 Other changes within the setting of the Pater Fort walls would also be beneficial to its significance, in particular the exposure and renovation of the Former Foremen's Office (Structure 2.23) that through its initial function as a Guard House has a link to the use of the fort walls for a dockyard defensive purpose. The important connection between the former fort walls and the Former Pater Fort Soldiers' Barracks (Structure 3.5) would not be significantly impacted by the proposed development, nor would the relationship between the former fort walls and the south-west Martello tower (Structure 2.24).
- 10.185 As a Grade II listed structure, the Pater Fort South West and West Walls would usually be ascribed a Medium sensitivity or value. However, its value is enhanced by the contribution that it makes to the combined group value of the surviving elements of the 19th century dockyard along with the potential presence of fabric of a mid-18th century fort) and a High sensitivity or value is more appropriate. The assessed magnitude of impact on this asset is Low (its significance would be improved in terms of repairs to the fabric but harmed in terms of changes within setting) and the assessed level of effect is Minor and long-term. This is not a significant effect in terms of the EIA.

Carr Jetty

- 10.186 This Grade II listed jetty (Structure 3.3) was constructed at the end of the 19th century for use in the fitting out of warships built at the dockyard. Prior to its construction, vessels were fitted out at Hobbs Point or were towed under jury rig to other Royal naval dockyards such as Plymouth.
- 10.187 The proposed development would not have any direct physical impact on any part of the fabric of the Carr Jetty. However, there would be changes within its setting which would detract from its significance. These changes principally comprise the establishment of the 'mega slipway', the dismantling of a number of historic buildings to the east of the walls, and the infilling of the graving dock and the subsequent construction of Building B. The works required at the western side of the 'mega slipway' would be carefully designed such that the quay wall between Building Slip No. 1 and the Carr Jetty is not physically impacted - the Grade II listing is likely to apply to the whole of the quay wall in this area.
- 10.188 Building Slips Nos 1 and 2 (Structures 2.15 and 2.16) and the graving dock (Structure 2.17) are associated with the Carr Jetty as they are all part of the 19th century expansion of the dockyard and the transition to the construction of steam-powered iron-clad vessels. The same is true for some of the buildings to the south-east of the Carr Jetty which would be dismantled, including the Former Shed for Docking Gear (Structure 3.4), the Former Battery Room & c (Structure 3.10), the Former Iron Store (Building 3.6), the Former Pattern and Gunnery Fitting Shop (Structure 3.7) and the Former Testing House (Structure 3.8).

10.189 As a Grade II listed structure, the Carr Jetty would usually be ascribed a Medium sensitivity or value. However, its value is enhanced by the contribution that it makes to the combined group value of the surviving elements of the 19th century dockyard and a High sensitivity or value is more appropriate. The assessed magnitude of impact on this asset is Low (its significance would be slightly harmed) and the assessed level of effect is Minor and long-term. This is not a significant effect in terms of the EIA.

Former Oakum Store

10.190 The Grade II listed Former Oakum Store (Structure 2.22) was constructed in 1856 for the storage of rope strands used in the caulking of wooden ships. It shows the same design and materials used in other near-contemporary buildings within the dockyard such as The Old Storehouse (Structure 2.12), Sunderland House (Structure 2.13), the Former Guard House (Structure 2.20) and the Former Captain Superintendent's Office (Structure 2.21), as well as the officers' houses along The Terrace. The Former Oakum Store was renovated to a high standard by the applicant several years ago and is tenanted by a boat-building company.

10.191 As a building that is directly associated with the construction of wooden vessels, the Former Oakum Store has an associative relationship with the graving dock (Structure 2.17), Buildings Slips Nos. 1, 2 and 4 (Structures 2.15, 2.16 and 2.19), the Western Camber (Structure 2.18) and the timber pond (Structure 2.14), and is in proximity to all of these except for the timber pond.

10.192 The proposed development would not have any direct physical impact on any part of the fabric of the Former Oakum Store. However, there would be changes within its setting, some of which would detract from its significance. These principally comprise the infilling of the graving dock and the subsequent construction of Building B, and the establishment of the 'mega slipway'. The associative relationship between the Former Oakum Store and the graving dock would be lost, whilst that relationship between the Former Oakum Store and Building Slips Nos 1 and 2 would be degraded by the works to create the 'mega slipway' and by the presence of Building B which could be as high as 40 m. There are also some beneficial changes including the removal of modern buildings and scrap metal, the re-establishment of a visual link with the (restored) Former Foremen's Office (Structure 2.23) and the reuse of the graving dock area for vessel maintenance.

10.193 As a Grade II listed structure, the Former Oakum Store would usually be ascribed a Medium sensitivity or value. However, its value is enhanced by the contribution that it makes to the combined group value of the surviving elements of the 19th century dockyard and a High sensitivity or value is more appropriate. On balance, the assessed magnitude of impact on this asset is Low (its significance would be slightly harmed) and the assessed level of effect is Minor and long-term. This is not a significant effect in terms of the EIA.

The Western Camber

10.194 The Grade II listed Western Camber (Structure 2.18) was constructed as a building slip during the initial establishment of the naval dockyard. It is a square tidal basin in stone ashlar blocks from which the shipbuilding slip extended south; this appears to have been infilled in the latter part of the 19th century leaving just the square basin. The canted concrete jetty on the west side of the camber dates to around 1940.

- 10.195 The Western Camber has an associative relationship with the graving dock (Structure 2.17), Buildings Slips Nos. 1, 2 and 4 (Structures 2.15 and 2.16), the Former Oakum Store (Structure 2.22) and the timber pond (Structure 2.14) and is in reasonable proximity to all of these except for the timber pond.
- 10.196 The proposed development would not have any direct physical impact on the fabric of the Western Camber. However, there would be changes within its setting, some of which would detract from its significance. These changes principally comprise the infilling of the graving dock and the subsequent construction of Building B, and the establishment of the 'mega slipway'. The associative relationship between the Western Camber and the graving dock would be lost (although the impact is reduced through the retention of the dock entrance), whilst that relationship between the Western Camber and Building Slips Nos 1 and 2 would be degraded by the works to create the 'mega slipway' and by the presence of Building B which could be as high as 40 m.
- 10.197 As a Grade II listed structure, the Western Camber would usually be ascribed a Medium sensitivity or value. However, its value is enhanced by the contribution that it makes to the combined group value of the surviving elements of the 19th century dockyard and a High sensitivity or value is more appropriate. The assessed magnitude of impact on this asset is Low (its significance would be slightly harmed) and the assessed level of effect is Minor and long-term. This is not a significant effect in terms of the EIA.

Building Slip No. 4

- 10.198 The Grade II listed Building Slip No. 4 (Structure 2.19) was constructed during the initial establishment of the naval dockyard. It has limestone ashlar sides with granite copings and stone paving at the base. There is a late 20th century slipway cover over the south end of the building slip.
- 10.199 Building Slip No. 4 has an associative relationship with the graving dock (Structure 2.17), Buildings Slips Nos. 1 and 2 (Structures 2.15 and 2.16), the Western Camber (Structure 2.18), the Former Oakum Store (Structure 2.22) and the timber pond (Structure 2.14) and is in reasonable proximity to all of these except for the timber pond.
- 10.200 The proposed development would not have any direct physical impact on the fabric of Building Slip No. 4. However, there would be changes within its setting which would detract from its significance. These changes principally comprise the infilling of the graving dock and the subsequent construction of Building B, and the establishment of the 'mega slipway'. The associative relationship between Building Slip No. 4 and the graving dock would be lost, whilst that relationship between Building Slip No. 4 and Building Slips Nos 1 and 2 would be degraded by the works to create the 'mega slipway' and by the presence of Building B which could be as high as 40 m. Building Slip No. 4 would be left as the only surviving historic shipbuilding slip within the dockyard.
- 10.201 As a Grade II listed structure, Building Slip No. 4 would usually be ascribed a Medium sensitivity or value. However, its value is enhanced by the contribution that it makes to the combined group value of the surviving elements of the 19th century dockyard and a High sensitivity or value is more appropriate. The assessed magnitude of impact on this asset is Low (its significance would be

slightly harmed) and the assessed level of effect is Minor and long-term. This is not a significant effect in terms of the EIA.

The Old Storehouse, Sunderland House, the Former Guard House and the Former Captain Superintendent's Office

- 10.202 The Old Storehouse (Structure 2.12) is a Grade II* listed building located centrally within the dockyard, to the west of Admiralty Way. It was built in around 1822 to a design by the architect Edward Holl and was the main dockyard storehouse. A tall domed clocktower in the centre of the building was removed in 1944. A matching storehouse (but without a tower) was constructed immediately to the south in c. 1857 but was demolished in around 1981.
- 10.203 Sunderland House (Structure 2.13) is a Grade II listed building located immediately to the east of The Old Storehouse. It too was built in around 1822 to a design by the architect Edward Holl and was extended to the west in matching style in the 1880s. Although similar in design to The Old Storehouse, the limestone walls of Sunderland House are unpainted whereas those of The Old Storehouse are painted white. Sunderland House was constructed as the main dockyard office building.
- 10.204 The Former Guard House (Structure 2.20) is located to the south of The Old Storehouse and Sunderland House, on the west side of, and fronting onto, Admiralty Way. It is a Grade II* listed building constructed c. 1840-45 in similar style to The Old Storehouse and Sunderland House, and has a single storey portico on the east side. It was marked as 'Guard House' on a plan of 1860s date but was later used as offices.
- 10.205 The former Captain Superintendent's Office (Structure 2.21) is located just to the south of the Former Guard House and also fronts onto Admiralty Way. It is a Grade II listed building constructed c. 1847-48 in similar style to The Old Storehouse, Sunderland House and the Former Guard House. Initially envisaged as a Captain Superintendent's Office over a police station, a plan of 1858 indicates office use in the southern part of the building and a surgery in the northern part.
- 10.206 The four buildings described above represent key surviving elements of the late Georgian dockyard and have been restored to a high quality. Their design, influenced heavily by Edward Holl, demonstrates a naval interpretation of the Neo-Classical architecture which was popular at that time and the buildings share the same materials, scale and character. Their locations and alignments form a visual reminder of the geometric layout of the early 19th century dockyard. Much of this common form and composition is also shared with the officers' houses along The Terrace to the south (Structures 2.3, 2.6, 2.7 and 3.1), whilst to the west the Former Oakum Store (Structure 2.22) is also part of this group with shared characteristics.
- 10.207 There are clear associations with other elements of the dockyard that were established for the construction of naval vessels, including the graving dock (Structure 2.17), Building Slips Nos. 1, 2 and 4 (Structures 2.15, 2.16 and 2.19), the Western Camber (2.18) and the timber pond (Structure 2.14).
- 10.208 The proposed development would not have any direct physical impact on any part of the fabric of these four buildings. However, there would be changes within their settings which would detract from their significance. These changes principally comprise the infilling of the graving dock and the

subsequent construction of Building B, the establishment of the 'mega slipway', the infilling of the timber pond and the subsequent construction of Building A, and the construction of Building C.

- 10.209 The associative relationship between these four buildings and the graving dock and timber pond would be lost, whilst that relationship between these buildings and Building Slips Nos. 1 and 2 would be degraded by the works to create the 'mega slipway' and by the presence of Building B which could be as high as 40 m. However, these four buildings are already physically separated from those elements of the proposed development by the buildings and land used for the Irish ferry operations. The proposed Building C (up to 10 m high) would be seen in proximity to the Former Captain Superintendent's House (Structure 2.3) in views from and across the Former Guard House and the Former Captain Superintendent's Office and would be a detracting element in such views, although screened by the presence of mature trees. The relationship between these four buildings and the officers' houses along The Terrace to the south would not otherwise be affected by the proposed development.
- 10.210 As Grade II listed buildings, Sunderland House and the Former Captain Superintendent's Office would usually be ascribed a Medium sensitivity or value. However, their value is enhanced by the contribution that they make to the combined group value of the surviving elements of the 19th century dockyard and a High sensitivity or value is more appropriate and in line with the value ascribed to The Old Storehouse and The Former Guard House. The assessed magnitude of impact on these assets is Negligible (their significance would be barely affected) and the consequent level of effect in each case is Minor and long-term. These are not significant effects in terms of the EIA.

Former Captain Superintendent's House and Long Stable Range to south

- 10.211 The Former Captain Superintendent's House (Structure 2.3) is a Grade II* listed building constructed 1832-34 for the senior commanding officer of the naval dockyard. A house was planned for this location by the architect Edward Holl in 1817-18 but was not built at that time, although the completed building was based on Holl's design for the corresponding building (Structure 2.6) on the other side of the principal entrance to the dockyard. The main elevation faces north across the dockyard. The building was later used as a hotel (the Port Hotel / Commodore Hotel / Commodore Club) and is currently in very poor condition following a serious fire in 2006 and a subsequent (and ongoing) period of neglect and extensive vandalism.
- 10.212 Attached to, and extending south from, the Former Captain Superintendent's House, is the Long Stable Range (Structure 2.4). This is separately listed at Grade II* and was built at the same time as the house. A coach-house was added after 1858, extending west slightly from the southern end of the stable range. The Long Stable Range is also currently in very poor condition.
- 10.213 These two buildings form part of the geometric layout of the early 19th century dockyard and share common design characteristics with the officers' houses along The Terrace to the east (Structures 2.6, 2.7 and 3.1) and surviving functional dockyard buildings to the north including the Former Captain Superintendent's Office (Structure 2.21), the Former Guard House (Structure 2.20), The Old Storehouse (Structure 2.12) and Sunderland House (Structure 2.13).
- 10.214 There are clear associations with other elements of the dockyard that were established for the construction of naval vessels, including the graving dock (Structure 2.17), Building Slips Nos. 1, 2

and 4 (Structures 2.15, 2.16 and 2.19), the Western Camber (2.18) the timber pond (Structure 2.14) and the Former Oakum Store (Structure 2.22).

- 10.215 The proposed development would not have any direct physical impact on any part of the fabric of the Former Captain Superintendent's House or the Long Stable Range. However, there would be changes within their settings which would detract from their significance. These changes principally comprise the construction of Building C and the removal of the east-west aligned section of the enclosing wall (Structure 2.5), along with the infilling of the graving dock and the subsequent construction of Building B, the establishment of the 'mega slipway', and the infilling of the timber pond and the subsequent construction of Building A.
- 10.216 The proposed Building C (up to 10 m high) would be approximately 35 m west of the Former Captain Superintendent's House and the Long Stable Range and would be clearly visible (and dominant) in views from and across these buildings. The associative relationship between these buildings and the graving dock and timber pond would be lost, whilst that relationship between these buildings and Building Slips Nos. 1 and 2 would be degraded by the works to create the 'mega slipway' and by the presence of Building B which could be as high as 40 m. However, these two buildings are already physically separated from those elements of the proposed development by the buildings and land used for the Irish ferry operations and by other modern dockyard buildings. The relationship between these two buildings and the officers' houses along The Terrace to the east would not otherwise be affected by the proposed development, nor would the relationship with the Georgian dockyard buildings to the north along Admiralty Way.
- 10.217 As Grade II* listed buildings, the Former Captain Superintendent's House and the Long Stable Range have a High sensitivity or value. The assessed magnitude of impact on these assets is Low (their significance would be slightly harmed) and the assessed level of effect in each case is Minor and long-term. These are not significant effects in terms of the EIA.

Piers and Lodges and Dockyard Gates, No. 1 The Terrace, Nos. 2 and 3 The Terrace, and Nos. 4 and 5 The Terrace

- 10.218 The Piers and Lodges and Dockyard Gates (Structure 2.2) were largely constructed in 1817-18 to a design by Edward Holl. They are collectively listed at Grade II* and represent the main formal entrance into the former naval dockyard (and which was the only entrance until the railway gate was inserted into the east wall in the mid-19th century). They form the central element of a matching composition with the Former Captain Superintendent's House to the west and the Former Fleet Surgeon's House to the east. The east lodge has been restored and is in use for office purposes, whilst the west lodge is disused but in reasonable condition. The iron gates were removed some time after 1981 and their current location remains unknown.
- 10.219 No. 1 The Terrace (Structure 2.6) was built around 1818 to a design by Edward Holl. It is a Grade II* listed building which was originally the residence of the Fleet Surgeon with accommodation for police at the western end. It forms part of the formal composition of Georgian buildings in this part of the dockyard and is also important for the early structural use of iron components within its construction.

- 10.220 Nos. 2 and 3 The Terrace (Structure 2.7) form a pair of houses which were built around 1818 to a design by Edward Holl. They represent a single Grade II* listed building which originally provided accommodation for the Master shipwright and the Clerk of the Cheque of the Royal Dockyard. This structure forms part of the formal composition of Georgian buildings in this part of the dockyard and is also important for the early structural use of iron components within its construction.
- 10.221 Nos. 4 and 5 The Terrace (Structure 3.1) is the easternmost pair of former officers' house along the south side of The Terrace. They are Grade II listed and were built c. 1877 for the Constructor and Chief Engineer of the Royal Dockyard and are of a slightly different design to the earlier houses just to the west, but share many elements of design and character. They represent a Victorian re-interpretation of the Georgian buildings within the dockyard.
- 10.222 The buildings described above form part of the geometric layout of the early 19th century dockyard and share common design characteristics with the Former Captain Superintendent's House and Long Stable Range to the west (Structures 2.3 and 2.4) and surviving functional dockyard buildings to the north including the Former Captain Superintendent's Office (Structure 2.21), the Former Guard House (Structure 2.20), The Old Storehouse (Structure 2.12) and Sunderland House (Structure 2.13).
- 10.223 There are clear associations with other elements of the dockyard that were established for the construction of naval vessels, including the graving dock (Structure 2.17), Building Slips Nos. 1, 2 and 4 (Structures 2.15, 2.16 and 2.19), the Western Camber (2.18) the timber pond (Structure 2.14) and the Former Oakum Store (Structure 2.22).
- 10.224 The proposed development would not have any direct physical impact on any part of the fabric of the dockyard gateway or the former officers' houses to the east along The Terrace. However, there would be changes within their settings which would detract from their significance. These changes principally comprise the construction of Building C, the infilling of the graving dock and the subsequent construction of Building B, the establishment of the 'mega slipway', and the infilling of the timber pond and the subsequent construction of Building A.
- 10.225 The proposed Building C (up to 10 m high) would be approximately 35 m west of the Former Captain Superintendent's House and the Long Stable Range and would be partially visible in views from or across the dockyard gateway and the former officers' houses to the east along The Terrace. The associative relationship between the dockyard gateway and the former officers' houses to the east along The Terrace, and the graving dock and timber pond would be lost, whilst that relationship between these buildings and Building Slips Nos. 1 and 2 would be degraded by the works to create the 'mega slipway' and by the presence of Building B which could be as high as 40 m. However, the dockyard gateway and the former officers' houses to the east along The Terrace are already physically separated from those elements of the proposed development by the buildings and land used for the Irish ferry operations and by other modern dockyard buildings. The relationships between the dockyard gateway and the former officers' houses to the east along The Terrace, and the Georgian dockyard buildings to the north along Admiralty Way, would not be affected by the proposed development.
- 10.226 As Grade II* listed buildings, the dockyard gateway and also No. 1 The Terrace and Nos. 2 and 3 The Terrace have a High sensitivity or value. As a Grade II listed structure, Nos. 4 and 5 The

Terrace would usually be ascribed a Medium sensitivity or value. However, its value is enhanced by the contribution that it makes to the combined group value of the surviving elements of the 19th century dockyard and a High sensitivity or value is more appropriate. The assessed magnitude of impact on these assets is Negligible (their significance would be barely affected) and the consequent level of effect in each case is Minor and long-term. These are not significant effects in terms of the EIA.

Coach-house to rear of Nos. 1 and 2 The Terrace, Coach-house to rear of No. 3 The Terrace, and Garden Walls to rear of Nos. 1, 2 and 3 The Terrace

- 10.227 These buildings and walls (Structures 2.8, 2.9 and 2.10) are separately listed at Grade II. They are all of early 19th century date and are associated with the former officers' houses located along the southern side of The Terrace. They form a minor part of the geometric layout of the early 19th century dockyard.
- 10.228 The proposed development would not have any direct physical impact on any part of the fabric of these coach-houses and garden walls. There would be no changes within their settings which would detract from their significance.
- 10.229 As Grade II listed structures, these coach-houses and garden walls are of Medium sensitivity or value. The assessed magnitude of impact on these assets is No Change and the consequent level of effect in each case is No Change.

Former Dockyard Chapel

- 10.230 The Former Dockyard Chapel (Structure 2.11) is located in the eastern part of the dockyard. It is a Grade II* listed building and was constructed in 1830-32 in late Georgian neo-Classical style with minimal detailing. It has been recently extended to the east to provide additional facilities for the museum trust which now uses the building.
- 10.231 The former chapel formed the focal point of the axial gardens associated with the layout of The Terrace and is part of the coherent ensemble of early 19th century dockyard structures including the officers' houses along The Terrace and surviving functional dockyard buildings such as the Former Captain Superintendent's Office (Structure 2.21), the Former Guard House (Structure 2.20), The Old Storehouse (Structure 2.12) and Sunderland House (Structure 2.13).
- 10.232 There are also clear associations with other elements of the dockyard that were established for the construction of naval vessels, including the graving dock (Structure 2.17), Building Slips Nos. 1, 2 and 4 (Structures 2.15, 2.16 and 2.19), the Western Camber (2.18) the timber pond (Structure 2.14) and the Former Oakum Store (Structure 2.22).
- 10.233 The proposed development would not have any direct physical impact on any part of the fabric of the Former Dockyard Chapel. However, there would be changes within its setting including the infilling of the graving dock and the subsequent construction of Building B, the establishment of the 'mega slipway', the infilling of the timber pond and the subsequent construction of Building A, and the construction of Building C. The relationships between the Former Dockyard Chapel and the former officers' houses to the east along The Terrace, and the Georgian dockyard buildings to the north along Admiralty Way, would not be affected by the proposed development.

10.234 As a Grade II* listed building, the Former Dockyard Chapel has a High sensitivity or value. The assessed magnitude of impact on this asset is Negligible (its significance would be barely affected) and the consequent level of effect is Minor and long-term. This is not a significant effect in terms of the EIA.

No. 1 Hangar and Annexes and No. 2 Hangar and Annexes

10.235 No. 1 Hangar (Structure 4.1) is the western one of a pair of large hangars constructed by the Air Ministry for the maintenance and repair of Sunderland seaplanes (flying boats). It is a Grade II listed building and was constructed in 1934-35 in the eastern part of the dockyard. The hangar has a riveted steel girder frame and a large opening on the eastern side. It is currently used for the storage of animal feed. A rendered and painted two-storey annex on the south side has recently been demolished (and will be replaced), whilst the single storey annexes to the west and north and currently undergoing restoration.

10.236 No. 2 Hangar (Structure 4.2) is the eastern one of a pair of large hangars constructed by the Air Ministry for the maintenance and repair of Sunderland seaplanes (flying boats). It is a Grade II listed building and was constructed in 1934-35 in the eastern part of the dockyard. The hangar has a riveted steel girder frame and a large opening on the western side. The rendered brick two-storey annexes on the north side are currently undergoing restoration.

10.237 The two hangars provide a clear visual reminder of the contribution of the dockyard during the Second World War, when this was the largest seaplane base in the world and played a significant role in the protection of trans-Atlantic supply convoys. Their size means that these are the dominant buildings in the eastern part of the dockyard, contrasting with the more discreet presence of the Georgian and Victorian dockyard structures and a few more modern and larger buildings in this area.

10.238 The hangars have an associative relationship with the other surviving Air Ministry buildings at the dockyard, particularly with the Former Air Ministry Repair Workshop (Structure 4.3), the RAF pier (Structure 4.4) and the Catalina Type 2 Hangar (Structure 4.6).

10.239 The proposed development would not have any direct physical impact on any part of the fabric of the two Sunderland hangars. However, there would be changes within their settings including the construction of Buildings A and B. These new buildings would be considerably larger even than the hangars, which would consequently no longer be the dominant structures within the dockyard as they are currently. In views from or across the hangars towards Building A, the Catalina Type 2 Hangar would be dwarfed by the new building, although such views already include the large Mainstay Marine Workshop (Structure 5.40) which actually precludes almost all visibility of the Catalina Type 2 Hangar. The relationships between the Sunderland Hangars and the Former Air Ministry Repair Workshop and the RAF pier would remain unchanged.

10.240 As Grade II listed buildings, the Sunderland hangars and their annexes have a Medium sensitivity or value. The assessed magnitude of impact on these assets is Low (their significance would be slightly harmed) and the consequent level of effect in each case is Minor and long-term. These are not significant effects in terms of the EIA.

South-West Martello Tower

- 10.241 This defensive gun platform (Structure 2.24) is located just beyond the south-west corner of the dockyard, at the western end of Fort Road. It is a Grade II* listed building and also a Scheduled Monument. It was built in 1848-51 as one of a pair (with the North-East Martello Tower - Structure 2.25) to provide additional defensive cover for the naval dockyard. When completed it had one 32-pound gun and four 12-pound howitzers mounted on the surface platform. It is currently in private residential use.
- 10.242 It has clear associations with the Dockyard Walls (Structure 2.1) and the Former Pater Fort Walls (Structure 1.2) and with other defensive structures adjacent to the dockyard including the North-East Martello Tower and the Defensible Barracks (Structure 2.26). There are also associative relationships with other defensive structures within the Milford Haven waterway.
- 10.243 The proposed development would not have any direct physical impact on any part of the fabric of the South-West Martello Tower. However, there would be changes within its setting including the construction of Building A. This new building would be considerably taller than the Dockyard Walls and would dominate the south-western corner of the dockyard. The relationships with the North-East Martello Tower, the Defensible Barracks and the other defensive structures within the Milford Haven waterway would remain unchanged. The proposed development would not affect the visibility of the western approach along the haven in views out from the Martello Tower, which is related to its defensive function.
- 10.244 As a Grade II* listed building and Scheduled Monument, the South-West Martello Tower has a High sensitivity or value. The assessed magnitude of impact on this asset is Low (its significance would be slightly harmed) and the assessed level of effect is Minor and long-term. This is not a significant effect in terms of the EIA.

North-East Martello Tower

- 10.245 This defensive gun platform (Structure 2.25) is located just beyond the north-east corner of the dockyard and is a Grade II* listed building. It was built in 1848-51 as one of a pair (with the South-West Martello Tower - Structure 2.24) to provide additional defensive cover for the naval dockyard. When completed it had two 32-pound guns and four 12-pound howitzers mounted on the surface platform. It is currently disused, having recently served as a local museum.
- 10.246 It has clear associations with the Dockyard Walls (Structure 2.1) and the Former Pater Fort Walls (Structure 1.2) and with other defensive structures adjacent to the dockyard including the South-West Martello Tower and the Defensible Barracks (Structure 2.26). There are also associative relationships with other defensive structures within the Milford Haven waterway.
- 10.247 The proposed development would not have any direct physical impact on any part of the fabric of the North-East Martello Tower. However, there would be changes within its setting including the construction of Buildings A and B. These buildings would be very visible in views towards and across the tower. The relationships with the Dockyard Walls, the South-West Martello Tower, the Defensible Barracks and the other defensive structures within the Milford Haven waterway would remain unchanged. The proposed development would not affect the visibility of the western approach along the haven in views out from the Martello Tower, which is related to its defensive function.

10.248 As a Grade II* listed building, the North-East Martello Tower has a High sensitivity or value. The assessed magnitude of impact on this asset is Negligible (its significance would be barely affected) and the consequent level of effect is Minor and long-term. This is not a significant effect in terms of the EIA.

Defensible Barracks

10.249 The Defensible Barracks (Structure 2.26) was built in 1841-46 on the elevated ground to the south of the dockyard (see Figure 10.2 for location). It is a Grade II* listed building and also a Scheduled Monument. The barracks building was used to house officers and men of the Royal Marines (for dockyard protection duties) and also provided limited defence against any landward assault on the dockyard. Although it was constructed on open ground with a clear field of fire in all directions, 20th century urban development has encroached right up to the eastern edge of the structure and very close to the southern edge. The open land to the west is now a golf course, but was previously in military ownership and kept free of development for the mobilisation of troops. The barracks has been partially converted to apartments but much remains unused and in a poor state of repair.

10.250 The Defensible Barracks has clear associations with the Dockyard Walls (Structure 2.1) and the Former Pater Fort Walls (Structure 1.2) and with other defensive structures adjacent to the dockyard including the South-West and North-East Martello Towers (Structures 2.24 and 2.25). There are also associative relationships with other defensive structures within the Milford Haven waterway. The elevated location of the Defensible Barracks means that there is clear visibility outwards over much of the eastern part of the waterway. Conversely there are clear views towards the barracks building from most directions (but not from the south-east).

10.251 The proposed development would not have any direct physical impact on any part of the fabric of the Defensible Barracks. However, there would be changes within its setting including the construction of Buildings A and B. These buildings would be very visible in views towards, from and across the structure. Looking towards the Defensible Barracks from across the waterway, the barracks would remain visible from all but a small number of locations, although the legibility of its relationship with the dockyard would be reduced as a result of the scale and massing of Buildings A and B. In views from the barracks towards the dockyard, Buildings A and B would appear to be the dominant structures but would not impede views of any of the defensive elements adjacent to the dockyard or elsewhere with the haven. Such views already include major industrial facilities including the Dragon LNG tanks and the nearby large wind turbines. The relationships with the Dockyard Walls, the South-West and North-East Martello Towers, the Defensible Barracks and the other defensive structures within the Milford Haven waterway would remain unchanged. The proposed development would not affect the visibility of the western approach along the haven in views out from the Martello Tower, which is related to its defensive function.

10.252 As a Grade II* listed building and Scheduled Monument, the Defensive Barracks has a High sensitivity or value. The assessed magnitude of impact on this asset is Low (its significance would be slightly harmed) and the assessed level of effect is Minor and long-term. This is not a significant effect in terms of the EIA.

Bomb Stores

- 10.253 Located to the immediate south-west of the dockyard, at the western end of Fort Road, are two brick-built bomb stores of probable 1934-39 date (Structures 4.11 and 4.12). Together with an area of land surrounding the structures, these represent a single Scheduled Monument. The bomb stores are associated with the Air Ministry leasing of much of the dockyard from 1930 and are based on a design used for aerodrome bomb stores in the 'expansion period' of 1934-39 when national defences were being built up ahead of likely conflict in Europe.
- 10.254 The Bomb Stores have a clear association with the dockyard and specifically with other structures built by the Air Ministry, including the pair of Sunderland hangars (Structures 4.1 and 4.2) and the Catalina Type 2 hangar (Structure 4.6). Due to the placement of the Bomb Stores outside of the dockyard and behind a blast wall, there is no intervisibility between these structures and any of the Air Ministry hangars. There is also an association with the Dockyard Wall (Structure 2.1) in that the opening in the very south-west corner of the Dockyard Wall is likely to have been established in order to enable connectivity between the Bomb Stores and the other Air Ministry buildings.
- 10.255 The proposed development would not have any direct physical impact on any part of the fabric of the Bomb Stores. However, there would be changes within its setting including the construction of Building A, which would be very visible in views across the Bomb Stores where Building A would not only be seen above the Dockyard Wall but also through the opening in the south-west corner of the wall.
- 10.256 As a Scheduled Monument, the Bomb Stores have a High sensitivity or value. The assessed magnitude of impact on these assets is Low (its significance would be slightly harmed) and the assessed level of effect in each case is Minor and long-term. These are not significant effects in terms of the EIA.

Other designated and non-designated historic assets

- 10.257 The proposed development would fall within the settings of numerous additional designated and non-designated historic assets. These include listed buildings within the town of Pembroke Dock and the surrounding area on both sides of the Haven as well as several Scheduled Monuments. With certain exceptions, the impact on the significance of these historic assets as a result of changes within their settings would be Negligible at worst and no detailed individual assessment of impacts and effects has been undertaken - the purpose of an EIA is to identify *likely significant effects*. However, there are three designated historic assets (all on the north side of the waterway) for which further assessment is considered to be appropriate.
- 10.258 The Church of St Tudwal at Llanstadwell is a Grade II listed building which is almost directly opposite the dockyard - it is approximately 1 km from the edge of the graving dock. The church tower is probably of 15th century date but other structural elements may be as early as the 12th century. The church is located on the edge of the waterway and there are clear views from and across the church towards the dockyard. The waterway, and the views along and across the waterway, are important parts of the setting of the church and contribute towards its significance.
- 10.259 The proposed Buildings A and B would be clearly visible in views from and across the church towards the dockyard. Current visibility of key historic buildings such as the two Sunderland hangars

- and the Defensible Barracks may be impeded in some of these views, and the new buildings would certainly be the dominant structures in all views towards the dockyard.
- 10.260 As a Grade II listed building, the Church of St Tudwal has a Medium sensitivity or value. The assessed magnitude of impact on this asset is Low (its significance would be slightly harmed) and the consequent level of effect is Minor and long-term. This is not a significant effect in terms of the EIA.
- 10.261 Scoveston Fort is also on the north side of the haven opposite the dockyard; it is in an elevated position approximately 2.8 km from the edge of the graving dock. The fort is a Grade II listed building and also a Scheduled Monument. It was built in 1861-68 as part of a proposed north line of defence for the naval dockyard, but due mainly to the cost of construction of this fort the others were never built (although there was a second generation of construction which included Forts Popton, South Hook, Hubberston and Chapel Bay along with the remodelling of the island fort at Stack Rock.
- 10.262 Scoveston Fort was a large artillery fort with accommodation for 128 men, and was designed to have 32 guns on the ramparts. It has clear views across to the dockyard and the surrounding landscape on the south side of the waterway, and a clear association with the dockyard given its defensive function. The fort is disused and overgrown, with no public access.
- 10.263 The proposed Buildings A and B would be visible in views from and across the fort towards the dockyard. Current visibility of key historic buildings such as the two Sunderland hangars may be impeded in some of these views and the new buildings would potentially be the dominant structures in all views towards the dockyard.
- 10.264 As a Scheduled Monument, Scoveston Fort has a High sensitivity or value. The assessed magnitude of impact on this asset is Negligible (its significance would be barely affected) and the consequent level of effect is Minor and long-term. This is not a significant effect in terms of the EIA.
- 10.265 Adjacent to the edge of the waterway at Neyland, and approximately 975 m north-east of the graving dock, is a Scheduled Monument comprising a redan (a fortification with a V-shaped salient angle towards an expected attack). This was constructed at the beginning of the American War of Independence (c. 1776) to protect an emergency shipyard used to build frigates (for the Royal Navy) from the potential threat posed by American privateers operating from France. It may have had as many as 10 gun emplacements within what is now an area of lawn within an irregular, five-sided, stone-revetted structure.
- 10.266 Residential properties have been built within and adjacent to the north side of the redan, but the south side is open and provides clear views across to the dockyard. There is an associative relationship with the dockyard in that the redan was built to protect a precursor shipyard. The proposed Buildings A and B would be clearly visible in views from and across the redan towards the dockyard. Current visibility of key historic buildings such as the two Sunderland hangars and the Defensible Barracks may be impeded in some of these views, and the new buildings would certainly be the dominant structures in all views towards the dockyard.
- 10.267 As a Scheduled Monument, the American War of Independence redan at Neyland has a High sensitivity or value. The assessed magnitude of impact on this asset is Negligible (its significance

would be barely affected) and the consequent level of effect is Minor and long-term. This is not a significant effect in terms of the EIA.

Pembroke Dock Conservation Area

10.268 The Conservation Area covers all of the historic part of the town of Pembroke Dock as well as the dockyard and land to the south on Barrack Hill (including the Defensible Barracks and the northern part of the golf course) and also land to the north of the town extending to Hobbs Point and the former military barracks area at West Llanion (Figure 10.2).

10.269 A Character Appraisal and Management Plan (CAMP) for the Pembroke Dock Conservation Area was adopted by Pembrokeshire County Council in September 2017. This document identifies the following as key characteristics which contribute toward the special interest of the Conservation Area:

- *Long maritime history with the establishment of a Royal Navy Dockyard and the subsequent Victorian development initiated by the Admiralty;*
- *The only Royal Dockyard in Wales;*
- *Historic former admiralty buildings in the former dockyard;*
- *Military base established at Llanion Hill from 1905-67;*
- *Strategic position in relation to links to Ireland;*
- *Architecturally distinctive landmark buildings;*
- *Significant views into, out of, and within the Conservation Area;*
- *Mix of building styles with the majority comprising 19th century buildings;*
- *Listed Buildings and many other buildings which add to the interest and character of the Conservation Area;*
- *Grid pattern street layout, which adds to the 'special interest' of the town;*
- *A number of well-preserved Victorian shops with living accommodation over;*
- *The presence of buildings relating to the three armed forces gives the town added significance in a regional and a national context;*
- *Military cemetery – unique to Wales;*
- *Medieval tower which is a vestige of the former Paterchurch Farm on which Pembroke Dockyard stands; and*
- *Defensible barracks structure of national architectural importance.*

- 10.270 The Conservation Area is divided into four general character zones and the proposed development site is wholly within the defined 'Royal dockyard and Hobbs Point' character zone. The Summary and Recommendations section for this zone within the CAMP recognizes that *'The modernisation of activities at the Dockyard is inevitable to ensure continued prosperity'* but goes on to state that *'There is a need however to ensure that maintenance of historic buildings and other structures and their active and sympathetic use to support a vibrant and attractive Dockyard'* (sic).
- 10.271 The proposed infilling of the graving dock and the timber pond, the establishment of the 'mega slipway' and the programme of dismantling of buildings within the western part of the dockyard would principally be experienced from within the dockyard itself, although there are also views into the dockyard from the elevated land to the south (and from the waterway, which provides views across the Conservation Area). These elements of the proposed development would therefore represent a harmful change to the character and appearance of this part of the Conservation Area in that historic structures would be infilled, amended or dismantled. This would reduce the legibility of the historic character of the dockyard, which forms a key element within the Conservation Area. One benefit of the proposed development relevant in the consideration of impacts on the Conservation Area is that the Grade II listed Former Foremen's Office (Structure 2.23) would be repaired and restored and would become much more visible than at present.
- 10.272 The proposed new buildings, particularly Buildings A and B, would be visible from numerous locations within most parts of the Conservation Area, and in views towards and across the Conservation Area from most directions. They would be the largest buildings in the Conservation Area both in terms of height and footprint and would be the dominant structures in any view in which they appear as part of the Conservation Area.
- 10.273 However, the dockyard currently contains a number of large buildings, both historic and modern, which provide a visual recognition of its former and present functions, whilst the longer views which provide a more extensive understanding of the context of the Conservation Area also include very large industrial facilities and structures (such as Pembroke Power Station, the Valero oil refinery and the Dragon LNG terminal with adjacent large wind turbines). Consequently the new buildings would represent a visual expression of the continuing development of an established and important part of the Conservation Area. The design of Buildings A and B provides a reference back to the historic shipbuilding sheds (the slipway covers) which used to extend along almost all of the seaward edge of the dockyard.
- 10.274 The Pembroke Dock Conservation Area is a historic asset of High sensitivity or value. The assessed magnitude of impact on this asset is Low (its significance would be slightly harmed through the physical loss of historic structures) and the assessed level of effect is Minor and long-term. This is not a significant effect in terms of the EIA.

Historic Landscape

- 10.275 The proposal site is located wholly within the Milford Haven Waterway Landscape of Outstanding Historic Interest (LOHI). A detailed assessment of the impact of the proposed development on the LOHI has been carried out in accordance with the appropriate methodology and is presented as Appendix 10.2 of the ES. This concludes that the overall significance of impact on the LOHI would

be Moderate, on a 6-part scale of: Very Slight; Slight; Moderate; Considerable, Severe: Very Severe.

Further Mitigation

10.276 No further mitigation is proposed regarding effects on the historic environment during construction.

Future Monitoring

10.277 No future monitoring is proposed regarding effects on the historic environment during construction.

Accidents and/or Disasters

10.278 Potential accidents or disasters during construction which are relevant to this chapter principally comprise unplanned physical damage to historic buildings or structures. This could occur through accidental damage to structures, or through demolition (partial or complete) being undertaken prior to completion of the proposed programme of building recording.

10.279 Accidental damage to structures would be avoided through the implementation of good working practices operating within an agreed Code of Construction Practice (CoCP).

10.280 Premature demolition would be avoided through the implementation of an agreed Construction Environment Management Plan (CEMP).

Assessment of Operational Effects

10.281 Where permanent effects occur during construction, such as those resulting from the demolition of historic buildings, these cannot recur during the operation of the proposed development.

10.282 Effects resulting from the changes within the settings of historic assets and from changes with defined historic areas are described above with regard to construction effects and are considered to be long-term. It is assumed that operational effects would be no greater than those associated with construction and therefore the assessment process is not repeated here, however during operation the effects are considered to be permanent (even when reversible). This is reflected in Table 10.6.

Further Mitigation

10.283 No further mitigation is proposed regarding any effects on the historic environment during operation.

Future Monitoring

10.284 No future monitoring is proposed regarding any effects on the historic environment during operation.

Accidents/Disasters

10.285 No potential operational accidents or disasters relevant to the historic environment have been identified.

Potential Changes to the Assessment as a Result of Climate Change

10.286 Future changes to baseline conditions as a result of climate change would not alter any of the assessments for the operational phase set out above.

Assessment of Cumulative Effects

10.287 Details of the other projects to be considered in the cumulative assessment are presented in Chapter 4 of the ES. None of these are considered likely to result in cumulative effects on aspects of the historic environment.

Inter-relationships

10.288 Care has been taken within this ES to consider the historic landscape as a distinct receptor, separate to any consideration of receptors addressed within the landscape and visual impact assessment presented as Chapter 14.

10.289 No other inter-relationships have been identified between the historic environment and any other topic considered within this ES.

Summary of Effects

10.290 The assessed likely impacts and effects on aspects of the historic environment are presented below in Table 10.6. Significant adverse effects during construction have been identified regarding the following historic assets:

- The Grade II* listed graving dock (infilled and partially built over);
- The Grade II listed timber pond (infilled and built over);
- The Grade II listed Building Slips No. 1 and 2 (partially removed);
- Five non-designated Admiralty buildings of c. 1861 - 1926 date (dismantled);
- Three non-designated Air Ministry buildings of c. 1926-1945 date (dismantled);
- Eleven non-designated Admiralty buildings of c. 1926 - 1945 (dismantled);
- The non-designated 'paddock wall' (partially dismantled); and
- The Grade II* listed Dockyard Walls (changes within setting).

10.291 There would be adverse effects with regard to other historic assets, including the Pembroke Dock Conservation Area, but these would not be significant in EIA terms.

10.292 The proposal site is located wholly within the Milford Haven Waterway Landscape of Outstanding Historic Interest (LOHI). A detailed assessment of the impact of the proposed development on the LOHI carried out in accordance with the appropriate methodology concluded that the overall significance of impact on the LOHI would be Moderate, on a 6-part scale of: Very Slight; Slight; Moderate; Considerable, Severe: Very Severe.

10.293 Various measures have been incorporated into the design of the scheme in order to avoid or reduce any adverse impacts and effects. These have been subject to a process of consultation with statutory authorities.

- 10.294 Revisions have been made to the layout of the proposed scheme such that a Grade II listed building currently in poor condition is retained and can be conserved and restored to use, with the removal of unsightly modern structures and materials from the surrounding area so that the building can be seen and appreciated.
- 10.295 Although the Grade II* listed graving dock will be carefully infilled and a new building constructed in this location, the design of the works here has allowed for the retention of the dock entrance as a visible feature. The caisson which formerly sealed the dock when necessary will be recovered from its current location (where it continues to deteriorate) and will be conserved and placed on display close to the dock entrance where future maintenance is possible.
- 10.296 Potential designs for the two largest of the three new buildings have been prepared, showing how these could reflect the heritage of the dockyard by referring back to the former large shipbuilding sheds (slipway covers) which once extended along most of the northern edge of the dockyard, and also reference large airship hangars to complement the existing Sunderland hangars in the eastern part of the dockyard.
- 10.297 A proposed programme of historic building recording would help to offset the effects of the demolition (complete and partial) and infilling of historic structures. The results of this work could be utilised within a digital history of the dockyard appreciated through visual or augmented reality technology.
- 10.298 Although the potential for impacts on buried archaeological remains is fairly low, a proposed programme of archaeological investigation will focus on the location of the mid-18th century Pater Fort.
- 10.299 The significant effects described above for the construction phase would continue throughout the operation of the proposed development, other than those which occur as a result of the dismantling of historic buildings.

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Non-Technical Summary

- 10.300 The proposal site is located wholly within the Milford Haven Waterway Landscape of Outstanding Historic Interest (LOHI) and almost wholly within the Pembroke Dock Conservation Area. The Royal Dockyard (HM Pembroke Dockyard) was established as a naval dockyard from around 1812 and was used for shipbuilding until 1926; it was the only Admiralty dockyard ever established in Wales. More than 250 vessels were launched from the slipways between 1816 and 1922, covering the period from wooden ships under sail, through to wooden steamships, ironclads and then full steel vessels, with the dockyard adapting to all these changes in technology.
- 10.301 Following the closure of most of the dockyard in 1926, it was reused and redeveloped from 1931 by the Royal Air Force as a base for flying boats, eventually becoming the largest such base in the world. Flying boats from Pembroke Port played a crucial role in the Second World War, providing convoy escorts in the Atlantic and air sea rescue duties as well as hunting enemy submarines. The Admiralty retained land at the western end of the dockyard, which was used for refuelling and maintenance, and also as a support site for vessels involved in anti-submarine defences within the Haven and in supporting convoys.
- 10.302 The RAF finally left in 1959 since when the dockyard has acquired several new users and tenants, including the Irish ferry service operating between Pembroke Dock and Rosslare. The dockyard was disposed of into the private sector in 2008.
- 10.303 Several listed buildings are present within the proposal site, including a Grade II* listed graving dock, two Grade II listed shipbuilding slips, a Grade II listed timber pond and a Grade II listed former foremen's office. The dockyard walls which form the southern and much of the western boundary of the proposal site is also listed at Grade II.
- 10.304 Numerous additional designated historic assets are present within the dockyard including a medieval tower (part of a pre-dockyard manorial complex), Georgian and Victorian officers' accommodation and office buildings and a chapel, and two large hangars built by the Air Ministry for the maintenance and repair of seaplanes (flying boats). Outside the dockyard are other designated historic assets associated with the defence of the naval facility. These comprise two gun platforms (also known as Martello towers) just to the north-east and south-west of the dockyard walls, a substantial mid 19-th century defensible barracks further to the south, and two bomb stores just to the south-west of immediate pre-Second World War date.
- 10.305 The assessed likely impacts and effects on aspects of the historic environment are presented in Chapter 10 of the ES. Significant adverse effects during construction have been identified with regard to the following historic assets:
- The Grade II* listed graving dock (infilled and partially built over);
 - The Grade II listed timber pond (infilled and built over);
 - The Grade II listed Building Slips No. 1 and 2 (partially removed);
 - Five non-designated Admiralty buildings of c. 1861 - 1926 date (dismantled);

- Three non-designated Air Ministry buildings of c. 1926-1945 date (dismantled);
 - Eleven non-designated Admiralty buildings of c. 1926 - 1945 (dismantled);
 - The non-designated 'paddock wall' (partially dismantled); and
 - The Grade II* listed Dockyard Walls (changes within setting).
- 10.306 There would be adverse effects regarding other historic assets, including the Pembroke Dock Conservation Area, but these would not be significant in EIA terms.
- 10.307 The proposal site is located wholly within the Milford Haven Waterway Landscape of Outstanding Historic Interest (LOHI). A detailed assessment of the impact of the proposed development on the LOHI carried out in accordance with the appropriate methodology concluded that the overall significance of impact on the LOHI would be Moderate, on a 6-part scale of: Very Slight; Slight; Moderate; Considerable, Severe: Very Severe.
- 10.308 Various measures have been incorporated into the design of the scheme in order to avoid or reduce any adverse impacts and effects. These have been subject to a process of consultation with statutory authorities throughout which various design options have been reviewed and discussed.
- 10.309 Revisions have been made to the layout of the proposed scheme such that a Grade II listed building currently in poor condition is retained and can be conserved and restored to use, with the removal of unsightly modern structures and materials so that the building can be seen and appreciated.
- 10.310 Although the Grade II* listed graving dock will be carefully infilled and a new building constructed in this location, the design of the works here has allowed for the retention of the dock entrance as a visible feature. The caisson which formerly sealed the dock when necessary will be recovered from its current location (where it continues to deteriorate) and will be conserved and placed on display close to the dock entrance where future maintenance is possible.
- 10.311 Potential designs for the two largest of the three new buildings have been prepared, showing how these could reflect the heritage of the dockyard by referring back to the former large shipbuilding sheds (slipway covers) which once extended along most of the northern edge of the dockyard, and also reference large airship hangars to complement the existing Sunderland hangars in the eastern part of the dockyard.
- 10.312 A proposed programme of historic building recording would help to offset the effects of the dismantling (complete and partial) and infilling of historic structures. The results of this work could be utilised within a digital history of the dockyard appreciated through virtual or augmented reality technology.
- 10.313 Although the potential for impacts on buried archaeological remains is fairly low, a proposed programme of archaeological investigation will focus on the location of the mid-18th century Pater Fort.
- 10.314 The significant effects described above for the construction phase would continue throughout the operation of the proposed development, other than those which occur as a result of the dismantling of historic buildings.

Table 10.6: Summary of Likely Environmental Effects on the Historic Environment

Receptor	Sensitivity of receptor	Description of impact	Short- / medium- / long-term	Magnitude of impact	Significance of effect	Significant / Not significant	Notes
Construction phase							
Buried archaeological remains	Medium	Physical damage or loss of integrity	Permanent	Low	Minor adverse	Not significant	Below ground impacts mostly comprise piles and possibly strip footings, also ground reduction for 'mega slipway'. Effect partially offset through programme of archaeological investigation.
Grade II* listed graving dock Structure 2.17	High	Infilled with new building constructed over.	Long-term	Medium	Major adverse	Significant	Impact is reversible, partially mitigated through visible retention of dock entrance, caisson and bollards and offset through programme of recording.
Grade II listed timber pond Structure 2.14	High	Infilled with new building constructed over.	Long-term	Medium	Major adverse	Significant	Impact is reversible, partially mitigated through visible retention of upper part of western wall, and offset through programme of recording.
Grade II listed Building Slip No. 1 Structure 2.15	High	Partial removal, change within setting.	Permanent	Medium	Moderate adverse	Significant	Partially mitigated through retention of part of structure, and offset through programme of recording.
Grade II listed Building Slip No. 2 Structure 2.16	High	Partial removal, change within setting.	Permanent	Medium	Moderate adverse	Significant	Partially mitigated through retention of part of structure, and offset through programme of recording.
Enclosing wall to west of Former Captain Superintendent's House Structure 2.5	High	Partial removal, change within setting.	Permanent	Medium	Moderate adverse	Significant	Partially mitigated through retention of part of structure, and offset through programme of recording.
Former Shed for Docking Gear Structure 3.4	Medium	Complete dismantling	Permanent	High	Moderate adverse	Significant	Partially offset through programme of recording.
Former Iron Store Structure 3.6	Medium	Complete dismantling	Permanent	High	Moderate adverse	Significant	Partially offset through programme of recording.

Receptor	Sensitivity of receptor	Description of impact	Short- / medium- / long-term	Magnitude of impact	Significance of effect	Significant / Not significant	Notes
Former Pattern & Gunnery Fitting Shop Structure 3.7	Medium	Complete dismantling	Permanent	High	Moderate adverse	Significant	Partially offset through programme of recording.
Former Testing House Structure 3.8	Medium	Complete dismantling	Permanent	High	Moderate adverse	Significant	Partially offset through programme of recording.
Former Battery Room &c Structure 3.10	Medium	Complete dismantling	Permanent	High	Moderate adverse	Significant	Partially offset through programme of recording.
Former Air Ministry Building 101 Ready Use Pyrotechnics Structure 4.7	Medium	Complete dismantling	Permanent	High	Moderate adverse	Significant	Partially offset through programme of recording.
Remains of Former Air Ministry Rifle Range Structure 4.8	Medium	Complete dismantling	Permanent	High	Moderate adverse	Significant	Partially offset through programme of recording.
Former Air Ministry Loco Shed Structure 4.9	Medium	Complete dismantling	Permanent	High	Moderate adverse	Significant	Partially offset through programme of recording.
Former Sentry Pillbox Structure 4.10	Medium	Complete dismantling	Permanent	High	Moderate adverse	Significant	Partially offset through programme of recording.
Former Admiralty Trailer and Tangye Pumps Structure 4.14	Medium	Complete dismantling	Permanent	High	Moderate adverse	Significant	Partially offset through programme of recording.
Former Admiralty Substation Structure 4.17	Medium	Complete dismantling	Permanent	High	Moderate adverse	Significant	Partially offset through programme of recording.

Receptor	Sensitivity of receptor	Description of impact	Short- / medium- / long-term	Magnitude of impact	Significance of effect	Significant / Not significant	Notes
Former Admiralty Air Compressor House Structure 4.18	Medium	Complete dismantling	Permanent	High	Moderate adverse	Significant	Partially offset through programme of recording.
Former Admiralty Net Shed Structure 4.19	Medium	Complete dismantling	Permanent	High	Moderate adverse	Significant	Partially offset through programme of recording.
Former Admiralty WSA Office Structure 4.20	Medium	Complete dismantling	Permanent	High	Moderate adverse	Significant	Partially offset through programme of recording.
Former Admiralty Store Structure 4.21	Medium	Complete dismantling	Permanent	High	Moderate adverse	Significant	Partially offset through programme of recording.
Former Admiralty Store Structure 4.22	Medium	Complete dismantling	Permanent	High	Moderate adverse	Significant	Partially offset through programme of recording.
Former Admiralty Workshops Structure 4.23	Medium	Complete dismantling	Permanent	High	Moderate adverse	Significant	Partially offset through programme of recording.
Former Admiralty Rigging Shed Structure 4.24	Medium	Complete dismantling	Permanent	High	Moderate adverse	Significant	Partially offset through programme of recording.
Former Admiralty Canteen Structure 4.25	Medium	Complete dismantling	Permanent	High	Moderate adverse	Significant	Partially offset through programme of recording.
Former Admiralty Winch House Structure 5.14	Low	Complete dismantling	Permanent	High	Minor adverse	Not significant	Partially offset through programme of recording.
Former Admiralty Office Structure 5.15	Low	Complete dismantling	Permanent	High	Minor adverse	Not significant	Partially offset through programme of recording.
Former Admiralty Blast/ Spray Shop Annex Structure 5.16	Low	Complete dismantling	Permanent	High	Minor adverse	Not significant	Partially offset through programme of recording.

Receptor	Sensitivity of receptor	Description of impact	Short- / medium- / long-term	Magnitude of impact	Significance of effect	Significant / Not significant	Notes
Former Admiralty Compressor House Structure 5.17	Low	Complete dismantling	Permanent	High	Minor adverse	Not significant	Partially offset through programme of recording.
Former Hayes Building 9H Canteen Structure 5.42	Negligible	Complete dismantling	Permanent	High	Minor adverse	Not significant	Partially offset through programme of recording.
Former Hayes Building 5H Stores Structure 5.43	Negligible	Complete dismantling	Permanent	High	Minor adverse	Not significant	Partially offset through programme of recording.
Scrapyard Workshop Structure 5.44	Negligible	Complete dismantling	Permanent	High	Minor adverse	Not significant	
Bombora Wave Energy Test Tank Structure 5.45	Negligible	Complete dismantling	Permanent	High	Minor adverse	Not significant	
Waste Oil Point Structure 5.46	Negligible	Complete dismantling	Permanent	High	Minor adverse	Not significant	
Grade II listed Former Foremen's Office Structure 2.23	High	Restored and renovated, but substantial changes within setting.	Long-term	Negligible	Minor adverse	Not significant	Partially offset through programme of recording, restoration and reuse.
Grade II listed Dockyard Walls Structure 2.1	High	Substantial changes within setting.	Long-term	Medium	Moderate adverse	Significant	
Grade I listed Paterchurch Tower Structure 1.1	High	Changes within setting.	Long-term	Low	Minor adverse	Not significant	
Grade II listed Pater Fort South West and West Walls	High	Changes within setting.	Long-term	Low	Minor adverse	Not significant	

Receptor	Sensitivity of receptor	Description of impact	Short- / medium- / long-term	Magnitude of impact	Significance of effect	Significant / Not significant	Notes
Structure 1.2							
Grade II listed Carr Jetty Structure 3.3	High	Changes within setting.	Long-term	Low	Minor adverse	Not significant	Care needed for works affecting quay wall to east of jetty.
Grade II listed Former Oakum Store Structure 2.22	High	Changes within setting.	Long-term	Low	Minor adverse	Not significant	
Grade II listed Western Camber Structure 2.18	High	Changes within setting.	Long-term	Low	Minor adverse	Not significant	
Grade II listed Building Slip No. 4 Structure 2.19	High	Changes within setting.	Long-term	Low	Minor adverse	Not significant	
Grade II* listed The Old Storehouse Structure 2.12	High	Changes within setting	Long-term	Negligible	Minor adverse	Not significant	
Grade II listed Sunderland House Structure 2.13	High	Changes within setting	Long-term	Negligible	Minor adverse	Not significant	
Grade II* listed Former Guard House Structure 2.20	High	Changes within setting	Long-term	Negligible	Minor adverse	Not significant	
Grade II listed Former Captain Superintendent's Office Structure 2.21	High	Changes within setting	Long-term	Negligible	Minor adverse	Not significant	
Grade II* listed Former Captain Superintendent's House	High	Changes within setting	Long-term	Low	Minor adverse	Not significant	

Receptor	Sensitivity of receptor	Description of impact	Short- / medium- / long-term	Magnitude of impact	Significance of effect	Significant / Not significant	Notes
Structure 2.3							
Grade II* listed Long Stable Range to south of Former Captain Superintendent's House	High	Changes within setting	Long-term	Low	Minor adverse	Not significant	
Structure 2.4							
Grade II* listed Piers and Lodges and Dockyard Gates	High	Changes within setting	Long-term	Negligible	Minor adverse	Not significant	
Structure 2.2							
Grade II* listed No. 1 The Terrace	High	Changes within setting	Long-term	Negligible	Minor adverse	Not significant	
Structure 2.6							
Grade II* listed Nos. 2 and 3 The Terrace	High	Changes within setting	Long-term	Negligible	Minor adverse	Not significant	
Structure 2.7							
Grade II listed Nos. 4 and 5 The Terrace	High	Changes within setting	Long-term	Negligible	Minor adverse	Not significant	
Structure 3.1							
Grade II listed Coach-house to rear of Nos. 1 and 2 The Terrace	Medium	No changes within setting	Long-term	No change	No change	Not significant	
Structure 2.8							
Grade II listed Coach-house to rear of No. 3 The Terrace	Medium	No changes within setting	Long-term	No change	No change	Not significant	
Structure 2.9							
Grade II listed Garden Walls to	Medium	No changes within setting	Long-term	No change	No change	Not significant	

Receptor	Sensitivity of receptor	Description of impact	Short- / medium- / long-term	Magnitude of impact	Significance of effect	Significant / Not significant	Notes
rear of Nos. 1, 2 and 3 The Terrace Structure 2.10							
Former Dockyard Chapel Structure 2.11	High	Changes within setting	Long-term	Negligible	Minor adverse	Not significant	
Grade II listed No 1 Hangar and Annexes Structure 4.1	Medium	Changes within setting	Long-term	Low	Minor adverse	Not significant	
Grade II listed No 2 Hangar and Annexes Structure 4.2	Medium	Changes within setting	Long-term	Low	Minor adverse	Not significant	
Grade II* listed and Scheduled South-West Martello Tower Structure 2.24	High	Changes within setting	Long-term	Low	Minor adverse	Not significant	
Grade II* listed North-East Martello Tower Structure 2.25	High	Changes within setting	Long-term	Negligible	Minor adverse	Not significant	
Grade II* listed and Scheduled Defensible Barracks Structure 2.26	High	Changes within setting	Long-term	Low	Minor adverse	Not significant	
Scheduled Bomb Store Structure 4.11	High	Changes within setting	Long-term	Low	Minor adverse	Not significant	
Scheduled Bomb Store Structure 4.12	High	Changes within setting	Long-term	Low	Minor adverse	Not significant	

Receptor	Sensitivity of receptor	Description of impact	Short- / medium- / long-term	Magnitude of impact	Significance of effect	Significant / Not significant	Notes
Grade II listed Church of St Tudwal at Llanstadwell	Medium	Changes within setting	Long-term	Low	Minor adverse	Not significant	
Grade II listed and Scheduled Scoveston Fort	High	Changes within setting	Long-term	Negligible	Minor adverse	Not significant	
Scheduled American War of Independence Redan at Neyland	High	Changes within setting	Long-term	Negligible	Minor adverse	Not significant	
Pembroke Dock Conservation Area	High	Physical loss of historic structures, change to character and appearance	Long-term	Low	Minor adverse	Not significant	
Operational phase							
Grade II* listed graving dock Structure 2.17	High	Infilled with new building constructed over.	Permanent	Medium	Major adverse	Significant	Reversible
Grade II listed timber pond Structure 2.14	High	Infilled with new building constructed over.	Permanent	Medium	Major adverse	Significant	Reversible
Grade II listed Building Slip No. 1 Structure 2.15	High	Partial removal, change within setting.	Permanent	Medium	Moderate adverse	Significant	
Grade II listed Building Slip No. 2 Structure 2.16	High	Partial removal, change within setting.	Permanent	Medium	Moderate adverse	Significant	
Enclosing wall to west of Former Captain	High	Partial removal, change within setting.	Permanent	Medium	Moderate adverse	Significant	

Receptor	Sensitivity of receptor	Description of impact	Short- / medium- / long-term	Magnitude of impact	Significance of effect	Significant / Not significant	Notes
Superintendent's House Structure 2.5							
Grade II listed Former Foremen's Office Structure 2.23	High	Restored and renovated, but substantial changes within setting.	Permanent	Negligible	Minor adverse	Not significant	
Grade II listed Dockyard Walls Structure 2.1	High	Substantial changes within setting.	Permanent	Medium	Moderate adverse	Significant	
Grade I listed Paterchurch Tower Structure 1.1	High	Changes within setting.	Permanent	Low	Minor adverse	Not significant	
Grade II listed Pater Fort South West and West Walls Structure 1.2	High	Changes within setting.	Permanent	Low	Minor adverse	Not significant	
Grade II listed Carr Jetty Structure 3.3	High	Changes within setting.	Permanent	Low	Minor adverse	Not significant	
Grade II listed Former Oakum Store Structure 2.22	High	Changes within setting.	Permanent	Low	Minor adverse	Not significant	
Grade II listed Western Camber Structure 2.18	High	Changes within setting.	Permanent	Low	Minor adverse	Not significant	
Grade II listed Building Slip No. 4 Structure 2.19	High	Changes within setting.	Permanent	Low	Minor adverse	Not significant	

Receptor	Sensitivity of receptor	Description of impact	Short- / medium- / long-term	Magnitude of impact	Significance of effect	Significant / Not significant	Notes
Grade II* listed The Old Storehouse Structure 2.12	High	Changes within setting	Permanent	Negligible	Minor adverse	Not significant	
Grade II listed Sunderland House Structure 2.13	High	Changes within setting	Permanent	Negligible	Minor adverse	Not significant	
Grade II* listed Former Guard House Structure 2.20	High	Changes within setting	Permanent	Negligible	Minor adverse	Not significant	
Grade II listed Former Captain Superintendent's Office Structure 2.21	High	Changes within setting	Permanent	Negligible	Minor adverse	Not significant	
Grade II* listed Former Captain Superintendent's House Structure 2.3	High	Changes within setting	Permanent	Low	Minor adverse	Not significant	
Grade II* listed Long Stable Range to south of Former Captain Superintendent's House Structure 2.4	High	Changes within setting	Permanent	Low	Minor adverse	Not significant	
Grade II* listed Piers and Lodges and Dockyard Gates Structure 2.2	High	Changes within setting	Permanent	Negligible	Minor adverse	Not significant	
Grade II* listed No. 1 The Terrace	High	Changes within setting	Permanent	Negligible	Minor adverse	Not significant	

Receptor	Sensitivity of receptor	Description of impact	Short- / medium- / long-term	Magnitude of impact	Significance of effect	Significant / Not significant	Notes
Structure 2.6							
Grade II* listed Nos. 2 and 3 The Terrace	High	Changes within setting	Permanent	Negligible	Minor adverse	Not significant	
Structure 2.7							
Grade II listed Nos. 4 and 5 The Terrace	High	Changes within setting	Permanent	Negligible	Minor adverse	Not significant	
Structure 3.1							
Grade II listed Coach-house to rear of Nos. 1 and 2 The Terrace	Medium	No changes within setting	Permanent	No change	No change	Not significant	
Structure 2.8							
Grade II listed Coach-house to rear of No. 3 The Terrace	Medium	No changes within setting	Permanent	No change	No change	Not significant	
Structure 2.9							
Grade II listed Garden Walls to rear of Nos. 1, 2 and 3 The Terrace	Medium	No changes within setting	Permanent	No change	No change	Not significant	
Structure 2.10							
Former Dockyard Chapel	High	Changes within setting	Permanent	Negligible	Minor adverse	Not significant	
Structure 2.11							
Grade II listed No 1 Hangar and Annexes	Medium	Changes within setting	Permanent	Low	Minor adverse	Not significant	
Structure 4.1							
Grade II listed No 2 Hangar and Annexes	Medium	Changes within setting	Permanent	Low	Minor adverse	Not significant	
Structure 4.2							

Receptor	Sensitivity of receptor	Description of impact	Short- / medium- / long-term	Magnitude of impact	Significance of effect	Significant / Not significant	Notes
Grade II* listed and Scheduled South-West Martello Tower Structure 2.24	High	Changes within setting	Permanent	Low	Minor adverse	Not significant	
Grade II* listed North-East Martello Tower Structure 2.25	High	Changes within setting	Permanent	Negligible	Minor adverse	Not significant	
Grade II* listed and Scheduled Defensible Barracks Structure 2.26	High	Changes within setting	Permanent	Low	Minor adverse	Not significant	
Scheduled Bomb Store Structure 4.11	High	Changes within setting	Permanent	Low	Minor adverse	Not significant	
Scheduled Bomb Store Structure 4.12	High	Changes within setting	Permanent	Low	Minor adverse	Not significant	
Grade II listed Church of St Tudwal at Llanstadwell	Medium	Changes within setting	Permanent	Low	Minor adverse	Not significant	
Grade II listed and Scheduled Scoveston Fort	High	Changes within setting	Permanent	Negligible	Minor adverse	Not significant	
Scheduled American War of Independence Redan at Neyland	High	Changes within setting	Permanent	Negligible	Minor adverse	Not significant	
Pembroke Dock Conservation Area	High	Physical loss of historic structures, change to character and appearance	Permanent	Low	Minor adverse	Not significant	

