

9 Cultural Heritage

9.1 Introduction

- 9.1.1 This chapter presents an assessment of the potential effects of the proposed development on heritage assets.
- 9.1.2 For archaeology a study area of 1km was used to identify non-designated archaeological assets around the application site (centred on National Grid Reference (NGR) SX 4460 5750). A 5km study area around the same NGR was used to identify statutorily designated archaeological assets which may have their setting or value impacted upon by the proposed development.
- 9.1.3 For built heritage all designated and non designated built heritage assets within approximately 1km of the site were included. Any more significant assets, including Grade I and II* structures that were located within the Zone of Visual Influence (ZVI) (see Figure 8.12.3 accompanying the landscape and visual impact assessment as well as Figure 9.2) were also included.
- 9.1.4 For historic landscape, all Registered Parks and Gardens located within the ZVI were included.
- 9.1.5 This approach reflects the relative significance of the assets and their sensitivity to change, in accordance with current planning policy (Planning Policy Statement (PPS) 5 Policy HE9).
- 9.1.6 The aims of the assessment are:
- To identify known archaeological sites and built heritage receptors within the study area;
 - To assess the likely survival and significance of archaeological deposits;
 - To assess the potential impact of the development upon archaeological deposits;
 - To assess the impact that services and former intrusive activities may have had on potential archaeological deposits; and
 - To propose appropriate mitigation measures to avoid, reduce or remedy any potential adverse effects identified.
- 9.1.7 This ES chapter is supported by Appendix 9.1: Cultural Heritage Baseline Assessment. Appendix 9.1 presents a full and detailed archaeological and historical baseline with the findings summarised in this chapter.

9.2 Relevant Legislation and Policy

- 9.2.1 The following legislation and policy are relevant to this assessment:
- The Ancient Monuments and Archaeological Areas Act 1979.
 - The Planning (Listed Buildings and Conservation Areas) Act 1990.
 - PPS 5 - Planning for the Historic Environment (DCLG 2010).
 - Plymouth City Council Local Development Framework Core Strategy.
 - 'The Setting of Heritage Assets: English Heritage Guidance' Draft Document (English Heritage 2010).
 - Historic Environment Planning Practice Guide (English Heritage 2010).

9.2.2 Further detail can be found in Appendix 9.1.

9.3 Assessment Methodology

Information Sources

9.3.1 In order to establish a baseline of evidence a variety of sources were consulted for information on statutorily designated sites (Scheduled Monuments and Listed Buildings) and all other non-statutory heritage assets including:

- Conservation Areas;
- Registered Parks and Gardens;
- Registered Battlefields;
- World Heritage Sites;
- locally listed buildings; and
- findspots, sites and monuments.

9.3.2 For the statutory data the search area was 5km from the site centre. This distance took into account the height of the chimney for the proposed development and allowed the identification of assets which could potentially be impacted upon through visual intrusion, interruption of a designed view or landscape, or have an effect on their setting. Due to the large number of listed structures within this study area only structures within 1km of the site and more significant structures within the ZVI were assessed with regards to Built Heritage.

9.3.3 For the non-statutory searches of the Plymouth City Council Historic Environment Record (PHER), a smaller search area of 1km from the site boundary was used. This distance was adopted to ensure that only relevant information was considered and only those sites which had the potential to be impacted upon were considered in the baseline assessment.

9.3.4 Sources consulted included:

- National Monuments Record (NMR);
- PHER; and
- Plymouth and West Devon Record Office Archives.

9.3.5 A site walkover was undertaken by both an Archaeological Consultant and a Built Heritage Consultant on 19th – 20th October 2010 to visually assess the site and inform the baseline. The objectives of this survey were to identify any further undesignated archaeological sites and/or areas of previous ground disturbance, further undesignated historic buildings and structures, previously unrecorded historic landscape features as well as to provide details of site landform and setting.

9.3.6 A full inventory of all the heritage assets is included within the Cultural Heritage Baseline Assessment in Appendix 9.1.

Baseline Assessment

9.3.7 This baseline aims to identify heritage assets that may be affected indirectly or directly as a result of the proposed development. Initially, all designated heritage assets were identified within 5km.

The ZVI was then used to identify which assets would not be visible from the site. The remaining visible sites were then described in the baseline assessment and are assessed below.

9.3.8 The assessment of the heritage resource is presented in tabular form, listing cultural heritage assets or constraints, their relative value/significance (in accordance with Table 9.1) and the magnitude of change upon them (in accordance with Table 9.2). The resultant significance of effects is based on a combination of the magnitude of change brought about by the impact and the value/significance of the resource (see Table 9.3).

9.3.9 For the purpose of the assessment, the heritage resource comprises:

- Archaeology;
- Historic Buildings; and
- Historic Landscape.

9.3.10 The magnitude of impact (taking into account any mitigation measures) is assessed without reference to the value/significance of the feature.

Value/Significance of Assets

9.3.11 Value/significance is judged upon statutory and non-statutory designations, architectural and historic significance and contribution to local character. English Heritage has outlined a number of values which contribute to an asset's overall value/significance. These include evidential, historical, aesthetic and communal value. Non-designated structures may exhibit equivalent values to those which have been granted statutory protection. This has been reflected in the value/significance rating given. Taking these criteria into account, each identified feature has been assigned a value/significance rating in accordance with a five-point scale (See Table 9.1).

9.3.12 The historic landscape section should be read in conjunction with the landscape and visual impact assessment (ES Chapter 8) as many of the elements will be similar to both assessments. The combination of elements of historic landscape features and the modern landscape help to identify historic landscape character areas in the study area. These reflect the changing historic landscape and the degree of modernisation that it has undergone. Some landscapes contain a large number of elements such as ridge and furrow, earthworks, historic tracks, roads and streams, which are respected and reflected by early enclosure hedges. Other landscapes have been so modernised by the straightening or removal of hedges, culverting and dyking of streams, removal or straightening of tracks and roads that they contain little reflection or fossilisation of previous historic land use and historic landscape features. Similarly, in more urban landscapes and townscapes, the historic landscape is characterised by the survival or obliteration of historic street patterns, road systems and areas of housing.

9.3.13 At present there are no set criteria for the assessment of the historic landscape. Local character areas as identified from various historic landscape characterisations that have taken place within the study area have been assigned a level of importance, on a five-point scale (see Table 9.1). This is to provide an indication of their relative value in terms of their current national or regional designation, historic integrity (condition and level of modern intrusion), historic diversity (or time depth), and importance locally for amenity or cultural associations. This grading provides a basis for the environmental impact assessment and the assessment of the significance of any changes to the local historic character that the proposed development may introduce. The impact assessment has then been carried out at the character area level to determine the magnitude of impact that the proposed development could introduce.

Table 9.1: Factors for Assessing the Value/Significance of Assets

Factors for Assessing the Value/Significance of Historic Assets	
Very High	Remains of inscribed international importance, such as World Heritage Sites Other buildings or sites of recognised international importance. Grade I and Grade II* listed buildings Scheduled Monuments Undesignated assets of schedulable quality and importance Historic landscapes of international sensitivity, whether designated or not Extremely well preserved historic landscapes with exceptional coherence, time-depth or other critical factor(s) Designated historic landscapes of outstanding interest
High	Grade II listed buildings Conservation areas of exceptional quality Other assets that can be shown to have exceptional or particularly important qualities in their fabric or historical association Assets that can contribute significantly to acknowledged international or national research objectives Undesignated landscapes of outstanding interest Undesignated landscapes of high quality and importance, and of demonstrable national sensitivity Well preserved historic landscapes, exhibiting considerable coherence, time-depth or other critical factor(s)
Moderate	Historic buildings that are of special interest and can be shown to have important qualities in their fabric or historical association Conservation areas Historic Townscapes with historic integrity Undesignated assets that contribute to regional research objectives Undesignated assets not of schedulable quality but with good survival and rare in the region Designated special historic landscapes that would justify special historic landscape designation, landscapes of regional sensitivity Averagely well-preserved historic landscapes with reasonable coherence, time-depth or other critical factor(s)
Low	Undesignated assets of local importance and/ or modest quality Assets compromised by poor preservation and/or survival or contextual associations Assets of limited value, but with the potential to contribute to local research objectives Robust undesignated historic landscapes Historic landscapes with specific and substantial importance to local interest groups, but with limited sensitivity Historic landscapes whose sensitivity is limited by poor preservation and/or survival of contextual associations Landscapes with little or no significant historical interest

Factors for Assessing the Value/Significance of Historic Assets	
Not of significant value	Buildings of no architectural or historical merit Buildings of an intrusive character

Impact Magnitude

- 9.3.14 Having identified the value/significance of the heritage assets, the next stage is to assess the level or magnitude of the impact from the development. Impacts can be considered in terms of direct, indirect and cumulative impacts. The sources of impact may arise during construction, operation and/ or decommissioning, and can be characterised in terms of timing, scale, duration, reversibility and the likelihood of the impact occurring. All have been considered in this assessment.
- 9.3.15 The assessment of impact includes the consideration of an asset's setting. This varies from case to case and cannot be generically defined. A full assessment of setting is provided in the Baseline Assessment (Appendix 9.1).
- 9.3.16 The magnitude of an impact can be judged on a five-point scale (see Table 9.2). The impact score is arrived at without reference to the value/significance of the feature and the impact is assessed taking into account any proposed mitigation. Mitigation is used to reduce or compensate for any adverse effects or to enhance positive effects. Assessing the magnitude of impacts after mitigation allows a more balanced and realistic significance of effect to be determined.

Table 9.2: Factors for Assessing the Magnitude of Impact

Factors in the Assessment of Magnitude of Impacts	
High	Change to key historic elements, such that the resource is totally altered Total change to setting
Medium	Change to many key historic elements, such that the resource is significantly modified Changes to the setting of an asset, such that it is significantly modified
Low	Change to key historic elements, such that the asset is slightly different Change to setting of an asset, such that it is noticeably changed
Minimal Change	Slight changes to historic elements or setting that hardly affect it
No change	No change to fabric or setting

Significance of Effect

9.3.17 Once the value/significance of the assets and the magnitude of the impact have been established, the residual 'significance of effect' (in EIA parlance) can be established. This takes into account all of the factors discussed to establish a balanced level of overall effect (see Table 9.3).

Table 9.3: Matrix for Establishing Significance of Effects

Value/ significance of receptor	Magnitude of impact				
	High	Medium	Low	Minimal	No change
Very high	Major	Major	Moderate	Minor	No significant effect
High	Major	Major	Moderate	Minor	No significant effect
Moderate	Major	Moderate	Minor	Minor	No significant effect
Low	Moderate	Minor	Minor	Minor	No significant effect
Not of significant value	No significant effect	No significant effect	No significant effect	No significant effect	No significant effect

9.4 Baseline Conditions

Archaeological Assets

- 9.4.1 A full and detailed archaeological and historical baseline, including historical map regression, can be found in Appendix 9.1 and Figures 9.6 to 9.10.
- 9.4.2 Within 1km of the site 20 undesignated assets were identified, including one within the site boundary. These are shown on Figure 9.1.
- 9.4.3 As shown on Figure 9.2, a study area of 5km radius around the site identified 27 Scheduled Monuments. Of these, four Scheduled Monuments were evaluated based on their location within the ZVI. The remaining assets were discounted as they would not be impacted by the proposed development.
- 9.4.4 Throughout the sections below the numbers in bold relate to the assets which are listed in Table 9.4 along with their assessed value.

Undesignated Assets

Prehistoric (30,000 – 43AD)

- 9.4.5 The original creek level is now buried by an uneven layer of made ground between 7-11m in height which is used as a road access and car park. Beneath the made ground remains a 3-4m thick layer of alluvium (**20**) which has a potential to preserve unknown archaeological and/or palaeo-environmental deposits.

Roman (43AD – 410)

- 9.4.6 There is some evidence for Roman activity within 1km of the site though not necessarily enough to indicate actual settlement. A Roman brass coin (1) of Claudius (AD 41-54) was found during excavations for a house at Old Walls, St Budeaux. Another three coins (6), one dated to AD 100-117, were found during the digging of a pit at Camel's Head school. A refuse dump (7) thought to date to the Roman period and consisting of cockle, oyster and whelk shells was observed in a sewer in Barne Road. A Greek coin (18) dating to the period of the early Roman occupation of Britain and now held at the British Museum is reported to have been discovered in St Budeaux in 1965.

Early Medieval (410 – 1066)

- 9.4.7 Documentary evidence shows the settlement of St Budeaux was established in the early medieval period. The only record for the early-medieval period is that of a sundial (8) standing in the grounds of St Budeaux parish church. It is transcribed with the motto *ex hoc memento pendet aeternitas* (eternity is hinged upon this moment).

Medieval (1066 – 1540)

- 9.4.8 There is one record for a likely site of a medieval manor located in Kings Tamerton. The manor is recorded in Domesday as Tanbretona and originally part of the ancient crown lordship of Walkhampton.

Post-medieval (1540 – 1750)

- 9.4.9 There are three records for the post-medieval period. The first two detail the site of English civil war military earthworks at St Budeaux churchyard (14 and 15) which had been originally fortified by the Royalists before being taken by Parliamentarians in December 1645.
- 9.4.10 An Elizabeth I silver sixpence dating to 1561 (19) is reported to have been dug up in St Budeaux in 1962, and is now held at the British Museum.

Early Modern (1750 – 1914)

- 9.4.11 The Cornwall Railway (9) extension to the Royal Albert Bridge was opened by 1858, and its extension into Cornwall by 1859. A county boundary stone of granite, and inscribed 'Devon' is located on Normandy Way (Old Saltash Road) and marks the boundary of the Cornish Patch in St Budeaux, before the county boundaries were changed in 1895.

Modern (1914 – present)

- 9.4.12 The sites of three Air Raid Posts (5, 11 and 12) are recorded on Wolsely Road, Percy Street and Weston Mill respectively.
- 9.4.13 Two railway lines are recorded, one in Pennycross parish (3) and one in St Budeaux parish (4).

Unknown

- 9.4.14 Three archaeological assets are recorded as being of unknown date. The first is the railway at Stoke Demerel (10) and will date to the early-modern or modern periods. The second is a milestone (16) that was identified on the 1933 6' OS map but is no longer shown on the 1972 edition. The last is that of an iron sword (17) that was dug up in the rear garden of a house on Fletemoor Road in St Budeaux in 1965.

Scheduled Monuments

9.4.15 Four Scheduled Monuments were identified within the ZVI:

- Mount Pleasant Redoubt (24).
- Battery at Wearde Quay (26).
- Civil War Breastwork, Inswork Point (42).
- The Ballast Pond, Torpoint (49).

9.4.16 Mount Pleasant Redoubt (24) is a square earthwork redoubt, proposed by Dixon and constructed in 1780. It was designed to hold a battery of guns in an advanced position forward of the defences of the Plymouth Dockyard (Dock Lines). It was located in a commanding position on high ground with 360 degree views across Plymouth. The redoubt overlooks the surrounding landscape and gives good views of the Tamar estuary and Hamoaze across the Royal Naval Dockyards. The land between the redoubt is extensively developed by modern buildings comprising housing estates, offices and buildings and industrial facilities connected with the dockyards.

9.4.17 The Battery at Wearde Quay (26) forms the remains of a Royalist Civil War battery (gun platform) located in Saltash on the Cornish side of the Tamar, and lies beside the lane that runs down to the quayside. During the Civil War (1642-1646), Plymouth was a Roundhead town and Saltash was severely damaged as Cromwell's troops tried to gain a foothold in Cornwall and the battery marks the remains of part of the town defences.

9.4.18 The Civil War Breastwork at Inswork Point (42) is another defensive structure that dates to this period. A breastwork was essentially an earthen bank used to provide cover for the soldiers behind it. Part of such a breastwork still survives at Inswork Point.

9.4.19 The Ballast Pond at Torpoint (49) was built by French prisoners of war in around 1783 to shelter the ballast barges within its walls. This ancient monument was recently restored and developed to offer boat owners secure berthing within the walls as shelter against the weather. The harbour is an ancient monument being only one of two to survive today.

Value of the Identified Archaeological Assets

9.4.20 The archaeological assets to be assessed are listed in Table 9.4 below along with their value/significance.

Table 9.4: Identified Archaeological Asset for Impact Assessment

Receptor No	Description	Designation	Value/Significance of Asset	Location within study area
1	Findspot of Roman coin	Undesignated	Low	Within 1km
2	Manor (King's Tamerton)	Undesignated	Low	Within 1km
3	Railway (Pennycross)	Undesignated	Low	Within 1km
4	Railway (St Budeaux)	Undesignated	Low	Within 1km
5	Air Raid Post (Wolsey Road)	Undesignated	Low	Within 1km
6	3 Roman coins	Undesignated	Low	Within 1km

Receptor No	Description	Designation	Value/Significance of Asset	Location within study area
7	Refuse dump	Undesignated	Low	Within 1km
8	Sundial	Undesignated	Low	Within 1km
9	Railway (Cornwall Extension)	Undesignated	Low	Within 1km
10	Railway (Stoke Demerel)	Undesignated	Low	Within 1km
11	Air Raid Post (Percy Street)	Undesignated	Low	Within 1km
12	Air Raid Post (Weston Mill)	Undesignated	Low	Within 1km
13	Boundary Stone	Undesignated	Low	Within 1km
14	Military earthwork	Undesignated	Low	Within 1km
15	Military earthwork	Undesignated	Low	Within 1km
16	Milestone	Undesignated	Low	Within 1km
17	Findspot of iron sword	Undesignated	Low	Within 1km
18	Greek coin	Undesignated	Low	Within 1km
19	Elizabeth I silver sixpence	Undesignated	Low	Within 1km
20	Alluvial layer underneath made ground at Weston Mill Lake	Undesignated	Low	Within 1km
24	Mount Pleasant Redoubt	Scheduled Monument	Very High	Within ZVI
26	Battery at Wearde Quay	Scheduled Monument	Very High	Within ZVI
42	Civil War Breastwork at Inswork Point	Scheduled Monument	Very High	Within ZVI
49	The Ballast Pond, Torpoint	Scheduled Monument	Very High	Within ZVI

Built Heritage Assets

9.4.21 A total of 28 built heritage assets were identified as being within the study area. This included 25 Grade II and one Grade II* Listed Structures within 1km of the site (see Figure 9.3) and two Grade II* structures within the wider ZVI (see Figure 9.4). A summary of these built heritage resources, including any designations and the determination of their value/significance is provided in Table 9.5. A full discussion of the assets is provided in the accompanying Cultural Heritage Baseline Assessment (Appendix 9.1).

Table 9.5: Summary of Built Heritage Assets identified within the Study Area

SW Ref.	Name	Designation	Description	Value/Significance of Asset	Location within study area
B1	Building 124 (Mixing House)	Grade II	Gunpowder mixing house, later store, now office. 1804.	High	Within 1km
B2	HMS Drake St Nicholas Road Exmouth Block	Grade II	Large barrack, one of 3 similar blocks. 1901, Superintendent Engineer Lt-Col P Smith, RE.	High	Within 1km
B3	HMS Drake St Nicholas Road Grenville Block	Grade II	Large barrack, one of 3 similar blocks. 1901, Superintendent Engineer Lt-Col P Smith, RE.	High	Within 1km
B4	HMS Drake St Nicholas Road Raleigh Block.	Grade II	Large barrack, one of 3 similar blocks. 1901, Superintendent Engineer Lt-Col P Smith, RE	High	Within 1km
B5	HMS Drake drill shed.	Grade II	Drill shed constructed 1879-86.	High	Within 1km
B6	HMS Drake Theatre Complex.	Grade II	Barrack master's house and canteen, converted to theatre and associated recreation and service rooms, now partly a church	High	Within 1km
B7	HMS Drake Chapel Of St Nicholas.	Grade II	Chapel on naval base. 1905-7.	High	Within 1km
B8	HMS Drake Frobisher block right of main entrance.	Grade II	Commodore's office. 1879-86. Supervised by Engineer Lt-Colonel P Smith	High	Within 1km

B9	K6 telephone kiosk (plymouth 563568) outside gates to HMS Drake	Grade II	Telephone Kiosk designed in 1935 by Sir Giles Gilbert Scott. Constructed in Cast-iron, square in plan with domed roof.	High	Within 1km
B10	HMS Drake main gateway with gate pier arches, gates, flanking walls and railings.	Grade II	Entrance gates, gate-pier arches, flanking walls at main entrance, with railings extending approx 400m to S and SW.	High	Within 1km
B11	HMS Drake Howard Building.	Grade II	Officer's accommodation, now administration block. 1879-86, Superintendent Engineer Lt-Col P Smith	High	Within 1km
B12	HMS Drake clock tower south east of main gates and attached guardhouse.	Grade II	Clocktower and attached guardhouse on naval base. Completed 1896, under Superintendent Engineer Lt-Colonel P Smith	High	Within 1km
B13	HMS Drake, Drake House and attached walls and railings.	Grade II	Commodore's house, including attached porch on road frontage and flanking walls and iron railings.	High	Within 1km
B14	Royal Naval Arms.	Grade II	Public house. Late C19.	High	Within 1km
B15	HMS Drake terrace walls in front of the wardroom.	Grade II	Dressed Plymouth limestone walls with buttressed piers and turned balustrades surmounted by wrought-iron lamps.	High	Within 1km
B16	HMS Drake wardroom, officers quarters and mess.	Grade II*	Officer's quarters and wardroom blocks.	Very High	Within 1km
B17	HMS Drake Seymour Building.	Grade II	Officer's accommodation, now administration block on naval base.	High	Within 1km
B18	Block One (former soldiers' quarters) bull point barracks	Grade II	Soldiers' quarters within fort, now training centre	High	Within 1km

B19	Perimeter wall and attached guard house, magazine, stables, garage and canteen	Grade II	Perimeter wall, guard house, magazine, stables and canteen at infantry barracks, now training centre	High	Within 1km
B20	Block Two (former officers' quarters) bull point training centre	Grade II	Officers' quarters within fort, now training centre.	High	Within 1km
B21	Building 36 (Police Station), Royal Naval Ordnance Depot, Bull Point	Grade II	1894. Snecked limestone ashlar with slate roofs and ashlar stacks.	High	Within 1km
B22	Building 59 (Examining Room), Royal Naval Ordnance Depot, Bull Point	Grade II	Store, shell examining room by 1866	High	Within 1km
B23	Building 60 (Pattern and Class Room), Royal Naval Ordnance Depot, Bull Point	Grade II	Pattern and class rooms, later school and doubling as a church in the 1890s	High	Within 1km
B24	Building 63 (Empty Barrel and Case Store), Royal Naval Ordnance Depot, Bull Point	Grade II	Building 63 (Empty Barrel and Case Store), Royal Naval Ordnance Depot, Bull Point. Empty	High	Within 1km
B25	Building 65 (Shell Filling and Packing Workshop), Royal Naval Ordnance Depot, Bull Point	Grade II	Shell-filling workshop, later carpenters' shop, now store.	High	Within 1km
B26	Building 69 (Breaking-Up House), Royal Naval Ordnance Depot, Bull Point. Store	Grade II	Store. 1856/8. Limestone ashlar with rock-faced quoins, plinth and dressings, and slate roof	High	Within 1km
B27	Pavilion to Wearde Farmhouse	Grade II*	Mid C18. The last vestige of a great house burnt (about 1905), formerly one of a pair of flanking pavilions	Very High	Within ZVI
B28	Tor House and terrace walls and piers	Grade II*	House, with terrace walls and piers. Dated 1792.	Very High	Within ZVI

Historic Landscape

9.4.22 The site is situated in Landscape Character Area 151: South Devon, as identified by Natural England (www.naturalengland.org.uk). The key characteristics of this character area are:

- Rounded hills, without a strong pattern, separated by steep, intricate wooded valleys.
- Red and pink soils appear when parts of this mixed farming area is ploughed.
- Wooded rias with large expanses of tidal water and mudflats, extending far inland.
- Diverse and complex coastline with fine scenery and spectacular views, often looking deep inland along the rias.
- Sunken lanes link numerous farmsteads and hamlets, with cob, slate and thatched buildings.
- Wildflower rich, often treeless, Devon banks.
- Villages and towns generally in sheltered valley locations, with towns located at the heads of the rias.
- Distinctive landscape of ball clay extraction in the Bovey Basin.
- Cliffs and long, sandy beaches.

9.4.23 The site itself is located in an area that was, until the latter part of the 20th century, the tidal estuary of Weston Mill Lake. This would have been underwater at high tide, and at low tide would have been mud flats and saltmarsh and therefore uninhabitable. Map evidence shows that the Weston Mill Lake was used for the manufacture of salt at the end of the 19th century, though it is possible that a saltings was present in the estuary before this. The land surrounding the site was utilised entirely for agriculture until the expansion of the naval dockyard into St Budeaux parish in 1938. Weston Mill itself was reclaimed in the 1980's when it was used as a 'refuse tip'¹ before being filled over and incorporated by the expanding dockyard.

9.4.24 The site is located in an area defined by Devon County Council Historic Landscape Characterisation (www.devon.gov.uk) as a Modern Military Complex. The site is bordered to the north by a small area of land assigned as Modern Woodland with old field boundaries and to the north-east by Modern Rough Ground. Further to the east the broader landscape is detailed as Modern Settlement (i.e developed in the 20th century), comprising housing estates and road networks.

Registered Parks and Gardens

9.4.25 There are six RPGs within a 5km radius of the site boundary (see Figure 9.5). Of these, three RPGs were evaluated based on their location within the ZVI. The remaining three RPGs were discounted as they would not be impacted by the proposed development.

9.4.26 The three RPGs included in the assessment are described below and identified by a number in bold; their assessed value/significance is listed in Table 9.6.

9.4.27 Approximately 2.2km to the south of the site is Devonport Park (**21**) RPG (ID No.: 5174). Devonport Park is situated to the east of the southern area of Devonport dockyards. The park

¹ Known to have been used for construction and demolition waste rather than domestic waste.

has its origins in the mid-19th century and developed on land rented by the War Department and is grade II listed. An assessment from the northern boundary of the park (i.e. the park boundary facing towards the site) based on the existing topography coupled with treeline and built skyline shows that the RPG would largely be screened from the development.

9.4.28 Approximately 4km to the south of the site and across the Tamar estuary is Mount Edgcumbe (22) RPG (ID No.: 1030) which was first imparked in the mid-16th century and landscaped in the 18th and 19th centuries. Gardens and pleasure grounds were developed from the 18th century from the 17th century formal gardens. The site of the proposed development is partially visible from the RPG which is grade I listed.

9.4.29 The final RPG is Antony Park (23) (ID No.: 1638) which is situated approximately 1.8km west of the site across the Hamoaze and grade II* listed. The site visit has demonstrated that views toward the site will not be affected by the development as they are obscured by the promontory of Bull Point, the already existing industrial landscape of the dockyards surrounding Weston Mill Lake and the existing dense plantations within Antony Estate.

Value of the Identified Historic Landscape Assets

9.4.30 The historic landscape assets to be assessed are listed in Table 9.6 below along with their assessed value/significance.

Table 9.6: Summary of Historic Landscape Identified Within the Study Area

Receptor No	Description	Designation	Value/Significance of Asset
21	Devonport Park	RPG Grade II	High
22	Mount Edgcumbe Park	RPG Grade I	Very High
23	Antony Park	RPG Grade II*	Very High

9.5 Incorporated Mitigation

Archaeology

9.5.1 There will be no direct impacts on known archaeology in the study area. There is a very limited scope for direct impact on areas of potential archaeology. There is no mitigation required to be recommended for incorporation into the scheme.

Built Heritage and Historic Landscape

9.5.2 Due to the scale of the proposed structure there are limited mitigation measures that can be undertaken to reduce the impact on the identified historic structures and the historic landscape. However, comprehensive landscaping and planting will be implemented around the site.

9.6 Impact Assessment

Introduction

9.6.1 The proposed development is for the construction and operation of an Energy from Waste (EfW) Combined Heat and Power (CHP) facility. The facility will comprise the following principal elements:

- Tipping hall;
- Waste bunker hall;
- Bale store;
- Turbine / boiler house;
- Air pollution control system, including 95m high chimney;
- Bottom ash collection area;
- Air cooled condensers;
- Water treatment plant building;
- Central control room;
- Administration building;
- Workshop and stores building;
- Transformer compound for the export of electricity from the facility; and
- Emergency diesel generator enclosure; and
- Electricity cables and steam and condensate pipework for connection to the relevant networks.

9.6.2 In addition to these principal components, there will also be access roads and trafficked areas for operational purposes; replacement of two existing crossings of Weston Mill Stream with a new clear-span bridge; weighbridges and a gatehouse; drainage and connections to infrastructure; hard and soft landscaping, and an ecological mitigation area.

9.6.3 The impact assessment below considers the effect of the proposed development on cultural heritage features. It is not considered that the electricity cables and steam and condensate pipework will result in any impact on cultural heritage. The electricity cable linking the facility to the national grid will be undergrounded, in an area of the dockyard that has been subject to significant groundworks over a long period of time. Only a short section of new steam and condensate pipework close to the facility is required in order to link the facility to the existing dockyard steam network. Some of the existing steam and condensate pipework within the dockyard will be replaced and a detailed survey, to be carried out post planning, will determine whether these pipes are underground or overground. The cultural heritage impact assessment thus focuses on the potential impacts associated with the main building and associated structures.

Archaeology

Construction

- 9.6.4 The development will require the insertion of rotary bored piles on most foundations, however the proposed development will be situated on extensive depths of made ground, reclaimed from the sea. It is intended that the piles will be extended 7m into the slate bedrock and hence through the 3-4m alluvial layer (**20**) that lies directly above. There is a potential for this layer to contain archaeological and palaeo-environmental deposits. The magnitude of the impact is expected to be low.
- 9.6.5 The construction of the proposed development will also require cranes to assist in moving heavy materials. The cranes will have temporary setting impacts on archaeological assets, however any temporary setting impacts will be similar to those created by the chimney.
- 9.6.6 All other assets identified within the study area do not lie within the footprint of the development and will therefore not be impacted upon by the construction of the proposed development.

Operation

- 9.6.7 There will be limited setting impacts on archaeological assets but this is in keeping with the current built environment surrounding the proposed site. The views to and from the site from the assets would remain screened by the density of the urban landscape, the topography of the land, or, where views were identified, they were not a contributing factor to that asset's setting.
- 9.6.8 There will be some occasions where weather conditions are such that an intermittent water vapour plume from the chimney may create a temporary visual impact on the setting of surrounding archaeological features. This magnitude of the impact is considered to be low.

Decommissioning

- 9.6.9 No impacts either temporary or permanent are expected to affect the archaeological resource during the decommissioning phase of works.

Built Heritage

- 9.6.10 Of those 28 built heritage assets identified, it is concluded that 21 would not experience any construction or operation impacts from the implementation of the scheme. This is due to views to and from the site being screened by the density of the urban landscape, the topography of the land or, where views were identified, they were not a contributing factor to that asset's setting. These 21 assets are:

- HMS Drake drill shed (**B5**).
- HMS Drake Frobisher block right of main entrance (**B8**).
- K6 telephone kiosk (Plymouth 563568) outside gates to HMS Drake (**B9**).
- HMS Drake main gateway with gate pier arches, gates, flanking walls and railings (**B10**).
- HMS Drake Howard Building (**B11**).
- HMS Drake, Drake House and attached walls and railings (**B13**).
- Royal Naval Arms (**B14**).

- HMS Drake terrace walls in front of the wardroom (**B15**).
- HMS Drake wardroom, officers quarters and mess (**B16**).
- HMS Drake Seymour Building (**B17**).
- Block One (former soldiers' quarters) Bull Point barracks (**B18**).
- Perimeter wall and attached guard house, magazine, stables, garage and canteen (**B19**).
- Block Two (former officers' quarters) bull point training centre (**B20**).
- Building 36 (Police Station), Royal Naval Ordnance Depot, Bull Point (**B21**).
- Building 59 (Examining Room), Royal Naval Ordnance Depot, Bull Point (**B22**).
- Building 60 (Pattern and Class Room), Royal Naval Ordnance Depot, Bull Point (**B23**).
- Building 63 (Empty Barrel and Case Store), Royal Naval Ordnance Depot, Bull Point (**B24**).
- Building 65 (Shell Filling and Packing Workshop), Royal Naval Ordnance Depot, Bull Point (**B25**).
- Building 69 (Breaking-Up House), Royal Naval Ordnance Depot, Bull Point. Store (**B26**).
- Pavilion to Wearde Farmhouse (**B27**).
- Tor House and terrace walls and piers (**B28**).

Construction

- 9.6.11 During the construction phase of the proposed development there will be no physical impact on any of the built heritage assets identified. There will be temporary setting impacts resulting from the construction works, including the construction cranes, the construction compound and construction vehicles which will operate within the immediate vicinity of the development. The impact of this will be restricted to Building 124 (Mixing House) (**B1**) and the magnitude of this impact is considered to be low.

Operation

- 9.6.12 Operation of the scheme would not result in any physical impact on the built heritage resource. There would, however, be potential impacts on the setting of some of the built heritage assets arising from the presence of the proposed development and its operation. These impacts would be associated with potential visual intrusion on the setting of historic buildings.

Building 124 (Mixing House) (B1)

- 9.6.13 This structure is the closest to the site being located 290m to the west. The current conditions of the site do not enhance or complement the setting of the structure, although the lack of standing structures does allow for extensive views to the east. The proposed new structure will potentially detract from that view. The magnitude of the impact on the setting of this asset would be low.

HMS Drake St Nicholas Road Exmouth Block (B2), HMS Drake St Nicholas Road Grenville Block (B3) and HMS Drake St Nicholas Road Raleigh Block (B4)

- 9.6.14 Although not in the immediate vicinity of these buildings, the proposed development will be visible to and from them. The setting of these structures is essentially inward looking with each one addressing the other. The development of the EfW CHP facility will detract from views to the north of the surrounding hillside. The magnitude of the impact on the setting of these assets would be low.

HMS Drake Theatre Complex, Saltash Road (B6), HMS Drake Chapel of St Nicholas (B7) and HMS Drake Clock Tower South East of Main Gates and Attached Guardhouse (B12)

- 9.6.15 These assets are characterised by their immediate surroundings within the Dockyard complex. Although there will be limited views of the proposed development to and from these assets the magnitude of impact on the setting of these assets would be minimal.

Decommissioning

- 9.6.16 During the decommissioning phase of the proposed development there will be no physical impact on any of the built heritage assets. There will be temporary setting impacts resulting from the decommissioning works, akin to those expected during construction. The impact of this phase will be restricted to Building 124 (Mixing House) (B1) and its magnitude is considered to be low.

Historic Landscape

Construction

- 9.6.17 None of the RPGs identified within the ZVI study area lie within the footprint of the development and will therefore not be impacted upon by the construction of the proposed development.

Operation

- 9.6.18 The intermittent water vapour plume from the chimney of the facility may create a temporary visual effect on the setting of RPGs. The magnitude of this impact is expected to be minimal.
- 9.6.19 There may be a limited visual impact to the setting but this is in keeping with the current built environment between the RPGs and the site of the proposed development. The views of the site to and from the RPGs would remain screened by the density of the urban landscape, the topography of the land or, where views were identified, they were not a contributing factor to that asset's setting.

Decommissioning

- 9.6.20 No impacts either temporary or permanent are expected to affect the historic landscape resource during the decommissioning phase of works.

9.7 Additional Mitigation

- 9.7.1 The impact assessment has identified that archaeological feature **20**, the alluvial layer underneath made ground, which has the potential to contain archaeological and palaeo-environmental deposits, would be affected by the construction of the proposed development. The nature of the asset at depth means that it will be extremely difficult to conduct any further archaeological assessment. In addition, the low significance of the asset and the lack of useful data which could be retrieved from a borehole survey renders mitigation inappropriate and therefore no additional mitigation is proposed.

9.7.2 Since a comprehensive landscaping scheme is to be provided as part of the proposed development, no additional mitigation is proposed to reduce impacts on built heritage or historic landscape features.

9.8 Residual Effects

9.8.1 The significance of residual heritage effects of the proposed development, based on the assessment matrix in Table 9.3 is presented below and in Tables 9.7, 9.8 and 9.9 which follow.

Features of Very High Value

9.8.2 There will be a minimal impact on the Mount Pleasant Redoubt SAM (24), the Battery at Wearde Quay (26), the Civil War Breastwork at Inswork (42) and the Ballast Pond at Torpoint (49). The residual effects would be of **minor adverse significance**.

9.8.3 There will be a minimal impact on the two Registered Parks and Gardens of very high significance, Mount Edgcumbe Park (22) and Antony Park (23). The residual effects would be of **minor adverse significance**.

Features of High Value

9.8.4 There will be a minimal impact on the Registered Parks and Garden of Devonport Park (21). The residual effects would be of **minor adverse significance**.

9.8.5 The residual effects upon Building 124 (Mixing House) (B1), HMS Drake St Nicholas Road Exmouth Block (B2), HMS Drake St Nicholas Road Grenville Block (B3) and HMS Drake St Nicholas Road Raleigh Block (B4) would be of **moderate adverse significance**.

9.8.6 There would be residual effects of **minor adverse significance** on HMS Drake Theatre Complex, Saltash Road (B6), HMS Drake Chapel of St Nicholas (B7) and HMS Drake Clock Tower South East of Main Gates and Attached Guardhouse (B12).

Features of Moderate Value

9.8.7 There are no features considered to be of moderate importance.

Features of Low Value

9.8.8 There will be a low impact on the buried alluvium asset (20). The residual effect would be of **minor adverse significance**.

Table 9.7: Significance of Effects on Archaeology

Asset No.	Name	Value / significance of asset	Construction and Operational Impacts	Mitigation	Magnitude of Impact with Mitigation	Significance of Effect
1	Findspot of Roman coin	Low	There are no anticipated impacts	No mitigation required	No change	No significant effect
2	Manor	Low	There are no anticipated impacts	No mitigation required	No change	No significant effect
3	Railway in Pennycross Parish	Low	There are no anticipated impacts	No mitigation required	No change	No significant effect
4	Railway	Low	There are no anticipated impacts	No mitigation required	No change	No significant effect
5	Air Raid Post	Low	There are no anticipated impacts	No mitigation required	No change	No significant effect
6	Roman Coin Findspot	Low	There are no anticipated impacts	No mitigation required	No change	No significant effect
7	Midden	Low	There are no anticipated impacts	No mitigation required	No change	No significant effect
8	Sundial	Low	There are no anticipated impacts	No mitigation required	No change	No significant effect
9	Railway in Stoke Damerel Parish	Low	There are no anticipated impacts	No mitigation required	No change	No significant effect
10	Railway	Low	There are no anticipated impacts	No mitigation required	No change	No significant effect
11	Air Raid Post	Low	There are no anticipated impacts	No mitigation required	No change	No significant effect
12	Air Raid Post	Low	There are no anticipated impacts	No mitigation required	No change	No significant effect
13	Boundary Stone	Low	There are no anticipated impacts	No mitigation required	No change	No significant effect
14	Military Earthworks	Low	There are no anticipated impacts	No mitigation required	No change	No significant effect
15	Military Earthworks	Low	There are no anticipated impacts	No mitigation required	No change	No significant effect
16	Milestone	Low	There are no anticipated impacts	No mitigation required	No change	No significant effect
17	Findspot of iron sword	Low	There are no anticipated impacts	No mitigation required	No change	No significant effect
18	Coin Findspot	Low	There are no anticipated impacts	No mitigation required	No change	No significant effect

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Asset No.	Name	Value / significance of asset	Construction and Operational Impacts	Mitigation	Magnitude of Impact with Mitigation	Significance of Effect
19	Coin Findspot	Low	There are no anticipated impacts	No mitigation required	No change	No significant effect
20	Alluvium	Low	Piling during construction through alluvial layer. Permanent	No mitigation required	Low	Minor adverse
24	Mount Pleasant Redoubt	Very high	The Scheme will cause no direct physical change to the asset. There will be a limited visual impact to setting but is in keeping with the current built environment surrounding the proposed site.	No mitigation required	Minimal	Minor adverse
26	Battery at Wearde Quay	Very high	The Scheme will cause no direct physical change to the asset. There will be a limited visual impact to setting but is in keeping with the current built environment surrounding the proposed site.	No mitigation required	Minimal	Minor adverse
42	Civil War Breastwork at Inwork Point	Very high	The Scheme will cause no direct physical change to the asset. There will be a limited visual impact to setting but is in keeping with the current built environment surrounding the proposed site.	No mitigation required	Minimal	Minor adverse
49	The Ballast Pond, Torpoint	Very high	The Scheme will cause no direct physical change to the asset. There will be a limited visual impact to setting but is in keeping with the current built environment surrounding the proposed site.	No mitigation required	Minimal	Minor adverse

Table 9.8: Significance of Effects on Built Heritage

SW Ref.	Name	Value/significance of asset	Construction and Operational Impacts	Mitigation	Magnitude of Impact with Mitigation	Significance of Effect
B1	Building 124 (Mixing House),	High	Potential as a result of construction and setting impacts on completion of the scheme	Sensitive design of the site and planting used to soften impact	Low	Moderate adverse
B2	HMS Drake St Nicholas Road Exmouth Block	High	Operation will have a minor impact upon the setting of the structure	Sensitive design of the site and planting used to soften impact	Low	Moderate adverse
B3	HMS Drake St Nicholas Road Grenville Block	High	Operation will have a minor impact upon the setting of the structure	Sensitive design of the site and planting used to soften impact	Low	Moderate adverse
B4	HMS Drake St Nicholas Road Raleigh Block.	High	Operation will have a minor impact upon the setting of the structure	Sensitive design of the site and planting used to soften impact	Low	Moderate adverse
B5	HMS Drake drill shed.	High	None	None	No change	No significant effect
B6	HMS Drake Theatre Complex.	High	Structure will have limited visibility to and from the scheme	Sensitive design of the site and planting used to soften impact	Minimal	Minor adverse
B7	HMS Drake Chapel Of St Nicholas.	High	Structure will have limited visibility to and from the scheme	Sensitive design of the site and planting used to soften impact	Minimal	Minor adverse
B8	HMS Drake Frobisher block right of main entrance.	High	None	None	No change	No significant effect

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SW Ref.	Name	Value/significance of asset	Construction and Operational Impacts	Mitigation	Magnitude of Impact with Mitigation	Significance of Effect
B9	K6 telephone kiosk (plymouth 563568) outside gates to HMS Drake	High	None	None	No change	No significant effect
B10	HMS Drake main gateway with gate pier arches, gates, flanking walls and railings.	High	None	None	No change	No significant effect
B11	HMS Drake Howard Building.	High	None	None	No change	No significant effect
B12	HMS Drake clock tower south east of main gates and attached guardhouse.	High	Structure will have limited visibility to and from the scheme	Sensitive design of the site and planting used to soften impact	Minimal	Minor adverse
B13	HMS Drake, Drake House and attached walls and railings.	High	None	None	No change	No significant effect
B14	Royal Naval Arms.	High	None	None	No change	No significant effect
B15	HMS Drake terrace walls in front of the wardroom.	High	None	None	No change	No significant effect
B16	HMS Drake wardroom, officers quarters and mess.	Very high	None	None	No change	No significant effect
B17	HMS Drake Seymour Building.	High	None	None	No change	No significant effect

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SW Ref.	Name	Value/significance of asset	Construction and Operational Impacts	Mitigation	Magnitude of Impact with Mitigation	Significance of Effect
B18	Block One (former soldiers' quarters) bull point barracks	High	None	None	No change	No significant effect
B19	Perimeter wall and attached guard house, magazine, stables, garage and canteen	High	None	None	No change	No significant effect
B20	Block Two (former officers' quarters) bull point training centre	High	None	None	No change	No significant effect
B21	Building 36 (Police Station), Royal Naval Ordnance Depot, Bull Point.	High	None	None	No change	No significant effect
B22	Building 59 (Examining Room), Royal Naval Ordnance Depot, Bull Point.	High	None	None	No change	No significant effect
B23	Building 60 (Pattern and Class Room), Royal Naval Ordnance Depot, Bull Point	High	None	None	No change	No significant effect
B24	Building 63 (Empty Barrel and Case Store), Royal Naval Ordnance Depot, Bull Point	High	None	None	No change	No significant effect

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SW Ref.	Name	Value/significance of asset	Construction and Operational Impacts	Mitigation	Magnitude of Impact with Mitigation	Significance of Effect
B25	Building 65 (Shell Filling and Packing Workshop), Royal Naval Ordnance Depot, Bull Point	High	None	None	No change	No significant effect
B26	Building 69 (Breaking-Up House), Royal Naval Ordnance Depot, Bull Point. Store.	High	None	None	No change	No significant effect
B27	Pavilion to Wearde Farmhouse.	Very high	None	None	No change	No significant effect
B28	Tor House and terrace walls and piers	Very high	None	None	No change	No significant effect

Table 9.9: Significance of Effects on Historic Landscape

Asset No.	Name	Value/significance of asset	Construction and Operational Impacts	Mitigation	Magnitude of Impact with Mitigation	Significance of Effect
21	Devonport Park	High	The Scheme will cause no direct physical change to the asset. There will be a limited visual impact to setting but is in keeping with the current built environment surrounding the proposed site.	No mitigation required	Minimal	Minor adverse
22	Mount Edgcumbe Park	Very High	The Scheme will cause no direct physical change to the asset. There will be a limited visual impact to setting but is in keeping with the current built environment surrounding the proposed site.	No mitigation required	Minimal	Minor adverse
23	Antony Park	Very High	The Scheme will cause no direct physical change to the asset. There will be a limited visual impact to setting but is in keeping with the current built environment surrounding the proposed site.	No mitigation required	Minimal	Minor adverse

9.9 Conclusion

- 9.9.1 The assessment takes into account the value/significance of each heritage feature, and the likely impact (with appropriate mitigation) of the proposed development upon them, in order to arrive at a judgement of the significance of effects of the proposed development.
- 9.9.2 The proposed development site is well placed at the northern end of Devonport naval dockyard as it is partially screened by natural topography to the north and west and by the built environment to the east and south, including the railway embankment and viaduct, which will help to mitigate any setting issues.
- 9.9.3 Furthermore, incorporated within the proposed development is a comprehensive landscaping scheme which will minimise as far as possible effects on the setting of archaeological, built heritage and historic landscape features.
- 9.9.4 The construction of the proposed development has been assessed as having a minor effect on the potential archaeology and palaeo-environment deposits within the buried alluvial layer underneath the site.
- 9.9.5 The proposed development has been assessed as having a minor adverse effect on the setting of the following four Scheduled Monuments:
- Mount Pleasant Redoubt
 - Battery at Wearde Quay
 - Civil War Breastwork at Inswork
 - Ballast Pond at Torpoint
- 9.9.6 The proposed development has been assessed as having a minor adverse effect on the setting of the following three Registered Parks and Gardens:
- Devonport Park
 - Mount Edgcumbe Park
 - Antony Park
- 9.9.7 The proposed development has been assessed as having a moderate adverse effect on the setting of four Grade II Listed structures and a minor adverse effect on the setting of three Grade II Listed structures.
- 9.9.8 The proposed development will cause no direct physical change to these Scheduled Monuments, Registered Parks and Gardens, and Listed structures. There will be a limited visual impact to their setting but the proposed development is in keeping with the current built environment surrounding the site.

9.10 References

9.10.1 Refer to the Cultural Heritage Baseline Assessment (Appendix 9.1) for a list of references used.