

4 Land Use: The Site and Surrounding Area

4.1 Introduction

- 4.1.1 This chapter provides an introductory description of the site of the proposed development and the surrounding area. Full details of the site and surrounding areas as they relate to specific environmental disciplines can be found in the 'Baseline' sections of ES Chapters 7 to 18 (with subsequent impact assessments).

4.2 Site Location and General Characteristics

- 4.2.1 This section should be read in conjunction with Figures 4.1, 4.2, 4.3.1 and 4.3.2 which show the site location, land designations, and site photographs.
- 4.2.2 The site is located in the northern section of Her Majesty's Naval Base (HMNB), Devonport, Plymouth. It is in the ownership of the Ministry of Defence (MoD) and will be leased by the MoD to MVV for the EfW CHP facility for a period of 45 years if planning permission is granted. The site is in an industrial setting, with the operations of HMNB Devonport and other dockyard activities having been located on this part of the Tamar Estuary for many centuries.
- 4.2.3 The central part of the site on which the EfW CHP facility building will be constructed was until 2010 used by a firm called Ashcroft to process demolition rubble created from different construction projects throughout the naval base and dockyard. Some piles of rubble and skips remain on site and the MoD is in the process of disposing of some of these appropriately prior to making the site available for MVV. The ground surface predominantly comprises compacted rubble. British Geological Survey mapping indicates that the bedrock beneath the site comprises Upper Devonian Shales of the Saltash Formation, overlain by inter-tidal alluvial sediments, with made ground fill material above this. From historical site information it is known that the site comprises reclaimed ground where construction waste was used as the fill material. A Ground Investigation has been undertaken to characterise ground conditions and contamination. The dominant habitats of this central part of the site comprise bare ground, continuous scrub, rank semi-improved neutral grassland, ephemeral/short perennials, tall ruderals, semi-natural broadleaved woodland, a road and aggregate spoil. This part of the site is located within Flood Zone 1 so is therefore not at significant risk of coastal or fluvial (river) flooding. The Groundwater Vulnerability Map indicates that the Upper Devonian Slates beneath the site are classed as a Minor Aquifer. As shown on Figure 4.3.1, this area of land, that is required for the EfW CHP building, air-cooled condensers, workshop and stores building, car parking and other associated infrastructure measures approximately 2.47 ha in area.
- 4.2.4 The site also includes a large portion of Blackies Wood, a designated Biodiversity Network Feature and Local Greenscape area. As shown on Figure 4.3.1, this area of land, that will be subject to landscape and ecological management, measures approximately 4.15 ha in area.
- 4.2.5 At the south-western end of the site is a raised area of land, also comprising made ground, which is known colloquially by the MoD as 'Table Top Mountain'. It is used by the MoD for storage of equipment, but will be used by MVV as the construction compound. As shown on Figure 4.3.1, this area of land measures approximately 1.72 ha in area. There is a general shortage of external storage space within HMNB Devonport and this area is required long term by the MoD for storage purposes.

- 4.2.6 Access to the site is from the Camel's Head junction of Weston Mill Drive and Wolseley Road, through parts of HMNB Devonport. A tarmac access road crosses Weston Mill Creek (culverted crossings) at two points to access the central part of the site. A small section of the access road is located within Flood Zone 2. As shown on Figure 4.3.1, this area of land, that is required for the new site access, weighbridge, new bridge across Weston Mill Stream and sculpture measures approximately 1.74 hectares (ha) in area.
- 4.2.7 There is also an area of land to the west of Table Top Mountain that is required to construct the Bull Point Access Road. As shown on Figure 4.3.1, this land measures approximately 0.29 ha in area.
- 4.2.8 Electrical power from the facility will be exported via a direct connection into the Devonport Dockyard electrical distribution system by means of a connection to the North Intake 33/11 kV substation, located within Goschen Yard. The route of the new cable required between the EfW CHP facility and the North Intake substation is shown on Figure 6.6. The total distance is approximately 1,180 m. The majority of this distance falls within land owned by the MoD, except where new cables will be required to pass beneath Saltash Road through some existing but redundant pipes which will be re-used as ducts, to access the North Intake substation.
- 4.2.9 Electrical power during construction will be obtained via a direct connection into an existing MOD 11kV substation at Bull Point. The route of the new cable required is shown on Figure 6.6.
- 4.2.10 New steam and condensate pipework will be installed to connect to the existing system; some of the existing pipework will need to be replaced. A drawing showing the route of the pipe connections and replacement pipework can be seen at Figure 6.7. The total distance is approximately 1,560 m, all of which falls within land owned by the MoD.

4.3 Surrounding Area

- 4.3.1 To the north and north-west of the site lies the residential area of Barne Barton. In proximity are properties on Talbot Gardens, Savage Road and Poole Park Road. This area of housing is at a higher elevation than the site. A number of these properties are flats arranged over several storeys.
- 4.3.2 There are further residential properties to the east, north east and south east of the site at Weston Mill, St. Budeaux, King's Tamerton, Camel's Head, North Prospect and Keyham, as well as further afield in Saltash to the north-west, Wilcove to the west and Torpoint to the south-west.
- 4.3.3 Weston Mill Community Primary School is located at Camel's Head to the east.
- 4.3.4 To the west of Table Top Mountain is a car park, part of which is shortly to be the subject of a planning application for the Devonport Landing Craft Collocation Project (DLCCP).
- 4.3.5 To the south of Table Top Mountain lies the tidal Weston Mill Lake.
- 4.3.6 Located to the south east of the site is the Devonport Distribution Facility (DDF) which stands approximately 8m high and is bordered to the north and south by large areas of tarmac used as loading bays and service yards.
- 4.3.7 The Weston Mill Viaduct is located to the east of the main part of the site, which forms a bridge carrying the railway line over the nearby entrance to HMNB Devonport.

- 4.3.8 The site is located at the western end of Weston Mill Drive. Weston Mill Drive is a Principal Road and provides the highway link between HMNB Devonport / Devonport dockyard and the trunk road network (A38). The A38 is situated approximately 1.5km to the northeast of the site entrance.
- 4.3.9 The site is approximately 500m east of the Plymouth Sound and Estuaries Special Area of Conservation (SAC) at its closest point. The Tamar Estuaries Complex Special Protection Area (SPA) and Tamar-Tavy estuary Site of Special Scientific Interest (SSSI) are located approximately 2km to the north-west of the site.
- 4.3.10 The eastern edge of the Tamar Valley Area of Outstanding Natural Beauty (AONB) lies approximately 1.3km from the western boundary of the site, across the River Tamar. The Tamar Valley is designated as an AONB since it is a rare valley and water landscape of high visual quality with artistic and public appeal, with unique wildlife resources and heritage.
- 4.3.11 The Grade II Listed 'Mixing House' is located approximately 300m to the west of the site. A Scheduled Ancient Monument (SAM) is located at Bull Point, 1km to the northwest of the site. There are a number of Grade II Listed Buildings within the HMS Drake Fleet Accommodation Centre complex to the south, on the southern side of Weston Mill Lake.

Potential Future Developments

Non-waste related developments

- 4.3.12 Other planned non-waste related developments within a reasonable proximity of the proposed EfW CHP facility have been identified through discussion with Plymouth City Council (PCC) officers. One of these developments has recently been granted planning permission, others are currently the subject of planning applications, some are the subject of pre-application discussions, and some are ideas for future proposals. It is necessary therefore to be mindful of the likelihood and timings of these developments taking place. The list of other developments considered is as follows:
- Help for Heroes project, which is comprised of two elements, a disability-compliant accommodation block to the West of Drake Main Gate and a rehabilitation centre with therapeutic pool to the East of the Wyvern Sports Centre. The planning application for the accommodation block was submitted in February 2011 and unanimously approved by the Council on 7 April 2011, with construction due to start in October 2011. Submission of the planning application for the rehabilitation centre was made in April 2011. All Help for Heroes construction is due to be complete in October 2012.
 - Devonport Landing Craft Co-location Project (DLCCP) planning application, to be located on land to the west of the site of the proposed EfW CHP Facility. The proposed scheme comprises a small marina, accommodation (offices and classrooms) housed within a new building in place of existing building W007, a new rock revetment at Wilson's Beach, as well as a new slipway, finger jetty, boat yard and new Engineering Facility at the western end of Weston Mill Lake. Capital dredging, and subsequent maintenance dredging, will be required at the locations of the proposed works. Wilson's Beach at the western end of Weston Mill Lake will be used more frequently for training purposes. The construction of the marina requires the existing 13 Wharf Pontoon arrangement to be reconfigured and will incorporate the recently constructed 14 Wharf Small Boat Facility. The engineering facility and boat yard will be arranged around the existing helipad safety zones and vehicle parking. Construction start is proposed for summer 2011 and approximately 16 months has been programmed for the construction period therefore aiming for project completion by winter 2012/13 (including some contingency time).

- A Naval Base Helicopter landing site is already located to the North West of Weston Mill Lake, which is used by both military and Flag Officer Sea Training sponsored civilian helicopters. The civilian contracted helicopters are based and maintained at Plymouth City Airport. Whilst there is no current intention to change the number of flights in the Naval Base, it is understood that the future of Plymouth City Airport is under review and the outcome has the potential to affect the Naval Base helicopter flights. It is understood therefore that increased helicopter movements have been the subject of pre-application discussion with Plymouth City Council's Development Management Department and Public Protection Service.
- Weston Mill District Centre, allocated in Plymouth's Local Development Framework Core Strategy (Strategic Objective 7(5)), to be delivered by 2016. At the time of writing, it is believed that early pre-application discussions have been held between Plymouth City Council's Development Management Department and a developer, whose intention it is to develop a retail unit.
- Park and ride facility at Coombe Farm, near to the St Budeaux bypass / A38 interchange, mooted in Plymouth's Sustainable Communities Development Plan Document which was the subject of consultation during early 2011.
- MoD Submarine Dismantling Project. The purpose of the Submarine Dismantling Project is to develop a solution for the disposal of the UK's nuclear submarines after they have left service with the Royal Navy. This MoD project extends over a 60 year period and includes the provision of facilities to dismantle 27 defuelled nuclear submarines of past and current classes. In the current phase of the project, the MoD is seeking to identify how best to dismantle the submarines; where best to dismantle them; where best to store the Intermediate Level Radioactive Waste; and how it will work with industry to achieve the aims of the project. None of these decisions will be taken until after the MoD has completed a public consultation and Strategic Environmental Assessment, both occurring in 2011. Devonport is a candidate site for submarine dismantling.

Waste related developments

- 4.3.13 Other planned waste-related developments, within or close to the catchment of MVV's facility, have been identified. The developments listed in Table 4.1 overleaf focus on recovery facilities for treating residual waste only. This does not include those proposed which have yet to submit planning applications.
- 4.3.14 The Devonport, St Dennis and Exeter EfW facilities would primarily treat MSW from local authority contracts. The remaining facilities would treat both C&I waste secured on a "merchant" basis and also (in the case of Heathfield) some construction waste.
- 4.3.15 There has also been a recent Environmental Impact Assessment (EIA) Scoping Opinion request for an autoclave and anaerobic digestion facility at Lee Moor, near Plympton, which is proposed to have a capacity of 75,000 tpa. This facility would complement the proposed EfW CHP facility rather than be in competition to it, since it would largely process biodegradable waste.

Table 4.1: Other Potential Residual Waste Management Facilities in the Region

Facility	Capacity (ktpa)	Status	Type of Facility	Location
Exeter EfW	60	Planning permission approved	EfW (incineration)	Devon (Exeter)
Hill Barton Gasification Facility	72	Planning permission approved	EfW (gasification)	Devon (nr. Exeter)
Devonport EfW CHP (subject of this application)	245	Planning application pending	EfW (incineration)	Devon (SWDWP)
New England EfW	275	Planning application submitted	EfW (incineration)	Devon (SWDWP)
St Dennis EfW	240	Planning appeal underway	EfW (incineration)	Cornwall
Heathfield IWMF	105	Planned permission approved	Materials recycling facility	Devon (SWDWP)