Directorate of Economy & Environment
Director **Stuart Love**

Isle of Wight Shoreline Management Plan 2

Appendix C: Baseline Process Understanding

C2: Defence Appraisal

December 2010

Coastal Management;
Directorate of Economy & Environment, Isle of Wight Council

Appendix C: Baseline Process Understanding

C2: Defence Appraisal

Contents

Acknowledgements

Defra SMP Guidance (2006) was used in the production of this Defence Appraisal in 2009: Tasks 1.5c and 2.1b require the collation and assessment of necessary information on existing defences in accordance with Volume 2 & Appendix D, section 2.3b.

Key data sources used in the production of this report:

- Isle of Wight Council asset records, fully updated for this report;
- NFCDD records (available only for Estuaries)

Acknowledgement is given to the assistance provided by the Environment Agency Area Office and through Environment Agency support through Mott Macdonald.

Approval by Asset Managers at Isle of Wight Council and the Environment Agency Area Office was obtained in November 2009.

C2: Defence Appraisal

C2.1 Introduction and Methodology

1 Introduction

This report assesses the condition and residual life of existing coastal defences around the IW coast and estuaries. The results from this task will be used to develop the baseline scenarios, identify risks, and test the response and implications of different management policy scenarios over three separate timescales (0 to 20 years, 20 to 50 years and 50 to 100 years).

This document provides an assessment, in broad terms, of every coastal defence within the boundaries of the SMP study area. It has been split down further into two stages:

- Residual Life based on condition, according to the SMP guidance;
- Approval by asset managers.

2. Step 1: Residual Life based on Condition Grade

2.1 Data availability

Data relating to specific elements of defences within the estuaries were provided by the Environment Agency Area Office in Winchester from the National Flood and Coastal Defence Database (NFCDD). This database includes a description of each defence and an Overall Condition Grade that was assigned to the defence during the last inspection. It is also necessary to mention that the received NFCDD data does contain an estimate of residual life, but as specified in section 2.2.2. The SMP guidance for determining Residual Life has been used consistently for this Defence Appraisal, using condition grades supplied from NFCDD.

The following sources were also consulted in order to gain a holistic record of coastal defences within this SMP: Atkins, 2006, Eastern Yar Strategy Study – Report on Coastal and River Structures / Pritchard Wilmott Partnership, 2007, Newport Harbour Walls Condition Survey

2.2 Method

Defra SMP Guidance (2006) was used in the production of this Defence Appraisal: Tasks 1.5c and 2.1b require the collation and assessment of necessary information on existing defences (In accordance with Volume 2 & Appendix D, section 2.3b).

Data availability was reviewed, revised and supplemented in 2008-2009 to create a new and complete data set that complies with Defra SMP2 guidance. A list of all the information sources used is provided in Section 5. The Isle of Wight Council collated & improved information on the defence structures incorporating data on the Estuaries provided by the Environment Agency's Area office in Winchester in 2009. Prior to this new SMP, information available on the NFCDD asset register was for the estuaries only and no data was available for the coast of the Isle of Wight.

2.2.1 Condition

The Environment Agency – Blue Folder Hard Copy - National Sea & River Defence Surveys - Condition Assessment Manual (CAM) (No Issue or date stated within this document) has been used to determine the condition of each of the Coastal defence elements.

The Environment Agency - Managing Flood Risk - Condition Assessment Manual (CAM) - Document 166_03_SD01 – October 2006 Edition' has been used to determine the condition of each of the Estuary defence elements.

2.2.2 Residual Life

The SMP guidance provides residual life estimates based on the existing defence condition grades for a number of defence types (Table 1). This information has been derived from previous NADNAC (National Appraisal of Defence Needs and Costs) deterioration profiles.

Defence Description	**Estimate of Residual Life (years)**				
	Grade 1	**Grade 2**	**Grade 3**	**Grade 4**	**Grade 5**
Seawall (concrete/masonry)	25 to 35	15 to 25	10 to 15	5 to 7	0
Revetment (concrete/rock)	25 to 35	15 to 25	10 to 15	5 to 7	0
Timber groynes / timber structures	15 to 25	10 to 20	8 to 12	2 to 7	0
Gabion	10 to 25	6 to 10	4 to 7	1 to 3	0

Table 1: Estimate of deterioration for assessment of residual life (from SMP guidance)

Additional Method for Sheetpiles

The SMP guidance does not contain residual life estimates for sheet piles, which are present along some frontages of the Isle of Wight. As a result we have developed a residual life profile for this asset type. We propose to use the latest knowledge on asset deterioration, as published recently in "*Assessment and measurement of asset deterioration including whole life costing*", Science Report SC060078/SR2, Environment Agency, June 2009. The information from this report was adapted so that it is in the same format as the SMP guidance. A similar issue for The Wash SMP, which required residual life information for grassed earth embankments, was addressed in the same way. Table 5.1 of the EA's Science Report contains deterioration times from the start of a structure's life up to the five condition grades. The deterioration profile for unmaintained coastal sheetpiles is shown in Table 2. This information differs from the SMP guidance in that the numbers indicate the number of years to reach a condition from new, whereas the SMP numbers indicate the number of years from a condition to failure.

Type		**Time (years) to reach condition from new**				
		Grade 1	**Grade 2**	**Grade 3**	**Grade 4**	**Grade 5**
Vertical wall – Coastal – Sheet Piles – No maintenance	Best estimate	0	8	30	43	50
	Fastest	0	4	12	25	30
	Slowest	0	10	44	60	70

Table 2: Deterioration profile according to 'Assessment and measurement of asset deterioration including whole life costing' (Environment Agency, 2009)

In line with the approach chosen for The Wash SMP, it was decided to simply convert the deterioration profiles from Table 2 directly to residual life profiles. Grade 5 is assumed to signify failure; the difference in years between a certain grade and Grade 5 is assumed to be the residual life of a defence of that grade. This approach is comparable to the one used to establish the residual life profiles in the SMP guidance. Technically this assumes that the assigned condition is always at the 'top' of the condition, but this is acceptable given the uncertainties in the scientific background of the deterioration rates. Table 3 defines the final residual life assessments adopted to use for the sheetpiles of the Isle of Wight.

Defence Description		Estimate of Residual Life (years)				
		Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
Coastal sheetpiles		30 to 70	26 to 60	18 to 26	5 to 10	0

Table 3: Estimate of deterioration for assessment of residual life adopted for sheetpiles

2.3 Results

2.3.1 Referencing of the Defences

A unique 'SMP2 Reference' has also been assigned to all relevant defences within the SMP study boundary. For this assessment the frontline defences have been identified and assessed and therefore the format of the unique 'SMP2 Reference' is as follows: 'IW (policy no.) / defence element number'. The coast is divided into 59 units, running clockwise around the Isle of Wight from East Cowes, and within each unit the defence elements are recorded in numerical order.

2.3.2 Defence Appraisal Spreadsheet

The Isle of Wight SMP2 Appendix C – Defence Appraisal has been produced containing the results of this assessment. This contains the spreadsheet table required for the Baseline Understanding of Coastal Behaviour and Dynamics (Task 2.1) 'Template I2. Defence Appraisal' This table includes a description of each defence element, overall condition grade, residual Life, and natural features that were assigned to the defence during the last inspection. The Defence Appraisal is supported by a detailed photographic register of all the defence assets (recording over 700 individual defence elements).

2.3.3 GIS Mapping

Summary maps showing the defence maintainer, and residual life are provided in section 7 of this report. In association with the new Defence Appraisal an ArcGIS dataset and map has been completed containing data for each individual defence element as follows:

- Defended / Undefended frontages
- Maintainer
- Condition
- Residual Life
- Defence Type
- Crest Height

2.4 Developing the 'No Active Intervention' Scenario

The residual life for each defence (See Table 1 & Table 3) has also been used in Task 2.2 (Baseline Scenarios) to define the Epoch during which the defence is likely to fail under a scenario of 'No Active Intervention' (NAI). The three Epochs are defined under the SMP guidance for Task 2.2:

- Epoch 1 – 0 to 20 years
- Epoch 2 – 20 to 50 years
- Epoch 3 – 50 to 100 years

It is important to note that there are a large number of defences that have the potential to fail within Epoch 1, but may not fail until Epoch 2. This provides uncertainty to the consequences of defence failure which is taken into account in subsequent tasks.

2.5 Developing the 'With Present Management' Scenario

The Defence Appraisal is also used to inform the 'With Present Management' (WPM) scenario in Task 2.2 (Baseline Scenario), for which the function of the defence 'practice' is considered, rather

than the specifics of the structure itself. Defences are categorised using the guidance from Table D2 in Appendix D of the SMP Guidance. A summary of the categories and the assumptions for each are included in Table 4.

Defence Type Category	Example Structure	Brief Assumptions
Linear Stoppers	Seawall, Grassed embankments	Minimise breach, structural integrity remains and wall is rebuilt at a similar standard of effectiveness
Linear Reducers	Maintained shingle barrier	Continues to reduce erosion, although level of effectiveness may change and therefore rate of erosion may change
Cross-shore interrupters	Groynes, breakwaters	Continues to interrupt drift but not necessarily the same amount
Changers	Recharge/recycling	Continues to recharge with same amount, sediment type and timing

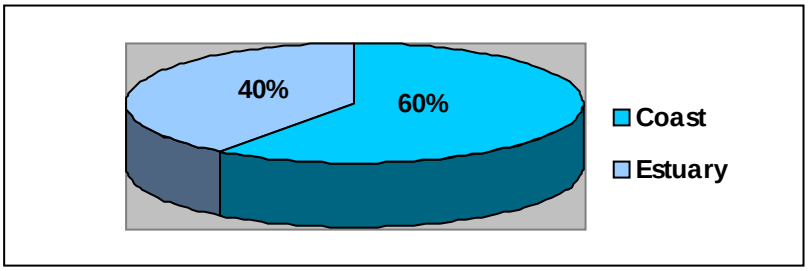
Table 4: Assumptions for the With Present Management baseline assessment

Full information on both the 'No Active Intervention' and continuing 'With Present Management' scenarios can also be found in Appendix C3.

2.6 Discussion

Of the defence structures currently in place around the Isle of Wight coast and estuaries. The Isle of Wight SMP2 frontage is approximately 165 km. SMP2 Appendix C – Coastal Defence Appraisal is supported by a catalogue of over 4500 photographic records of the Isle of Wight defence structures, divided into 59 SMP2 units, and sub-coded into approximately 700 individual defence elements.

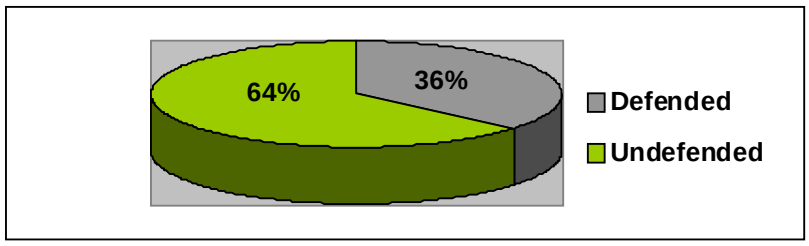
The results of the Defence Appraisal which are presented in the spreadsheet and GIS mapping have been analysed to provide the following overview of the frontage.



Coast / Estuary
The direct coastal frontage forms 60% of the SMP2 with the remaining 40% relating to the five main estuaries.
Chart 1 - SMP2 Frontage breakdown – Coast / Estuary

Defended / Undefended
The Isle of Wight coast line is 36% defended (based on length).

Chart 2 - SMP2 Frontage Summary – Defended / Undefended



Frontage Maintainer
The Isle of Wight SMP2 frontage provides a varied selection of maintainers with the majority of the frontages maintained by the Isle of Wight Council / Private / and The National Trust (47%, 39% and 11% respectively).

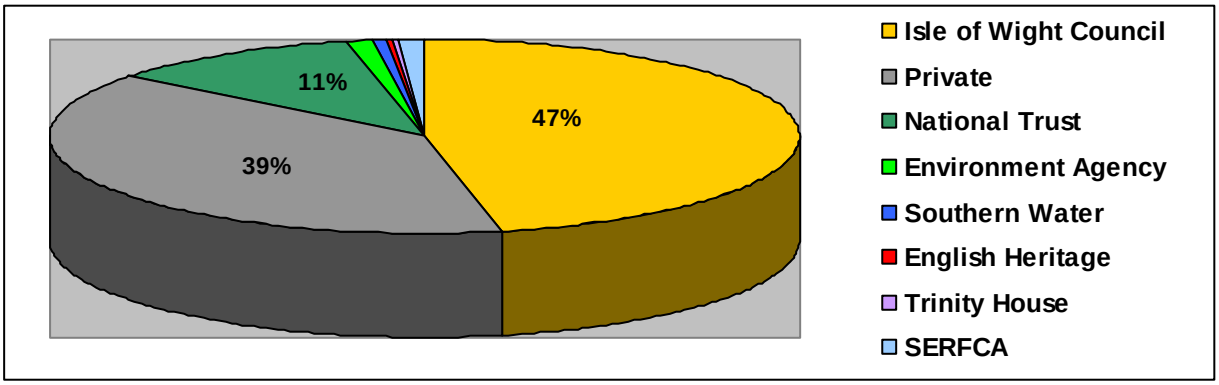


Chart 3 - SMP2 Frontage Maintainer Summary

Defence Type

The majority of Isle of Wight's coastline defence elements are classified as Concrete Walls 27% and Masonry Walls 26%.

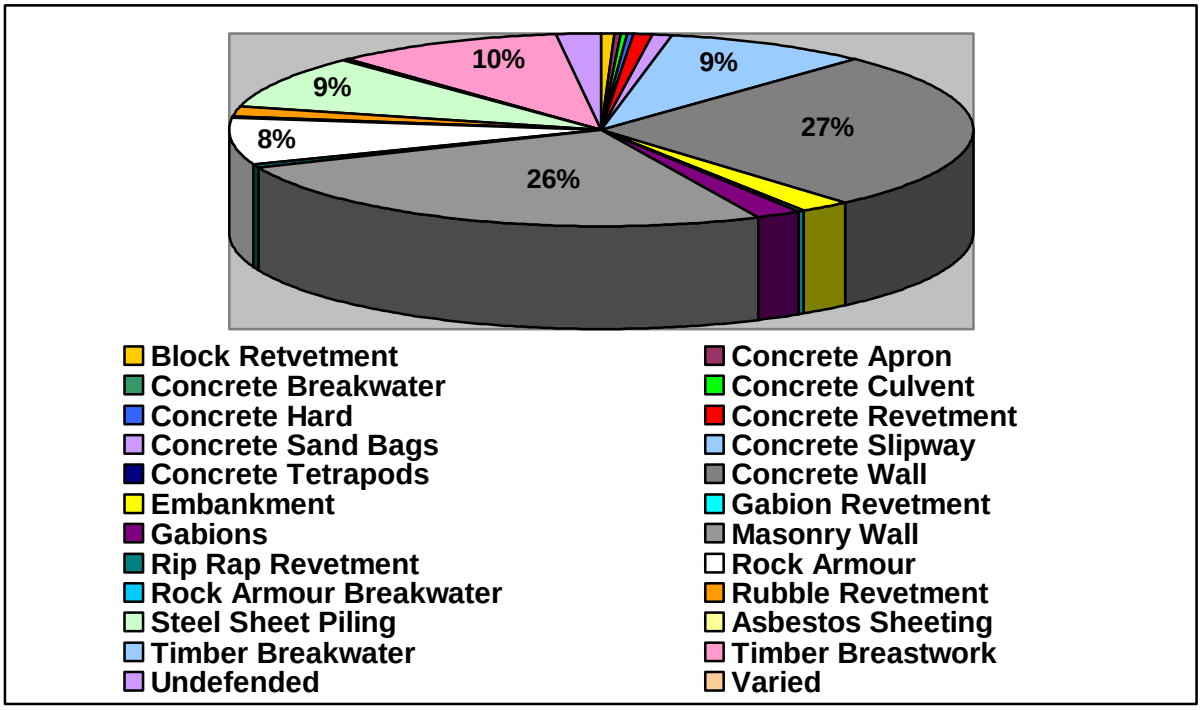
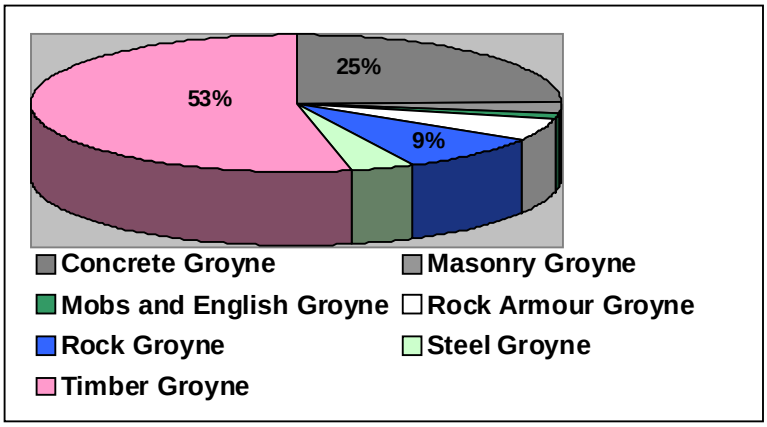


Chart 4 - SMP2 Defence Element Summary



The Isle of Wight Coastline has 312 effective groynes, with the majority being constructed from Timber 53%.

Chart 5 - SMP2 Groyne Summary

Defence Condition

The Isle of Wight SMP2 defended frontage provides a varied selection of condition grades for the study area. Condition grades range from 1 (Very Good) to 5 (Very Poor). The majority of the defences have a condition grade 2 (Good) or 3 (Fair) (44% and 32% respectively). Of the remaining defences, 17% have a condition grade of 4 (Poor) and only 5% have a condition of 1 (Very Good).

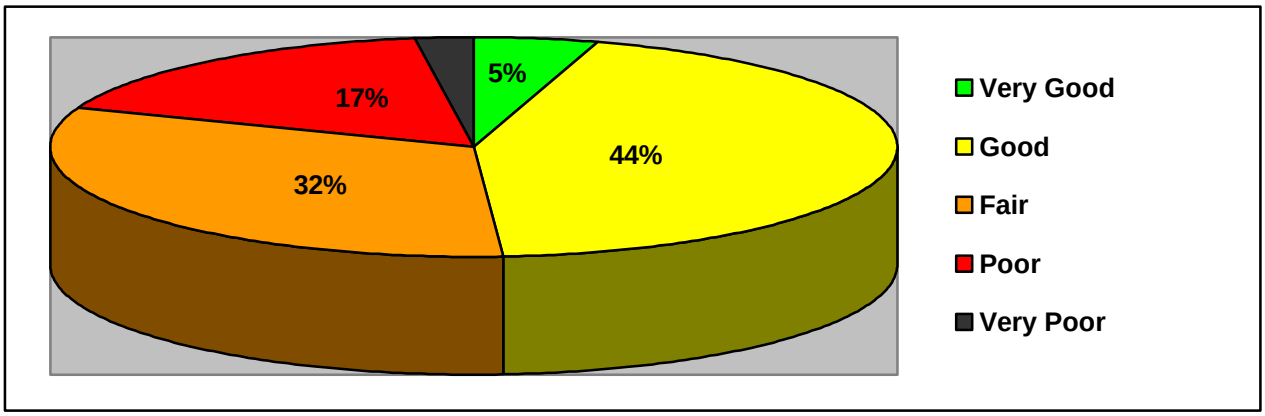


Chart 6 - SMP2 Coastal Frontage Summary – Condition of Defence Elements

Residual Life

It is important to note that there are a large number of defences that have the potential to fail within Epoch 1, but may not fail until Epoch 2. This provides uncertainty to the consequences of defence failure which is taken into account in subsequent tasks.

92% of the defences along the Isle of Wight frontage are expected to fail within Epoch 1 (0 – 20 years), based on worst-case scenario of the first date of possible defence failure. Alternatively 58% are likely to fail in Epoch 1, with the remainder in Epoch 2 (20 – 50 years), based on the mean date of possible defence failure within each category.

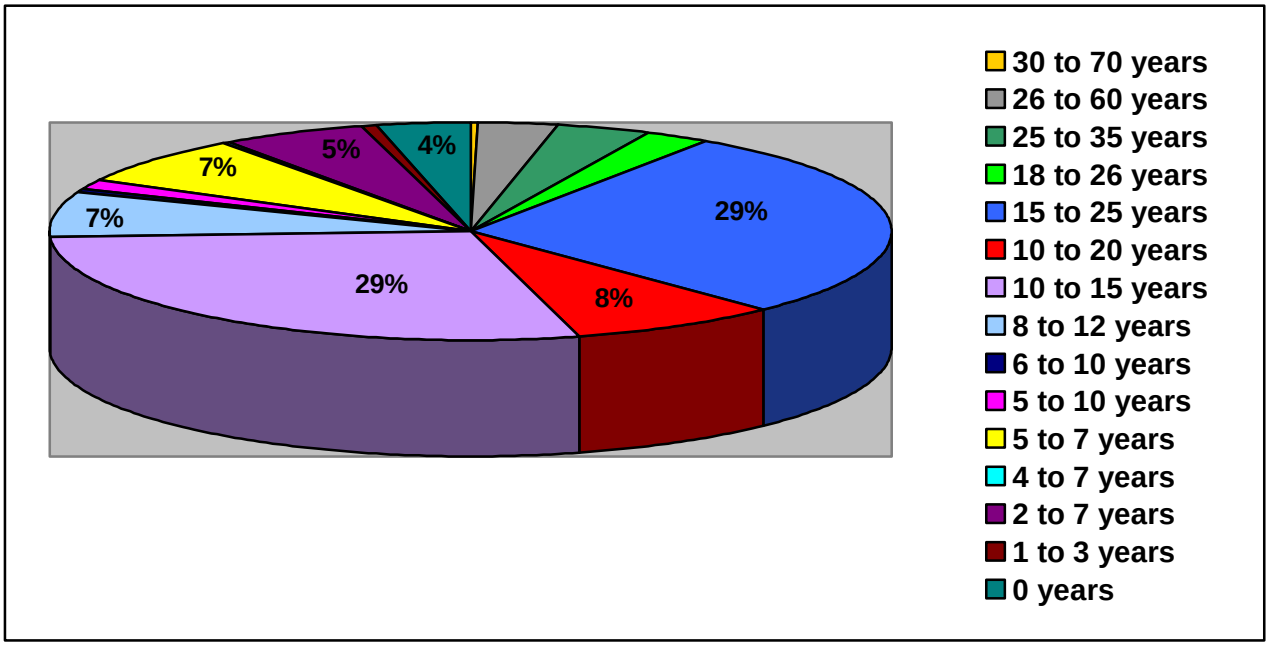


Chart 7 - SMP2 Coastal Frontage Summary – Residual Life of Defence Elements

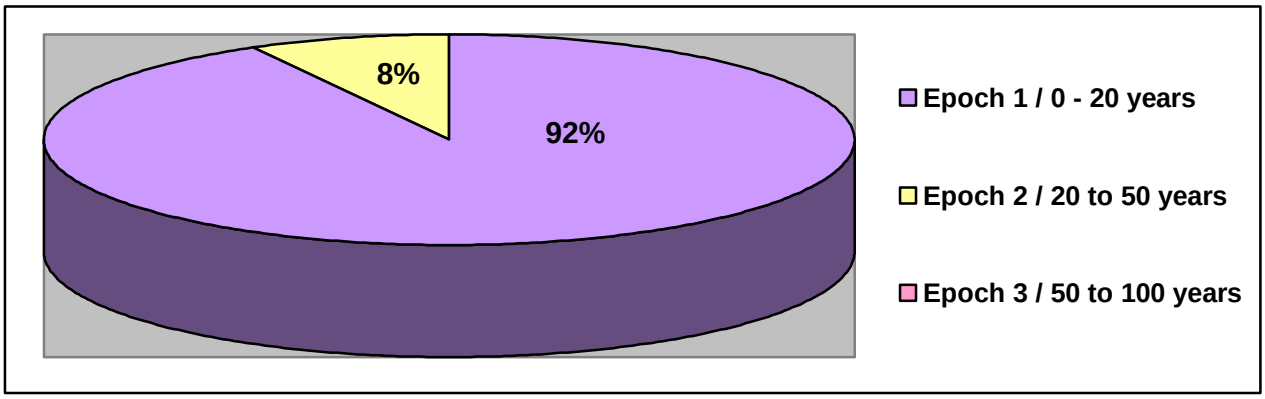


Chart 8 SMP2 Coastal Frontage Summary – Epoch of defence element failure, based on a worst-case scenario of defence failure within each residual life category. (eg. 10 to 15 years residual life = failure in 10 years, shown).

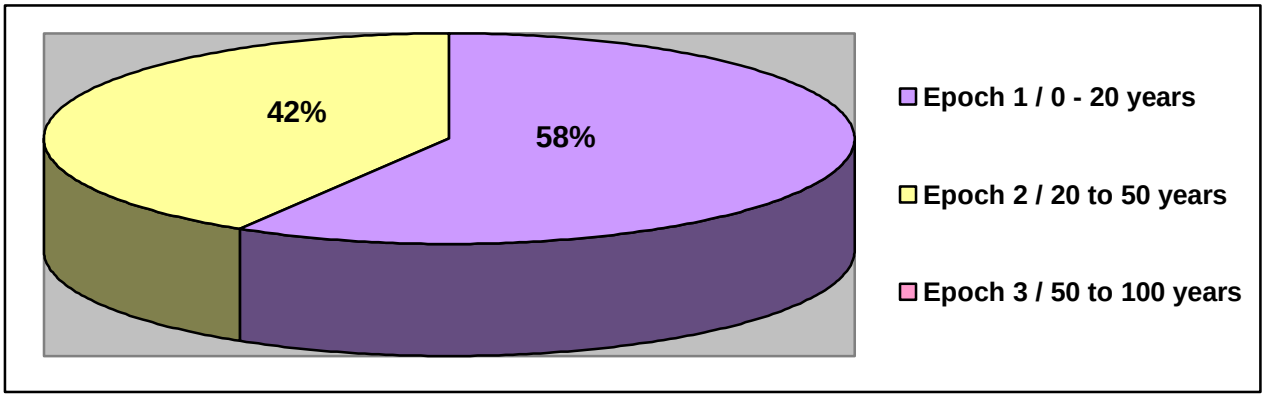


Chart 9 - SMP2 Coastal Frontage Summary – Epoch of defence elements failure, based on a mean-date scenario for defence failure within each residual life category. (eg. 10 to 15 years residual life = failure in 12.5 years, shown).

3. Step 2: Approval by the Defence Asset Managers

This Defence Appraisal has been prepared by the Isle of Wight Council with assistance from the Environment Agency. The asset managers at the IWC and the Environment Agency have reviewed the appraisal and residual life assessments in November 2009 and are satisfied that this is a good basis on which to progress the SMP.

4. Coastal Defence Strategies

The SMP provides a basic inventory of all frontline coastal defences within this SMP study area and undertakes an assessment of each defence's condition grade and predicted failure. It is important to remember the more detailed management strategies that have been carried out. This section provides a brief overview of the various known management strategies. This will also be useful when carrying out Task 2.2 Assessment of Baseline Scenarios.

North-East Coastal Defence Strategy Study, Isle of Wight Council / Royal Haskoning, 2004 (adopted 2005)

The North-East Coastal Defence Strategy Study, which extends from the Shrape Breakwater at East Cowes to Culver Cliff, was completed in 2004 and accepted by Defra in 2005. The Plan sets out the works programme along the north-east coast frontage for the next five years including details on cost. Schemes which are included for progression within the North-East Coast Strategy

Study include the possibility of further works at Seagrove Bay, Seaview and a beach management scheme for the Bembridge frontage.

Eastern Yar Flood and Erosion Risk Management Strategy, Environment Agency / Isle of Wight Council / Atkins (2010)
The Strategy aims to provide an integrated plan for managing the Eastern Yar Valley, from its source to the sea, for the benefit of people and the environment. The Strategy provides the Environment Agency, the Isle of Wight Council and all stakeholders with an integrated plan for management of flood and coastal erosion risk for the next 100 years.
This will be achieved through research and investigations to:

- understand the natural river and coastal processes to help address flooding and erosion risks;
- record the drainage and coastal regimes and review the existing water uses and land uses which are dependent on these;
- establish standards for future flood defence and coastal protection to meet the Environment Agency and Isle of Wight Council obligations together with their conservation duties and responsibilities.

Further Coastal Defence Strategies will be completed following completion of the SMP.

5. References

These data sources were analysed, collated and fully updated to create the Defence Appraisal in 2009.

ISLE OF WIGHT COAST
Sir William Halcrow & Partners Ltd / Posford Duviver, 1994, Ministry of Agriculture, Fisheries and Food / Coastal Defence Division. Coastal Protection Survey Of England

Sir William Halcrow & Partners Ltd / Posford Duviver, 1996, Ministry of Agriculture, Fisheries and Food / Coastal Defence Division. Coastal Protection Survey Of England

Isle of Wight Council / Environment Agency / Sir William Halcrow and Partners Ltd, 1997, Isle Of Wight Shoreline Management Plan

Sir William Halcrow & Partners Ltd / Posford Duviver, 1998, Ministry of Agriculture, Fisheries and Food / Coastal Defence Division. Coastal Protection Survey Of England – Class 4 Elements

Halcrow / Defra, 2005, Future Coast CD

ISLE OF WIGHT COAST - NORTH EAST
Isle of Wight Council / University of Portsmouth / Posford Duvivier, 2002, North East Coastal Strategy Study – Schedule of Coastal Defences – Final Report

ISLE OF WIGHT COAST - SANDOWN BAY
Isle of Wight Council, 2001, Sandown Bay Coastal Strategy Study – Schedule of Coastal Defences – Draft

Isle of Wight Council / University of Portsmouth / Posford Duvivier, 2005, Sandown Bay Coastal Strategy Study – Schedule of Coastal Defences – Draft

ISLE OF WIGHT COAST - UNDERCLIFF
Isle of Wight Council, 2004, Undercliff Coastal Strategy Study – Schedule of Coastal Defences – Draft

Isle of Wight Council / University of Portsmouth / Posford Duvivier, 2004, Undercliff Coastal Strategy Study – Schedule of Coastal Defences – Draft

ISLE OF WIGHT COAST - WEST WIGHT
Posford Duvivier, 1989, Coastline Review – Report to South Wight Borough Council

Posford Duvivier, 1992, South Wight Borough Council Coast Protection Maintenance Schedule

Isle of Wight Council, 2002, West Wight Coastal Strategy Study – Schedule of Coastal Defences – Draft

ISLE OF WIGHT COAST - ISLE OF WIGHT ESTUARY'S
Atkins, 2006, Eastern Yar Strategy Study – Report on Coastal and River Structures – Draft

Pritchard Wilmott Partnership, 2007, Newport Harbour Walls Condition Survey

Environment Agency – Winchester, 2009, Isle of Wight Estuary NFCDD

C2.2 Defence Appraisal Tables

The following series of tables provide a summary of the existing defences along the SMP frontage together with an assessment of residual life. An assessment of residual life under a 'no active intervention' policy was undertaken using the condition data as detailed in Section 2.2.2.

Please see the map on the following page showing the locations of the units used in the tables.

C2.3 Defence Appraisal Summary Maps

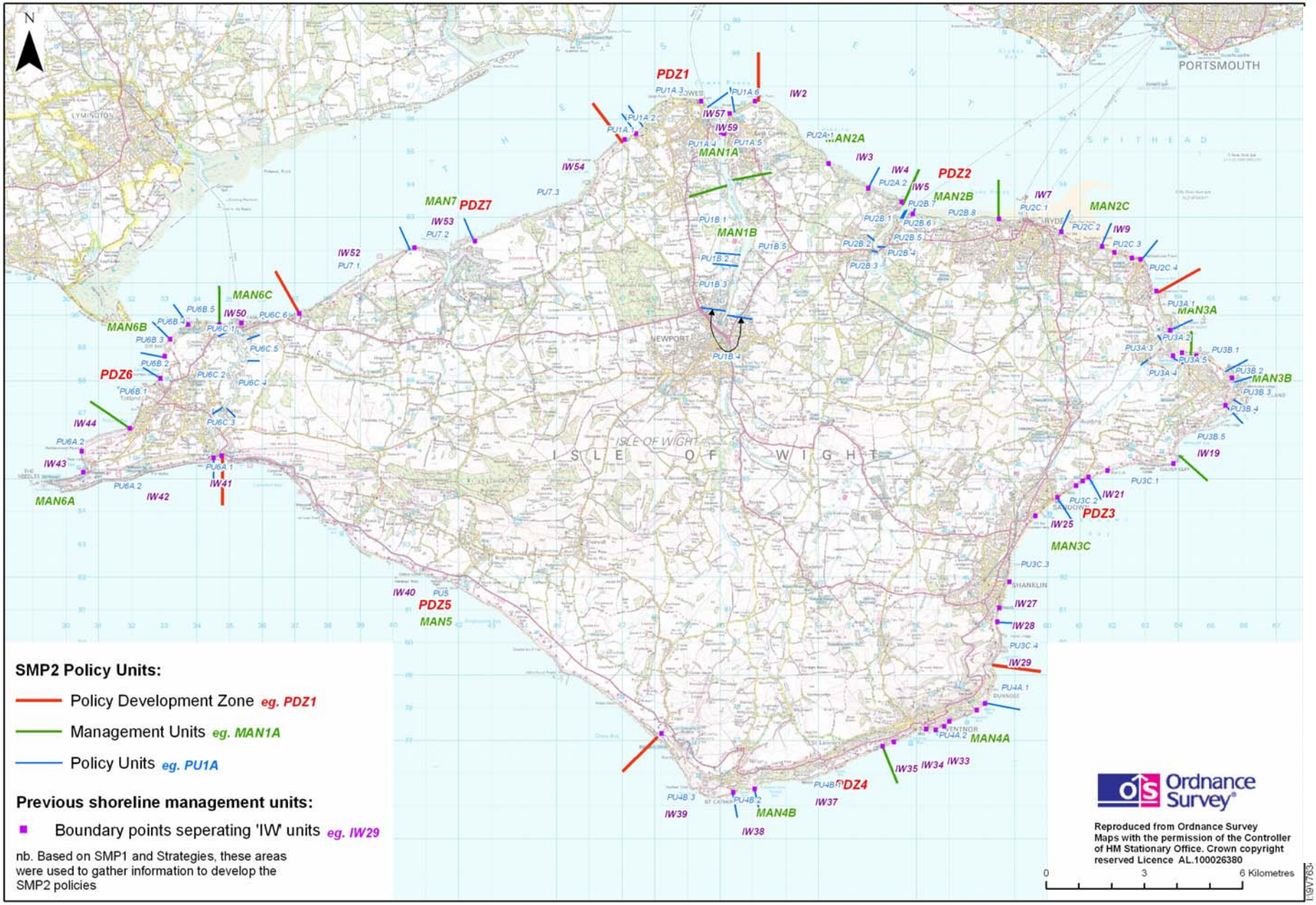
After the table, the following maps are provided at a scale of 1:70,000 to illustrate the Defence Appraisal.
Maps are divided into four topic areas:

- North East Coast
- South East Coast
- South West Coast
- North West Coast

Nb. All data has been generated in GIS format to enable access to a much greater level of detail and accuracy than shown in these summary maps.

Summary maps on the following themes are available:

- Defended / Undefended frontages
- Maintainer
- Condition
- Residual Life
- Defence Type
- Crest Height



Map showing the location of **'IW' units (in purple)** used in the following table.

Nb. the map also shows the location of new SMP2 ***Policy Units 'PU1A.1'*** *(in blue) developed following the completion of Appendices C, D and E and used in the main report.*

Location	Defence History	Present and Residual Life	Natural Features
IW 1 **EAST COWES ESPLANADE** OS Grid Reference: **SZ50291, 96172** **SZ51060, 96549** Length: **890m**	**IW 1 / 001** Seawall, apron, toe piling and groynes constructed 1963. Frontage recharged with shingle in 1992.	**IW 1 / 001** Concrete toe piled seawall with a slight batter, wave curve formed round nosing. Concrete up stand above forms parapet wall to footway at the rear, exists from the Shrape Breakwater to Old Castle Point with a crest level of some +3.35m above Ordnance Datum Newlyn (ODN). Fourteen concrete groynes are located along this frontage. Condition (Wall) - Good (Grade 2) Residual Life -15 to 25 years Condition (Groynes) - Fair (Grade 3) Residual Life - 10 to 15 years	Narrow beach, widening towards breakwater, backed by steep but presently stable coastal slope.
IW 2 **OSBORNE BAY** OS Grid Reference: **SZ51060, 96549** **SZ53325, 94643** Length: **3198m**	**IW 2 / 001** Seawall constructed around 1900. Groynes constructed 1930. **IW 2 / 002** Undefended **IW 2 / 003** Unknown **IW 2 / 004** Unknown	**IW 2 / 001** This frontage is partially protected by a stone masonry seawall constructed to a level of +4.0m above Ordnance Datum Newlyn (ODN). This seawall is privately owned and was built in the early 20th Century. There are also a number of irregularly spaced groynes. Both the seawall and groynes are in poor condition and at various locations the defences have failed. Condition - Very poor (Grade 5) Residual Life - 0 years **IW 2 / 002** Short section of undefended wooded slope with shingle foreshore. **IW 2 / 003** Concrete slipway from Pier Landing House. Concrete structure visible in places protruding from shingle shore. It is assumed that this structure is continuous along this section of frontage. Concrete groyne extending to mean low water. Condition - Good (Grade 2) Residual Life -15 to 25 years **IW 2 / 004** Steel sheet piled concrete capped structure, protecting stone masonry bathing pavilion (The Queen's Alcove Shelter). Condition - Fair (Grade 3) Residual Life - 18 to 26 years	Narrow boulder-strewn foreshore with thin beaches, backed by steep slopes suffering undercutting in places and mantled by inactive shallow landslides.

Location	Defence History	Present and Residual Life	Natural Features
	IW 2 / 005 Unknown	**IW 2 / 005** Slipway extending from The Boat House, and remains of Hard extending seaward. Remains of concrete structure on shore. Remains of approximately twenty three rock groynes fronting the Barton Wood. Wooded slopes are relatively stable and they yield clays and lime stones to the shore though there is significant variability over this defence section. Condition - Poor (Grade 4) Residual Life - 5 to 7 years	
IW 3 **KING'S QUAY** OS Grid Reference: **SZ53325, 94643** **SZ54527, 93885** Length: **2049m**	**IW 3 / 001** Undefended **IW 3 / 002** Unknown **IW 3 / 003** Undefended	**IW 3 / 001** Undefended wooded slopes that are relatively stable with intermittent exposures of clays and limestone along the shore. **IW 3 / 002** Stone masonry wall and earth embankment forming causeway. Condition - Poor (Grade 4) Residual Life - 5 to 7 years **IW 3 / 003** Undefended wooded slopes that are relatively stable with intermittent exposures of clays and limestone along the shore.	Wide muddy intertidal foreshore and partially in filled estuary (King's Quay) with double splits protecting entrance, some steep slopes potentially susceptible to reactivation.
IW 4 **WOODSIDE** OS Grid Reference: **SZ54527, 93885** **SZ55544, 93462** Length: **1185m**	**IW 4 / 001** Unknown **IW 4 / 002** Unknown	**IW 4 / 001** Short timber piled wall. Condition - Fair (Grade 3) Residual Life - 8 to 12 years **IW 4 / 002** Private frontage owners at Woodside have constructed their own ad hoc defences (without planning permission) consisting of concrete structures, timber walls, timber slipways and landing stages. Condition - Fair (Grade 3) Residual Life - 8 to 12 years	Wide boulder-veneered sand/silt foreshore with low eroding cliffs, Wootton Hard comprises a modified spit at the western entrance to Wootton Creek.

Location	Defence History	Present and Residual Life	Natural Features
	IW 4 / 003 Seawall constructed 1960.	**IW 4 / 003** A short timber wall of crest level of +2.4m Ordnance Datum Newlyn (ODN) is to be found along the waterfront of Woodside Holiday village. Condition - Fair (Grade 3) Residual Life - 8 to 12 years	
	IW 4 / 004 Undefended	**IW 4 / 004** Undefended wooded slope that is relatively stable with intermittent exposures of clays and limestone along the shore.	
	IW 4 / 005 Unknown	**IW 4 / 005** Concrete remains extend to concrete structure and slipway. Condition - Very poor (Grade 5) Residual Life - 0 years	
	IW 4 / 006 Undefended	**IW 4 / 006** Undefended wooded slope that is relatively stable with intermittent exposures of clays and limestone along the shore.	
IW 5 **WOOTTON CREEK** OS Grid Reference: **SZ55544, 93462** **SZ55888, 93104** Length: **5646m**	**IW 5 / 001** Undefended	**IW 5 / 001** Undefended wooded slope with a rocky foreshore and timber post remains. Foreshore showing signs of stability with good cover of seaweed. Some minor erosion. However, dense vegetation provides a stable coastal fringe. NFCDD Condition - Good (Grade 2)	Flooded river valley of Wootton Creek partly reclaimed as a freshwater pond at landward extremity. Steep valley sides with potential for reactivation of shallow landslides.
	IW 5 / 002 Unknown	**IW 5 / 002** Rock armour revetment defending a wooded slope. Foreshore rocky with shingle. Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 5 / 003 Undefended.	**IW 5 / 003** Undefended wooded slope with a rocky foreshore and some signs of ad-hoc rock defences.	

Location	Defence History	Present and Residual Life	Natural Features
		NFCDD Condition - Good (Grade 2)	
	IW 5 / 004 Timber structure constructed 1990.	**IW 5 / 004** Timber piled sleepers back filled with loose chalk constructed to a level of +2.5m above Ordnance Datum Newlyn (ODN). Two concrete slipways at the northern end of the defence line. Condition - Fair (Grade 3) Residual Life - 10 to 20 years	
	IW 5 / 005 Undefended	**IW 5 / 005** The end and inside of the shingle split is undefended. NFCDD Condition - Good (Grade 2)	
	IW 5 / 006 Unknown	**IW 5 / 006** Timber piles along the upper length of the shingle bank. Condition - Fair (Grade 3) Residual Life - 8 to 12 years	
	IW 5 / 007 Undefended	**IW 5 / 007** Undefended length of low lying land at the upper end of the shingle bank. NFCDD Condition - Fair (Grade 3)	
	IW 5 / 008 Unknown	**IW 5 / 008** Timber piled sleepers and timber breastwork. Also timber pontoon and steel pile. Condition - Good (Grade 2) Residual Life - 10 to 20 years	
	IW 5 / 009 Undefended	**IW 5 / 009** Undefended length of low lying land at the seaward end of private garden. NFCDD Condition - Fair (Grade 3)	
	IW 5 / 010 Seawall constructed	**IW 5 / 010** Concrete block work / brick masonry wall at seaward end of private garden and	

Location	Defence History	Present and Residual Life	Natural Features
	1950.	near boathouse. Including a concrete ramps leading to the boathouse. Condition - Fair (Grade 3) Residual Life - 10 to 15 years	
	IW 5 / 011 Unknown	**IW 5 / 011** Mixture of concrete, block work and brick sea walls constructed to a level of +2.2m above Ordnance Datum Newlyn (ODN), with concrete access steps / concrete boat ramp and timber landing stage. Condition - Fair (Grade 3) Residual Life - 10 to 15 years	
	IW 5 / 012 Unknown	**IW 5 / 012** Concrete block work masonry wall. Condition - Fair (Grade 3) Residual Life - 10 to 15 years	
	IW 5 / 013 Unknown	**IW 5 / 013** Concrete block work masonry wall. Concrete slipway and timber landing stage. Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 5 / 014 Unknown	**IW 5 / 014** Timber piled breast work. Condition - Poor (Grade 4) Residual Life - 2 to 7 years	
	IW 5 / 015 Unknown	**IW 5 / 015** Concrete filled sandbag revetment. Condition - Fair (Grade 3) Residual Life - 5 to 7 years	
	IW 5 / 016 Unknown	**IW 5 / 016** Timber breastwork. Steel landing stage. Timber slipway. Timber landing stage and access ramp, attached to steel piled post. Timber slipway. Various pontoons. Condition - Fair (Grade 3) Residual Life - 8 to 12 years	

Location	Defence History	Present and Residual Life	Natural Features
	IW 5 / 017 Unknown	**IW 5 / 017** Concrete wall. Steel piles supporting balcony structure. Concrete slipway. Timber slipway. Various pontoons and associated structures. Timber breastwork adjacent to summer houses. Slipway. Short section of undefended frontage. Recently constructed timber structure and landing stage. Concrete slipway. Various pontoons and associated structures. Short section of undefended frontage. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Breast work) - Good (Grade 2) Residual Life - 10 to 20 years	
	IW 5 / 018 Unknown	**IW 5 / 018** Rubble revetment. Condition - Poor (Grade 4) Residual Life - 5 to 7 years	
	IW 5 / 019 Undefended	**IW 5 / 019** Undefended frontage at Little Canada. NFCDD Condition - Good (Grade 2)	
	IW 5 / 020 Unknown	**IW 5 / 020** Concrete / masonry wall structure supporting pontoon access ramp to timber pontoon. Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 5 / 021 Unknown	**IW 5 / 021** Timber breastwork walls. Overtopped at high spring tide. Condition - Poor (Grade 4) Residual Life - 2 to 7 years	
	IW 5 / 022 Unknown	**IW 5 / 022** Rubble placed at edge of coastal fringe. Condition - Very Poor (Grade 5) Residual Life - 5 to 7 years	

Location	Defence History	Present and Residual Life	Natural Features
	IW 5 / 023 Undefended	**IW 5 / 023** Undefended frontage. NFCDD Condition - Fair (Grade 3)	
	IW 5 / 024 Unknown	**IW 5 / 024** Timber piled breastwork. Concrete slipway. Condition - Fair (Grade 3) Residual Life - 8 to 12 years	
	IW 5 / 025 Unknown	**IW 5 / 025** Rubble dumped on coastal fringe, supported by steel mesh and timber piled posts. Condition - Poor (Grade 4) Residual Life - 1 to 3 years	
	IW 5 / 026 Unknown	**IW 5 / 026** Concrete / concrete block work masonry wall at seaward end of Creek Gardens. Landing stage structure. Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 5 / 027 Unknown	**IW 5 / 027** Mixture of ad-hoc timber and rubble gabion style defences around the boathouses and associated structures. Also non-grouted brick/block defence walls. Access track from road to the shore. Largely undefended frontage. Condition - Very Poor (Grade 5) Residual - 0 years	
	IW 5 / 028 Unknown	**IW 5 / 028** Low-lying timber breastwork wall in front of reed bed. Condition - Poor (Grade 4) Residual Life - 2 to 7 years	
	IW 5 / 029 Unknown	**IW 5 / 029** Concrete block work masonry wall and concrete access ramp.	

Location	Defence History	Present and Residual Life	Natural Features
		Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 5 / 030 Unknown	**IW 5 / 030** Timber piles and breastwork. Condition - Good (Grade 2) Residual Life - 10 to 20 years	
	IW 5 / 031 Unknown	**IW 5 / 031** Mixture of concrete and concrete block work masonry seawall with concrete access ramp and new pontoon. Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 5 / 032 Unknown	**IW 5 / 032** Shallow concrete wall. Timber pontoon. Condition - Fair (Grade 3) Residual Life - 10 to 15 years	
	IW 5 / 033 Unknown	**IW 5 / 033** Shallow timber breastwork wall. Concrete slipway. Rubble. Partly undefended frontage. Condition - Poor (Grade 4) Residual Life - 2 to 7 years	
	IW 5 / 034 Timber breast work constructed June 2009.	**IW 5 / 034** New defences being constructed during site walkover, also defences upstream of similar design. Steel piles and timber sleeper breastwork. Also pitch stone and concrete access ramps. Condition - Very good (Grade 1) Residual Life - 15 to 25 years	
	IW 5 / 035 Unknown	**IW 5 / 035** Seawall constituting steel piles and timber sleeper breastwork. Concrete slipway. Access ramp to pontoons. Concrete slipway. Condition - Good (Grade 2) Residual Life - 10 to 20 years	

Location	Defence History	Present and Residual Life	Natural Features
	IW 5 / 036 Unknown	**IW 5 / 036** Rubble filled gabions and outfall pipe with concrete headwall. Also some undefended frontage. Rubble. Timber landing stage. Condition - Poor (Grade 4) Residual Life - 1 to 3 years	
	IW 5 / 037 Unknown	**IW 5 / 037** Timber piles and timber breastwork with concrete slipway. Overtopped at high spring tide. Condition - Poor (Grade 4) Residual Life - 2 to 7 years	
	IW 5 / 038 Unknown	**IW 5 / 038** Derelict timber piles and timber breastwork. Timber landing stage. Condition - Very Poor (Grade 5) Residual Life - 0 years	
	IW 5 / 039 Unknown	**IW 5 / 039** Timber piles and timber breastwork. Timber landing stages. Condition - Good (Grade 2) Residual Life - 10 to 20 years	
	IW 5 / 040 Unknown	**IW 5 / 040** Suspected cementitious / asbestos corrugated sheet piling, timber piles and concrete slipway. Timber landing stage. Condition - Poor (Grade 4) Residual Life - 2 to 7 years	
	IW 5 / 041 Unknown	**IW 5 / 041** Concrete and block work seawall marking boundary of property. Some minor timber breast work is present on the northern extent. Pontoon access ramps and associated structures. Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 5 / 042 Unknown	**IW 5 / 042** Timber breastwork wall.	

Location	Defence History	Present and Residual Life	Natural Features
		Condition - Good (Grade 2) Residual Life - 10 to 20 years	
	IW 5 / 043 Unknown	**IW 5 / 043** Concrete slipway. Concrete revetment. Vertical concrete wall. Timber landing stages.	
		Condition - Poor (Grade 4) Residual Life - 5 to 7 years	
	IW 5 / 044 Unknown	**IW 5 / 044** Concrete block work wall with brick coping.	
		Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 5 / 045 Unknown	**IW 5 / 045** Derelict timber piling. Concrete block work / brick masonry wall. Recent concrete slipway extension. Undefended frontage. Remains of pontoons.	
		Condition - Poor (Grade 4) Residual Life - 5 to 7 years	
	IW 5 / 046 Unknown	**IW 5 / 046** Rubble wall. Concrete block work masonry wall.	
		Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 5 / 047 Wall repaired in association with recent development 2008.	**IW 5 / 047** Concrete slipway. Concrete and concrete block work masonry seawall and concrete slipways.	
		Condition - Fair (Grade 3) Residual Life - 10 to 15 years	
	IW 5 / 048 Unknown	**IW 5 / 048** Ad-hoc defences in form of timber pallet and rubble backfill.	
		Condition - Very poor (Grade 5) Residual Life - 0 years	
	IW 5 / 049	**IW 5 / 049**	

Location	Defence History	Present and Residual Life	Natural Features
	Undefended	Ad-hoc defences. Undefended frontage with shallow grassed slope leading to private garden. Timber landing stage. NFCDD Condition - Fair (Grade 3)	
	IW 5 / 050 Unknown	**IW 5 / 050** Concrete private patio area with timber breastwork as a façade. Condition - Very good (Grade 1) Residual Life - 25 to 35 years	
	IW 5 / 051 Unknown	**IW 5 / 051** Concrete slipway. Condition - Fair (Grade 3) Residual Life -10 to 15 years	
	IW 5 / 052 Unknown	**IW 5 / 052** Brick masonry sea wall. Condition - Very good (Grade 1) Residual Life - 25 to 35 years	
	IW 5 / 053 Undefended	**IW 5 / 053** Undefended land with shallow grassed slope leading to pumping station and access track to main road. Concrete outfall structure. NFCDD Condition - Fair (Grade 3)	
	IW 5 / 054 Unknown	**IW 5 / 054** Short section of timber breastwork. Timber landing stage. Condition - Good (Grade 2) Residual Life - 10 to 20 years	
	IW 5 / 055 Undefended	**IW 5 / 055** Undefended land with shallow grassed slope leading to pumping station and access track to main road. However, there is a short section of timber breastwork providing protection for an oak tree. Also remnants of a timber groyne and timber structures.	

Location	Defence History	Present and Residual Life	Natural Features
		NFCDD Condition - Fair (Grade 3)	
	IW 5 / 056 Unknown	**IW 5 / 056** Suspected cementitious / asbestos corrugated sheet piling. Also remnants of a timber groyne and timber structures. Stepped timber landing stage and navigation marker. Concrete slipway edged with timber breast work. Condition - Very poor (Grade 5) Residual Life - 0 years	
	IW 5 / 057 Unknown	**IW 5 / 057** Concrete wall. Varied timber breastwork and timber piles used in the defence of private gardens. Access ramp to pontoons and associated structures. Concrete slipway. Access ramp to pontoons and associated structures. Condition - Good (Grade 2) Residual Life 10 to 20 years	
	IW 5 / 058 Unknown	**IW 5 / 058** Slipway. Stone masonry wall at edge of beer garden of pub. Condition - Good (Grade 2) Residual Life 10 to 15 years	
	IW 5 / 059 Unknown	**IW 5 / 059** Varied stone / concrete block work masonry seawall used in the defence of private gardens and often abutting directly to the main trunk of the house. Condition - Good (Grade 2) Residual Life 10 to 15 years	
	IW 5 / 060 Unknown	**IW 5 / 060** Stone / concrete block work masonry seawall and revetment. Low stone masonry wall. Timber / 'Plaswood' slipway. Navigation aid. Condition - Fair (Grade 3) Residual Life 10 to 15 years	
	IW 5 / 061 Unknown	**IW 5 / 061** Stone masonry wall with some concrete repair work around failure points. Stone masonry work constitutes majority of bridge structure. Some brick work around	

Location	Defence History	Present and Residual Life	Natural Features
		arches and upper section of bridge. Algal and seaweed growth on lower section of bridge. Outfalls. Tide gauge. Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 5 / 062 Unknown	**IW 5 / 062** Mill Pond upstream of Wootton Bridge. Timber landing stages. Undefended frontage. Steel sheet piling around sluice gates. Concrete wall. Private gardens with rock used as form of coastal protection. Timber piles and timber breastwork at the end of private gardens. Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 5 / 063 Unknown	**IW 5 / 063** East side of Wootton Bridge. Concrete poured / encased wall with concrete block work laid on upper wall. Timber decking leading to Christopher Scott estate agents. Concrete piled East Quay building. Steel Sheet piling with brick work coping. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Piling) - Good (Grade 2) Residual Life - 18 to 26 years	
	IW 5 / 064 Unknown	**IW 5 / 064** Concrete slipway. Timber pontoons, as associated structures. Ad-hoc defences adjacent to private property. Timber breastwork wall and concrete wall. Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 5 / 065 Unknown	**IW 5 / 065** Concrete block work masonry wall. Timber landing stage. Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 5 / 066 Unknown	**IW 5 / 066** Concrete block work masonry wall.	

Location	Defence History	Present and Residual Life	Natural Features
		Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 5 / 067 Unknown	**IW 5 / 067** Landing stage. Concrete slipway. Vertical concrete block work / brick masonry wall. Timber and steel piled pontoons. Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 5 / 068 Unknown	**IW 5 / 068** Houseboats and associated structures. Including vertical concrete wall at rear of houseboats. Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 5 / 069 Undefended	**IW 5 / 069** Undefended frontage at edge of private garden. Derelict timber landing stages NFCDD Condition - Good (Grade 2)	
	IW 5 / 070 Unknown	**IW 5 / 070** Derelict timber landing stages. Reed bed. Timber piles and timber breastwork at end of private land. Partly undefended frontage. Floating plastic pontoon. Timber landing stages. Condition - Good (Grade 2) Residual Life - 10 to 20 years	
	IW 5 / 071 Unknown	**IW 5 / 071** Timber breast work. Timber pontoons. Timber slipways. Condition - Good (Grade 2) Residual Life - 10 to 20 years	
	IW 5 / 072 Unknown	**IW 5 / 072** Suspected cementitious / asbestos corrugated sheet piling or steel sheet piling. Future investigations recommended. Concrete slipway. Condition - Good (Grade 2) Residual Life - 26 to 60 years	

Location	Defence History	Present and Residual Life	Natural Features
	IW 5 / 073 Unknown	**IW 5 / 073** Concrete / timber slipway. Long length of timber piles and breastwork along the bottom of private gardens. Landing stages and pontoons. Concrete slipway. Timber slipway. Condition - Good (Grade 2) Residual Life - 10 to 20 years	
	IW 5 / 074 Undefended	**IW 5 / 074** Undefended frontage. NFCDD Condition - Good (Grade 2)	
	IW 5 / 075 Unknown	**IW 5 / 075** Timber landing stages and pontoons. Timber breastwork. Four concrete slipways. Condition - Good (Grade 2) Residual Life - 10 to 20 years	
	IW 5 / 076 Undefended	**IW 5 / 076** Timber landing stages and pontoons. Undefended frontage. NFCDD Condition - Good (Grade 2)	
	IW 5 / 077 Unknown	**IW 5 / 077** Timber pontoon. Varied timber piling and breastwork follows private frontages. Concrete slipways. Condition - Good (Grade 2) Residual Life - 10 to 20 years	
	IW 5 / 078 Undefended	**IW 5 / 078** Undefended frontage. NFCDD Condition - Good (Grade 2)	
	IW 5 / 079 Unknown	**IW 5 / 079** Concrete block work masonry / concrete wall. Concrete slipways. Landing stage. Timber pontoon.	

Location	Defence History	Present and Residual Life	Natural Features
		Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 5 / 080 Unknown	**IW 5 / 080** Rubble revetment. Condition - Poor (Grade 4) Residual Life - 5 to 7 years	
	IW 5 / 081 Unknown	**IW 5 / 081** Fishbourne hard. Steel sheet piling with concrete coping. Timber pontoons. Steel crane track. Access ladders. Concrete slipway. Condition - Good (Grade 2) Residual Life - 26 to 60 years	
	IW 5 / 082 Unknown	**IW 5 / 082** Timber breastwork. Condition - Good (Grade 2) Residual Life - 10 to 20 years	
	IW 5 / 083 Undefended	**IW 5 / 083** Undefended shingle spit. Ad-hoc defences in form of rubble revetment. Condition (Rubble revetment) - Fair (Grade 3) Residual Life - 10 to 15 years NFCDD Condition (Split) - Good (Grade 2)	
	IW 5 / 084 Steel sheet piling constructed 1970.	**IW 5 / 084** Steel sheet piling with concrete coping. Recent concrete encasement boat lift structure. Condition - Good (Grade 2) Residual Life - 26 to 60 years	
	IW 5 / 085 Unknown	**IW 5 / 085** Concrete aggregate wall at Royal Victoria Yacht Club constructed to a level of +2.2m above Ordnance Datum Newlyn (ODN).. Stone masonry steps and wall. Concrete slipway. Timber landing stage. Steel access ramp to timber pontoons.	

Location	Defence History	Present and Residual Life	Natural Features
		Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 5 / 086 Unknown	**IW 5 / 086** Precast concrete block grouted revetment. Concrete slipway. Steel sheet piling constructed to a level of +2.8m above Ordnance Datum Newlyn (ODN). Ferry terminal infrastructure. Condition - Good (Grade 2) Residual Life - 26 to 60 years	
	IW 5 / 087 Seawall constructed around 1930.	**IW 5 / 087** Stone masonry wall of crest level +2.8m Ordnance Datum Newlyn (ODN) and timber fencing landward of high tide mark. Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 5 / 088 Seawall constructed 1950.	**IW 5 / 088** Shallow concrete wall often buried by shingle/ earth and grass. More exposure at north end of structure. Also concrete groynes. Some reinforcement made to the lower section of the wall at the north. Landing stage. Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 5 / 089 Seawall constructed around 1930.	**IW 5 / 089** Stone masonry wall. Concrete slipway. Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 5 / 090 Unknown	**IW 5 / 090** Concrete wall with timber breast work of crest level +2.1m Ordnance Datum Newlyn (ODN). Concrete toe protection. Concrete groyne. Condition - Fair (Grade 3) Residual Life - 8 to 12 years	
	IW 5 / 091 Seawall constructed around 1930.	**IW 5 / 091** Stone masonry wall with concrete toe of crest level +2.3m Ordnance Datum Newlyn (ODN). Some concrete encased wall. Concrete slipway. Remains of timber	

Location	Defence History	Present and Residual Life	Natural Features
		structures on foreshore. Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 5 / 092 Concrete wall constructed 1960. Sea wall constructed 1930. Groyne and Rock Armour constructed 1992.	**IW 5 / 092** Concrete wall of crest level +2.4m Ordnance Datum Newlyn (ODN) with rock armour protection. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Rock) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Groyne) - Good (Grade 2) Residual Life - 10 to 20 years	
	IW 5 / 093 Sea wall constructed 1930.	**IW 5 / 093** Stone masonry / concrete wall of crest level +2.4m Ordnance Datum Newlyn (ODN). Drain inspection concrete structure. Outfall pipes. Condition Fair - (Grade 3) Residual Life - 10 to 15 years	
	IW 5 / 094 Unknown	**IW 5 / 094** Earth embankment. Outfall. Condition Fair - (Grade 3) Residual Life - 10 to 15 years	
IW 6 **QUARR & BINSTEAD** OS Grid Reference: **SZ55888, 93104** **SZ58519, 92942** Length: **2815m**	**IW 6 / 001** Undefended	**IW 6 / 001** Undefended foreshore of mud, sand and shingle is subject to continual erosion. Rock outcrops to upper foreshore. Remains of timber structures visible on shore. At low tide large shingle bank is visible. Low clay cliffs exposed to erosion. Remains of stone masonry structure on shore.	Wide mud, gravel and boulder-strewn foreshore becoming increasingly sandy to the east. Low eroding soft cliffs in the west and slopes subject to shallow landsliding to the east. In filled valley with small lagoon/pond occupying central parts.
	IW 6 / 002 Undefended	**IW 6 / 002** Undefended frontage fronting residential dwellings. Timber slipway to upper foreshore. Timber landing stage. Concrete outfall structure.	
	IW 6 / 003	**IW 6 / 003**	

Location	Defence History	Present and Residual Life	Natural Features
	Unknown	Low stone masonry wall and slipway structure. Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 6 / 004 Undefended	**IW 6 / 004** Undefended foreshore of mud, sand and shingle. Remains of timber structure to lower foreshore.	
	IW 6 / 005 Unknown	**IW 6 / 005** Concrete slipway adjacent to stone masonry wall. Condition - Fair (Grade 3) Residual Life - 10 to 15 years	
	IW 6 / 006 Unknown	**IW 6 / 006** Concrete encasement structure extends southwards Timber landing stage and timber beach access steps. Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 6 / 007 Unknown	**IW 6 / 007** Timber post piled wall protects frontage. Remains of stone masonry wall on foreshore. Timber slipway extends onto the foreshore. Condition - Good (Grade 2) Residual Life - 10 to 20 years	
	IW 6 / 008 Undefended	**IW 6 / 008** Foreshore of mud, sand and shingle. Remains of timber and concrete structure on foreshore. Concrete access steps. Condition (Remains) - Failed (Abandoned) Residual Life - 0 years	
	IW 6 / 009 Undefended	**IW 6 / 009** Foreshore of mud, sand and shingle.	
	IW 6 / 010 Unknown	**IW 6 / 010** Concrete / stone masonry / timber breast work wall. Extending along frontage. Stone masonry wall forming Binstead hard. Remains of timber structures on shore.	

Location	Defence History	Present and Residual Life	Natural Features
		Concrete wall with battered face. Remains of timber structures on shore. Condition (Hard) - Fair (Grade 3) Residual Life - 10 to 15 years Condition (Wall) - Fair (Grade 3) Residual Life - 10 to 15 years	
	IW 6 / 011 Unknown	**IW 6 / 011** Stone masonry wall with concrete capping. Timber pole field fronting 'Seagull Cottage'. Condition - Fair (Grade 3) Residual Life - 8 to 12 years	
	IW 6 / 012 Undefended	**IW 6 / 012** Undefended foreshore of sand and shingle.	
	IW 6 / 013 Unknown	**IW 6 / 013** Concrete / stone masonry wall structure for access road. Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 6 / 014 Unknown	**IW 6 / 014** Timber groyne extending onto the foreshore. Timber breast work protecting frontage. Condition - Good (Grade 2) Residual Life - 10 to 20 years	
	IW 6 / 015 Unknown	**IW 6 / 015** Concrete slipway extends onto foreshore. Steel sheet piled wall with concrete copping. Condition - Poor (Grade 4) Residual Life - 5 to 10 years	
	IW 6 / 016 Undefended	**IW 6 / 016** Timber landing stage extends onto foreshore. Undefended foreshore of mud, sand and shingle is subject to continual erosion. Limestone outcrops to upper foreshore. Remains of timber structures and outfalls visible on shore.	

Location	Defence History	Present and Residual Life	Natural Features
IW 7 **RYDE** OS Grid Reference: **SZ58519, 92942** **SZ60432, 92553** Length: **2696m**	**IW 7 / 001** Unknown	**IW 7 / 001** Concrete outfall extends onto the foreshore. Stone masonry wall protects frontage, to the west extending landward the coastal structure comprises of a mixture of brick / concrete block masonry and concrete encasement. Condition (Wall) - Poor (Grade 4) Residual Life - 5 to 7 years Condition (Groyne) - Fair (Grade 4) Residual Life - 10 to 15 years	Wide dissipative sandy foreshore comprising the Ryde Sands sediment sink, coastal slope is steep in places.
	IW 7 / 002 Unknown	**IW 7 / 002** Stone masonry wall protects frontage. Concrete encasement toe visible. Condition - Fair (Grade 3) Residual Life - 10 to 15 years	
	IW 7 / 003 Seawall constructed 1960.	**IW 7 / 003** Sloping concrete apron with wave return section to top of crest level +2.7m Ordnance Datum Newlyn (ODN). Concrete strip buttresses at intervals along face of slopping apron. Stone masonry wall fronting ‘St Annes’. Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 7 / 004 Unknown	**IW 7 / 004** Stone masonry wall protects frontages. Mass concrete step block incorporates outfall. Concrete slipway. Condition - Fair (Grade 3) Residual Life - 10 to 15 years	
	IW 7 / 005 Seawall constructed 1950. Apron and toe piling constructed 1992.	**IW 7 / 005** Stone masonry wall of crest level +3.8m Ordnance Datum Newlyn (ODN) protects frontages. Steel sheet piled toe pre-cast concrete revetment blocks inset over line of sewer. Condition - Fair (Grade 3) Residual Life - 10 to 15 years	
	IW 7 / 006 Unknown	**IW 7 / 006** Stone masonry wall protects frontages. Concrete slipway.	

Location	Defence History	Present and Residual Life	Natural Features
		Condition - Fair (Grade 3) Residual Life - 10 to 15 years	
	IW 7 / 007 Unknown	**IW 7 / 007** Stone masonry wall protects frontages. Condition - Fair (Grade 3) Residual Life - 10 to 15 years	
	IW 7 / 008 Unknown	**IW 7 / 008** Stone masonry wall protects car park. Outfall. Condition - Poor (Grade 4) Residual Life - 5 to 7 years	
	IW 7 / 009 Seawall constructed 1930. Apron and Toe piling constructed 1980.	**IW 7 / 009** Steel sheet piled toe. Stepped concrete apron. Concrete wall with wave return parapet copping of crest level +4.1m Ordnance Datum Newlyn (ODN). Steel sheet piled 'T' shaped groyne extending onto the foreshore. Condition (Wall) - Fair (Grade 3) Residual Life - 10 to 15 years Condition (Groyne) - Fair (Grade 3) Residual Life - 18 to 26 years	
	IW 7 / 010 Seawall constructed 1950.	**IW 7 / 010** Vertical concrete wall with slight curved flank wall of crest level +3.9m Ordnance Datum Newlyn (ODN). Concrete encased groyne. Concrete step block. Concrete groyne incorporating west and east step accesses. Remains of timber structure on shore. Stone masonry groyne with rounded concrete capping. Condition (Wall) - Fair (Grade 3) Residual Life - 10 to 15 years Condition (Groyne) - Fair (Grade 3) Residual Life - 10 to 15	
	IW 7 / 011 Masonry seawall constructed 1930. Concrete wall constructed 1980.	**IW 7 / 011** Stone masonry wall, encased with concrete at sections of crest level +4.1m Ordnance Datum Newlyn (ODN), extends to the Hover Travel slipway. Condition - Fair (Grade 3) Residual Life - 10 to 15 years	

Location	Defence History	Present and Residual Life	Natural Features
	IW 7 / 012 Unknown	**IW 7 / 012** Rock Armour revetment protects concrete slipway wall. Concrete slipway 'Hover Travel' extends along the length of this frontage. Low laying concrete wall with various openings for access. Hovercraft terminal building. Condition (Wall) - Very Good (Grade 1) Residual Life - 25 to 35 years Condition (Rock) - Very Good (Grade 1) Residual Life - 25 to 35 years	
	IW 7 / 013 Seawall constructed 1991. Vectis slipway constructed 2001.	**IW 7 / 013** Precast concrete block modules with open joints forming 'rip rap' effect. Concrete wall with wave return of crest level +3.8m Ordnance Datum Newlyn (ODN). Rock armour surrounds the most westerly and easterly tips. Two concrete step access points. Concrete slipway 'Vectis Slip' incorporating storm gates. Concrete slipway 'Ryde Harbour'. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Rock) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 7 / 014 Reconstruction of Seawall and promenade July 1985.	**IW 7 / 014** Concrete wall with wave return of crest level +3.8m Ordnance Datum Newlyn (ODN), fronting Ryde Harbour. Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 7 / 015 Ryde Leisure Harbour constructed July 1991.	**IW 7 / 015** Ryde Harbour arm consisting of rock armour revetment, concrete wall, rock filled gabions with concrete capping beam. To the south east side - Concrete wall with wave return section crest level +4.1m Ordnance Datum Newlyn (ODN). Pre-cast concrete block modules with open joints forming 'rip rap' effect. Concrete access steps. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Rock) - Good (Grade 2) Residual Life - 15 to 25 years	

Location	Defence History	Present and Residual Life	Natural Features
	IW 7 / 016 Seawall constructed 1991.	**IW 7 / 016** Concrete wall with wave return section of crest level +3.8m Ordnance Datum Newlyn (ODN). Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 7 / 017 Unknown	**IW 7 / 017** Stone masonry wall. 'Colwell Street' slipway. Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 7 / 018 Seawall constructed 1966. Monkton Mead brook flood alleviation scheme completed October 2002.	**IW 7 / 018** Concrete wall and apron, with slight batter and curved overhang to coping of crest level +3.6m Ordnance Datum Newlyn (ODN). Monkton Mead outfall. Concrete step access. Sheet piled curvilinear breakwater with concrete slab overhanging to form coping edge. Navigation aid. Concrete wall and apron, with slight batter and curved overhang to coping of crest level +4.1m Ordnance Datum Newlyn (ODN). Condition (Wall) - Fair (Grade 3) Residual Life - 10 to 15 years Condition (Breakwaters) - Poor (Grade 4) Residual Life - 5 to 10 years	
	IW 7 / 019 Unknown	**IW 7 / 019** Concrete wall with wave return. Concrete slipway 'Sandy slip'. Condition - Fair (Grade 3) Residual Life - 10 to 15 years	
	IW 7 / 020 Seawall constructed 1966.	**IW 7 / 020** Sheet piled curvilinear breakwater with concrete slab overhanging to form coping edge. Navigation aid. Concrete access steps. Concrete wall and apron, with slight batter and curved overhang to coping of crest level +4.1m Ordnance Datum Newlyn (ODN). Two concrete access steps. Concrete wall and apron, with slight batter and curved overhang to coping. Condition (Wall) - Fair (Grade 3) Residual Life -10 to 15 years	

Location	Defence History	Present and Residual Life	Natural Features
		Condition (Breakwater) - Poor (Grade 4) Residual Life - 5 to 10 years	
IW 8 **APPLEY & PUCKPOOL** OS Grid Reference: **SZ60432, 92553** **SZ61679, 92109** Length: **1453m**	**IW 8 / 001** North Walk Seawall constructed August 1966.	**IW 8 / 001** Concrete wall and apron, with slight batter and curved overhang to coping of crest level +4.1m Ordnance Datum Newlyn (ODN). Concrete slipway 'Appley Slipway'. Sheet piled groyne with concrete slab overhanging to form coping edge. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Breakwater) - Poor (Grade 4) Residual Life - 5 to 7 years	Wide sandy foreshore with gravel backshore forming barrier across Seaview Duver. Bembridge Limestone outcrop resistant headland of Nettlestone point.
	IW 8 / 002 Stone masonry wall constructed. Seawall constructed 1960.	**IW 8 / 002** Stone masonry wall with concrete decking of crest level +3.7m Ordnance Datum Newlyn (ODN). Access steps. Condition - Fair (Grade 3) Residual Life - 10 to 15 years	
	IW 8 / 003 Seawall constructed 1930.	**IW 8 / 003** Stone masonry wall with concrete decking of crest level +3.7m Ordnance Datum Newlyn (ODN). Access steps. Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 8 / 004 Seawall constructed 1991.	**IW 8 / 004** Concrete wall with wave return section of crest level +4.0m Ordnance Datum Newlyn (ODN). Three sets of concrete access steps. Condition - Very Good (Grade 1) Residual Life - 25 to 35 years	
	IW 8 / 005 Seawall constructed 1930.	**IW 8 / 005** Stone masonry wall with concrete capping of crest level +4.5m Ordnance Datum Newlyn (ODN). Condition – Fair (Grade 3) Residual Life - 10 to 15 years	

Location	Defence History	Present and Residual Life	Natural Features
	IW 8 / 006 Seawall constructed 1984. **IW 8 / 007** Seawall constructed 1960. **IW 8 / 008** Seawall constructed 1930.	**IW 8 / 006** Concrete wall with extreme wave return section. Stepped apron of crest level +4.5m Ordnance Datum Newlyn (ODN). Remains of outfall. Concrete step block. Condition - Good (Grade 2) Residual Life - 15 to 20 years **IW 8 / 007** Concrete wall with wave return section. Stepped apron of crest level +4.5m Ordnance Datum Newlyn (ODN). Remains of timber and stone masonry structures on shore. Condition - Poor (Grade 4) Residual Life - 5 to 7 years **IW 8 / 008** Stone masonry wall. Stone masonry buttress. Concrete step block. Stone masonry buttress. Condition - Fair (Grade 3) Residual Life - 10 to 15 years	
IW 9 **SPRINGVALE** OS Grid Reference: **SZ61679, 92109** **SZ62059, 91922** Length: **449m**	**IW 9 / 001** Springvale Coast Protection Scheme Reconstruction Seawall completed June 1993.	**IW 9 / 001** Masonry Purbeck stone masonry wall, above concrete toe. Concrete coping with slight projection over wall face constructed to a level of +4.5m above Ordnance Datum Newlyn (ODN). Concrete slipway and slipway gates. Three outfalls. Four concrete step blocks and storm gates. Outfall. Rock Armour groyne. Outfall. Three concrete step blocks and storm gates. Outfall. Concrete slipway and slipway gates. Condition (Wall) - Very Good (Grade 1) Residual Life - 25 to 35 years Condition (Rock Groyne) - Good (Grade 2) Residual Life - 15 to 25 years	Wide sandy foreshore with gravel backshore forming barrier across Seaview Duver. Bembridge Limestone outcrop resistant headland of Nettlestone point.

Location	Defence History	Present and Residual Life	Natural Features
IW 10 **SEAVIEW DUVER** OS Grid Reference: **SZ62059, 91922** **SZ62587, 91747** Length: **578m**	**IW 10 / 001** Seaview Duver Coast Protection Scheme completed August 2004. Hersey Nature Reserve created in 2004.	**IW 10 / 001** Concrete piled and stepped apron wall with wave return. Rock Revetment. Portland stone masonry wall to landward face constructed to a level of +4.5m above Ordnance Datum Newlyn (ODN). Stone masonry outfall. Concrete slipway and slipway gates. Storm gates at various locations leading to concrete step blocks. Three short concrete outfalls, one large outfall incorporating rock armour and timber piling, and saline inlet pipe for the Hersey Nature Reserve. Concrete slipway and slipway gates. Condition (Wall) - Very Good (Grade 1) Residual Life - 25 to 35 years Condition (Rock) - Very Good (Grade 1) Residual Life - 25 to 35 years	Wide sandy foreshore with gravel backshore forming barrier across Seaview Duver. Bembridge Limestone outcrop resistant headland of Nettlestone point.
IW 11 **SEAVIEW** OS Grid Reference: **SZ62587, 91747** **SZ62847, 91713** Length: **277m**	**IW 11 / 001** Seawall constructed 1930.	**IW 11 / 001** Stone masonry wall protecting private frontages. Concrete buttress. Five timber landing stages. Three concrete steps accesses. Remains of timber landing stage and rock groyne. Condition - Fair (Grade 3) Residual Life - 10 to 15 years	Wide sandy foreshore with gravel backshore forming barrier across Seaview Duver. Bembridge Limestone outcrop resistant headland of Nettlestone point.
IW 12 **SEAGROVE BAY** OS Grid Reference: **SZ62847, 91713** **SZ63325, 90733** Length: **1436m**	**IW 12 / 001** Seawall constructed 1930. **IW 12 / 002** Seawall constructed 1930.	**IW 12 / 001** Stone set slipway. Stone masonry wall. Stone concrete access steps. Stone masonry wall fronting Seaview yacht club. Condition - Good (Grade 2) Residual Life - 15 to 25 years **IW 12 / 002** Steel sheet piled groyne. Condition - Poor (Grade 4) Residual Life - 5 to 10 years	Shallow embayment between headlands, with increasing relief to the south where steep coastal slopes formed in Tertiary clays have suffered rotational base failures. Narrow to moderate gravel upper beach and sandy lower foreshore, becoming wider and flatter to the

Location	Defence History	Present and Residual Life	Natural Features
			south.
	IW 12 / 003 Seawall constructed 1930.	**IW 12 / 003** Concrete step access. Stone masonry wall with concrete encasement toe and concrete wave return coping. Concrete slipway. Condition - Poor (Grade 4) Residual Life - 5 to 7 years	
	IW 12 / 004 Seawall constructed 1930.	**IW 12 / 004** Stone masonry wall with concrete wave return coping of crest level +4.3m Ordnance Datum Newlyn (ODN). Concrete encased outfall. Concrete step access. Concrete slipway 'High Street Slipway'. Condition - Fair (Grade 3) Residual Life - 10 to 15 years	
	IW 12 / 005 Seawall constructed 1930.	**IW 12 / 005** Stone masonry wall protecting private frontages of crest level +3.5m Ordnance Datum Newlyn (ODN). Three step accesses. Condition - Fair (Grade 3) Residual Life - 10 to 15 years	
	IW 12 / 006 Seawall constructed 1930.	**IW 12 / 006** Stone masonry wall with concrete encased toe. Condition - Fair (Grade 3) Residual Life - 10 to 15 years	
	IW 12 / 007 Seawall constructed 1930.	**IW 12 / 007** Stone masonry wall, three concrete buttresses and concrete step access. Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 12 / 008 Seawall constructed 1930 – Recently encased 2008.	**IW 12 / 008** Concrete wall with wave return coping and sloping concrete apron. Steel sheet piling. Concrete step access. Condition - Good (Grade 2) Residual Life - 15 to 25 years	

Location	Defence History	Present and Residual Life	Natural Features
	IW 12 / 009 Seawall constructed 1930.	**IW 12 / 009** Stone masonry wall with concrete toe encasement protecting concrete slipway 'Sand Cove Slipway'. Outfall. Condition - Fair (Grade 3) Residual Life - 10 to 15 years	
	IW 12 / 010 Seawall constructed 1970.	**IW 12 / 010** Concrete wall with wave return coping and stepped concrete apron of crest level +4.3m Ordnance Datum Newlyn (ODN). Remains of timber structures on foreshore. Concrete buttress. Concrete groyne. Concrete step access. Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 12 / 011 Seawall constructed 1970.	**IW 12 / 011** Stone masonry / concrete wall of crest level +3.3m Ordnance Datum Newlyn (ODN). Remains of timber posts on foreshore. Concrete slipway. Condition - Fair (Grade 3) Residual Life - 10 to 15 years	
	IW 12 / 012 Seawall constructed 1970.	**IW 12 / 012** Stone / concrete block masonry wall changing to concrete encased wall with wave return profile of crest level +3.3m Ordnance Datum Newlyn (ODN). Two short stone masonry / concrete groynes. Concrete access steps. Condition - Fair (Grade 3) Residual Life - 10 to 15 years	
	IW 12 / 013 Seawall constructed 2007.	**IW 12 / 013** Concrete access steps. Concrete wall with wave return profile. Condition - Very Good (Grade 1) Residual Life - 25 to 35 years	
	IW 12 / 014 Unknown	**IW 12 / 014** Concrete wall. Condition - Fair (Grade 3) Residual Life - 10 to 15 years	

Location	Defence History	Present and Residual Life	Natural Features
	IW 12 / 015 Unknown	**IW 12 / 015** Concrete block masonry wall. Rock / concrete rubble armour at toe. Concrete access steps. Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 12 / 016 Unknown	**IW 12 / 016** Concrete block masonry wall. Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 12 / 017 Seawall constructed in 2009 fronting one property along this frontage.	**IW 12 / 017** Concrete wall. Concrete access steps. Condition - Poor (Grade 4) Residual Life - 5 to 7 years	
	IW 12 / 018 Unknown	**IW 12 / 018** Concrete wall. Concrete access steps. Concrete slipway 'Gully Road Slipway'. Condition - Poor (Grade 4) Residual Life - 5 to 7 years	
	IW 12 / 019 Seagrove Bay Coast Protection Scheme completed Spring 2000.	**IW 12 / 019** Rock Revetment. Concrete sea wall faced with stone masonry constructed to a level of +3.4m above Ordnance Datum Newlyn (ODN) with concrete wave return coping. Concrete splash wall to the rear. Three rock groynes. Three concrete step accesses. Concrete slipway. Condition (Wall) - Very good (Grade 1) Residual Life - 25 to 35 years Condition (Rock) - Very Good (Grade 1) Residual Life - 25 to 35 years	
	IW 12 / 020 Timber walkway constructed 2000. Undefended	**IW 12 / 020** Timber walkway consisting of timber decked structure on timber piling. Connects seawall promenade with steps at Horestone Point. 50m section of round wood timber breastwork constructed to a level of +3.3m above Ordnance Datum Newlyn	

Location	Defence History	Present and Residual Life	Natural Features
		(ODN). Condition (Walkway) - Very good (Grade 1) Residual Life - 15 to 25 years Condition (Timber piles) - Very poor (Grade 5) Residual Life - 0 years	
IW 13 **PRIORY BAY** OS Grid Reference: **SZ63325, 90733** **SZ63743, 89542** Length: **1490m**	**IW 13 / 001** Unknown **IW 13 / 002** Slipway constructed 1970. **IW 13 / 003** Seawall constructed 1930. **IW 13 / 004** Undefended	**IW 13 / 001** Series of timber piled cribwork groynes with rock infill. Short section of undefended wooded slope with shingle / rock foreshore. Remains of stone masonry wall. Timber slipway. Concrete slipway. Condition (Cliff) - Poor (Grade 4) Residual Life - 5 to 7 years Condition (Cribwork) - Poor (Grade 4) Residual Life - 2 to 7 years **IW 13 / 002** Stone masonry / concrete wall of crest level +3.5m Ordnance Datum Newlyn (ODN). Remains of stone masonry structure on foreshore. Condition - Poor (Grade 4) Residual Life - 5 to 7 years **IW 13 / 003** Remains of stone masonry / concrete wall with buttresses and concrete wave return coping of crest level +4.0m Ordnance Datum Newlyn (ODN). Rock strewn point and foreshore. Condition - Very poor (Grade 5) Residual Life - 0 years **IW 13 / 004** Undefended wooded slope. Sandy beach with rocky ledges and shingle to upper foreshore.	A minor headland separates two frontages of contrasting shoreline behaviour. To the south there is a wide shore platform (Bembridge Limestone) and a sandy lower foreshore. Within Priory Bay to the north there is a wide sandy foreshore at times exhibiting an offshore bar. Eroding or reactivating cliffs are developed throughout, although landslide activity is presently concentrated within southern parts of Priory Bay.
IW 14 **ST HELEN'S DUVER**	**IW 14 / 001** Seawall constructed	**IW 14 / 001** Stone masonry wall, with a concrete toe crest level +3.3m Ordnance Datum	Convergent sand and gravel spits flanking the

Location	Defence History	Present and Residual Life	Natural Features
OS Grid Reference: **SZ63743, 89542** **SZ63838, 88756** Length: **924m**	1930. **IW 14 / 002** Seawall constructed 1930. **IW 14 / 003** Unknown **IW 14 / 004** Groynes constructed 1990. **IW 14 / 005** Groynes constructed 1990 **IW 14 / 006** Seawall constructed 1950.	Newlyn (ODN). Concrete access ramp. Concrete buttress. Condition - Fair (Grade 3) Residual Life - 10 to 15 years **IW 14 / 002** Stone masonry wall, sloping stone masonry apron with protecting 'St Helens Church'. Outfall. Condition - Fair (Grade 3) Residual Life - 10 to 15 years **IW 14 / 003** Low stone masonry wall, fronting car park. Concrete slipway. Condition - Fair (Grade 3) Residual Life - 10 to 15 years **IW 14 / 004** Concrete wall, fronting car park of crest level +3.8m Ordnance Datum Newlyn (ODN). Timber groyne. Timber access steps. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Groyne) – Good (Grade 2) Residual Life - 10 to 20 years **IW 14 / 005** Remains of entrance to changing chamber, blocked up with concrete blocks. Timber Groyne. Condition - Good (Grade 2) Residual Life - 15 to 25 years Condition (Groyne) – Good (Grade 2) Residual Life - 10 to 20 years **IW 14 / 006** Concrete wall of crest level +3.8m Ordnance Datum Newlyn (ODN). Two double concrete step blocks. Four timber groynes. Three concrete buttress. Timber access steps. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years	Bembridge Harbour inlet. The larger spit (the Duver) comprises a sand dune system stabilised by vegetation. Near shore water depths are shallow, owing to the presence of a substantial ebb tidal delta comprised of sand and gravel.

Location	Defence History	Present and Residual Life	Natural Features
		Condition (Groyne) – Good (Grade 2) Residual Life - 10 to 20 years	
	IW 14 / 007 Seawall constructed 1950.	**IW 14 / 007** Steel sheet piled / concrete wall. Double concrete step block. Timber groyne. Condition (Wall) - Poor (Grade 4) Residual Life - 5 to 10 years Condition (Groyne) – Good (Grade 2) Residual Life - 10 to 20 years	
	IW 14 / 008 Unknown	**IW 14 / 008** Concrete and granite set groyne. Remains of timber and metal structures. Condition - Poor (Grade 4) Residual Life - 5 to 7 years	
	IW 14 / 009 Unknown	**IW 14 / 009** Concrete wall. Condition - Fair (Grade 3) Residual Life - 10 to 15 years	
	IW 14 / 010 Seawall constructed 1950.	**IW 14 / 010** Steel sheet piled concrete wall. Bull head rail and timber groyne. Condition (Wall) - Fair (Grade 3) Residual Life - 18 to 26 years Condition (Groyne) - Good (Grade 2) Residual Life - 10 to 20 years	
	IW 14 / 011 Unknown	**IW 14 / 011** Steel sheet piled wall. Condition (Wall) - Very Poor (Grade 5) Residual Life - 0 years	
	IW 14 / 012 Unknown	**IW 14 / 012** Steel sheet piled concrete wall. Bull head rail and timber groyne. Condition - Good (Grade 2) Residual Life - 15 to 25 years	

Location	Defence History	Present and Residual Life	Natural Features
	IW 14 / 013 Unknown	**IW 14 / 013** Concrete / stone masonry wall constructed to a level of +3.3m above Ordnance Datum Newlyn (ODN).. Concrete step access. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Groyne) - Good (Grade 2) Residual Life - 10 to 20 years	
	IW 14 / 014 Unknown	**IW 14 / 014** Stone / concrete block work masonry wall constructed to a level of +3.3m above Ordnance Datum Newlyn (ODN).. Concrete / stone masonry groyne. Condition (Wall) - Fair (Grade 3) Residual Life - 10 to 15 years Condition (Groyne) - Fair (Grade 3) Residual Life - 8 to 12 years	
	IW 14 / 015 Unknown	**IW 14 / 015** Bembridge harbour groyne constructed from steel piles with braces and timber boarding. Condition - Good (Grade 2) Residual Life - 10 to 20 years	
IW 15 **BEMBRIDGE HARBOUR** OS Grid Reference: **SZ63838, 88756** **SZ64113, 88851** Length: **5256m**	**IW 15 / 001** Unknown	**IW 15 / 001** Earth / rubble revetment protecting boat yard. Condition - Poor (Grade 4) Residual Life - 5 to 7 years	Remnant of a previously larger estuary (flooded valley of the eastern Yar). Mostly artificial embanked margins. Suffering siltation owing to loss of tidal prism following reclamation.
	IW 15 / 002 Unknown	**IW 15 / 002** Rubble revetment. Entrance to boat yard. Condition - Poor (Grade 4) Residual Life - 5 to 7 years	
	IW 15 / 003 Unknown	**IW 15 / 003** Concrete block work masonry wall. Condition - Fair (Grade 3) Residual Life - 10 to 15 years	

Location	Defence History	Present and Residual Life	Natural Features
	IW 15 / 004 Unknown	**IW 15 / 004** Concrete revetment. Concrete slipway. Landing stage. Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 15 / 005 Unknown	**IW 15 / 005** Concrete block work masonry wall. Concrete slipway. Concrete wall. Concrete slipways. Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 15 / 006 Unknown	**IW 15 / 006** Concrete wall. Steel 'I' section / sleeper breast work. Landing stage. Concrete slipway. Condition - Good (Grade 2) Residual Life - 10 to 20 years	
	IW 15 / 007 Unknown	**IW 15 / 007** Timber piled posts. Landing stage. Concrete slipway. Condition - Good (Grade 2) Residual Life - 10 to 20 years	
	IW 15 / 008 Unknown	**IW 15 / 008** Remains of old stone masonry harbour wall, and timber posts. Condition - Failed (Abandoned) Residual Life - 0 years	
	IW 15 / 009 Unknown	**IW 15 / 009** Earth / rubble revetment. Condition - Poor (Grade 4) Residual Life - 8 to 12 years	
	IW 15 / 010 Undefended	**IW 15 / 010** Chalk / Flint cobble revetment. Remains of timber groyne and breastwork. Condition (Breast work) - Poor (Grade 4) Residual Life - 2 to 7 years	

Location	Defence History	Present and Residual Life	Natural Features
		NFCDD Condition - Good (Grade 2)	
	IW 15 / 011 Unknown	**IW 15 / 011** Timber woven breast work. Condition - Poor (Grade 4) Residual Life - 2 to 7 years	
	IW 15 / 012 Unknown	**IW 15 / 012** Stone masonry cause way. Incorporating two bridges. Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 15 / 013 Unknown	**IW 15 / 013** Stone / rubble revetment. Concrete wall. Condition - Fair (Grade 3) Residual Life - 10 to 15 years	
	IW 15 / 014 Undefended	**IW 15 / 014** Unprotected dune frontage. NFCDD Condition - Good (Grade 2)	
	IW 15 / 015 Unknown	**IW 15 / 015** Timber breast work protecting dunes. Condition - Good (Grade 2) Residual Life - 10 to 20 years	
	IW 15 / 016 Undefended	**IW 15 / 016** Unprotected dune frontage. NFCDD Condition - Good (Grade 2)	
	IW 15 / 017 Unknown	**IW 15 / 017** Timber breast work protecting dunes and footpath. Condition - Good (Grade 2) Residual Life - 10 to 20 years	

Location	Defence History	Present and Residual Life	Natural Features
	IW 15 / 018 Unknown	**IW 15 / 018** Short concrete wall. Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 15 / 019 Unknown	**IW 15 / 019** Timber breast work protecting dunes and footpath. Condition - Good (Grade 2) Residual Life - 10 to 20 years	
	IW 15 / 020 Unknown	**IW 15 / 020** Concrete wall incorporating inlet / outlet pipe. Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 15 / 021 Unknown	**IW 15 / 021** Timber breast work protecting dunes and footpath. Condition - Good (Grade 2) Residual Life - 10 to 20 years	
	IW 15 / 022 Undefended	**IW 15 / 022** Unprotected frontage. Timber bridge. Landing stage. NFCDD Condition - Good (Grade 2)	
	IW 15 / 023 Unknown	**IW 15 / 023** Suspected stone masonry wall. Condition - Fair (Grade 3) Residual Life - 10 to 15 years	
	IW 15 / 024 Unknown	**IW 15 / 024** Concrete rubble wall. Condition - Very Poor (Grade 5) Residual Life - 0 years	
	IW 15 / 025 Unknown	**IW 15 / 025** Stone masonry wall. Inlet / outlet tunnel structure. Concrete wall.	

Location	Defence History	Present and Residual Life	Natural Features
		Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 15 / 026 Unknown	**IW 15 / 026** Stone masonry wall. Inlet / outlet tunnel structure. Concrete access steps. Disused concrete slipway. Stone masonry / brick bridge. Timber access steps. Stone masonry access steps. Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 15 / 027 Unknown	**IW 15 / 027** Timber piled concrete wall. Access ramp to pontoons. Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 15 / 028 Unknown	**IW 15 / 028** Concrete block work masonry wall. Timber bridge. Condition - Fair (Grade 3) Residual Life - 10 to 15 years	
	IW 15 / 029 Unknown	**IW 15 / 029** Concrete wall. Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 15 / 030 Unknown	**IW 15 / 030** Concrete wall. Block revetment. Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 15 / 031 Unknown	**IW 15 / 031** Sluice gates at outfall of the Eastern Yar into Bembridge Harbour. Tidal sluice penstocks. Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 15 / 032	**IW 15 / 032**	

Location	Defence History	Present and Residual Life	Natural Features
	Unknown	Concrete wall. Block revetment. Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 15 / 033 Unknown	**IW 15 / 033** Timber piled concrete wall. Access ramp to pontoons. Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 15 / 034 Unknown	**IW 15 / 034** Concrete revetment. Concrete slipway. Landing stage and access ramp to pontoons. Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 15 / 035 Unknown	**IW 15 / 035** Bull head rail / sleeper breast work. Landing stage. Concrete slipway. Condition - Good (Grade 2) Residual Life - 10 to 20 years	
	IW 15 / 036 Unknown	**IW 15 / 036** Earth embankment constructed to a level of +3.0m above Ordnance Datum Newlyn (ODN), fronting embankment road. Remains of flint / chalk revetment structure protruding from foreshore. Condition - Fair (Grade 3) Residual Life - 10 to 15 years	
	IW 15 / 037 Unknown	**IW 15 / 037** Shingle / plastic mesh revetment fronting fisherman's pontoons. Access ramp to pontoons. Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 15 / 038 Unknown	**IW 15 / 038** Earth embankment. Remains of flint / chalk revetment structure protruding from foreshore.	

Location	Defence History	Present and Residual Life	Natural Features
		Condition - Fair (Grade 3) Residual Life - 10 to 15 years	
	IW 15 / 039 Unknown	**IW 15 / 039** Concrete wall incorporating outfall pipe. Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 15 / 040 Unknown	**IW 15 / 040** Rubble / earth embankment. Remains of flint / chalk revetment structure protruding from foreshore. Condition - Poor (Grade 4) Residual Life - 5 to 7 years	
	IW 15 / 041 Unknown	**IW 15 / 041** Concrete filled sandbag structure. Condition - Fair (Grade 3) Residual Life - 10 to 15 years	
	IW 15 / 042 Unknown	**IW 15 / 042** Timber breast work back filled with cobbles and rubble. Condition - Poor (Grade 4) Residual Life - 2 to 7 years	
	IW 15 / 043 Unknown	**IW 15 / 043** Timber access steps. Concrete filled sandbag structure. Condition - Fair (Grade 3) Residual Life - 10 to 15 years	
	IW 15 / 044 Unknown	**IW 15 / 044** Concrete wall supporting access ramp to pontoons. Concrete slipway. Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 15 / 045 Unknown	**IW 15 / 045** Timber breast work back filled with cobbles and rubble. Condition - Poor (Grade 4) Residual Life - 2 to 7 years	

Location	Defence History	Present and Residual Life	Natural Features
	IW 15 / 046 Unknown	**IW 15 / 046** Concrete filled sandbag structure. Condition - Poor (Grade 4) Residual Life - 5 to 7 years	
	IW 15 / 047 Unknown	**IW 15 / 047** Concrete block work masonry wall. Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 15 / 048 Unknown	**IW 15 / 048** Poured concrete / rock revetment. Condition - Poor (Grade 4) Residual Life - 5 to 7 years	
	IW 15 / 049 Unknown	**IW 15 / 049** Concrete filled sandbag structure. Condition - Poor (Grade 4) Residual Life - 5 to 7 years	
	IW 15 / 050 Unknown	**IW 15 / 050** Poured concrete / rock revetment. Condition - Poor (Grade 4) Residual Life - 5 to 7 years	
	IW 15 / 051 Unknown	**IW 15 / 051** Rock revetment. Poured concrete / rock revetment. Condition - Poor (Grade 4) Residual Life - 5 to 7 years	
	IW 15 / 052 Unknown	**IW 15 / 052** Concrete slipway. Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 15 / 053	**IW 15 / 053**	

Location	Defence History	Present and Residual Life	Natural Features
	Unknown	Concrete wall. Landing stage and ramp leading onto pontoons. Concrete slipway. Concrete block masonry wall. Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 15 / 054 Unknown	**IW 15 / 054** Concrete filled sandbag structure. Condition - Fair (Grade 3) Residual Life - 10 to 15 years	
	IW 15 / 055 Unknown	**IW 15 / 055** Rock revetment. Timber landing stage structure to house boat. Condition - Poor (Grade 4) Residual Life - 5 to 7 years	
	IW 15 / 056 Unknown	**IW 15 / 056** Concrete rubble revetment. Condition - Poor (Grade 4) Residual Life - 5 to 7 years	
	IW 15 / 057 Unknown	**IW 15 / 057** Timber breast work. Access ramp to house boat. Condition - Good (Grade 2) Residual Life - 10 to 20 years	
	IW 15 / 058 Unknown	**IW 15 / 058** Concrete block work / brick masonry wall. Timber landing stage structure to house boat. Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 15 / 059 Unknown	**IW 15 / 059** Rock revetment. Concrete wall. Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 15 / 060	**IW 15 / 060**	

Location	Defence History	Present and Residual Life	Natural Features
	Unknown	Rock revetment. Concrete wall. Timber landing stage structure to house boats. Condition - Fair (Grade 3) Residual Life - 15 to 25 years	
	IW 15 / 061 Unknown	**IW 15 / 061** Concrete block work masonry wall. Timber landing stage structure to house boat. Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 15 / 062 Unknown	**IW 15 / 062** Stone masonry wall. Condition - Fair (Grade 3) Residual Life - 10 to 15 years	
	IW 15 / 063 Unknown	**IW 15 / 063** Timber breast work. Condition - Good (Grade 2) Residual Life - 10 to 20 years	
	IW 15 / 064 Unknown	**IW 15 / 064** Concrete wall. Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 15 / 065 Unknown	**IW 15 / 065** Concrete rubble revetment. Condition - Poor (Grade 4) Residual Life - 5 to 7 years	
	IW 15 / 066 Unknown	**IW 15 / 066** Concrete wall. Timber landing stage structures to house boats. Access steps to foreshore. Remains of timber piles. Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 15 / 067 Unknown	**IW 15 / 067** Concrete block work masonry wall.	

Location	Defence History	Present and Residual Life	Natural Features
		Condition - Fair (Grade 3) Residual Life - 10 to 15 years	
	IW 15 / 068 Unknown	**IW 15 / 068** Timber landing stage structures to house boats. Condition - Fair (Grade 3) Residual Life - 8 to 12 years	
	IW 15 / 069 Unknown	**IW 15 / 069** Concrete block work masonry wall. Timber landing stage structure to house boat. Condition - Fair (Grade 3) Residual Life - 10 to 15 years	
	IW 15 / 070 Unknown	**IW 15 / 070** Timber landing stage structures to house boats. Condition - Fair (Grade 3) Residual Life - 8 to 12 years	
	IW 15 / 071 Unknown	**IW 15 / 071** Timber breast work. Condition - Fair (Grade 3) Residual Life - 8 to 12 years	
	IW 15 / 072 Unknown	**IW 15 / 072** Concrete block work masonry wall supported on steel drums. Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 15 / 073 Unknown	**IW 15 / 073** Timber landing stage structures to house boats. Earth embankment. Condition - Fair (Grade 3) Residual Life - 8 to 12 years	
	IW 15 / 074 Unknown	**IW 15 / 074** Concrete wall. Condition - Fair (Grade 3) Residual Life - 10 to 15 years	

Location	Defence History	Present and Residual Life	Natural Features
	IW 15 / 075 Unknown	**IW 15 / 075** Embankment. Timber landing stage structures to house boats. Condition - Fair (Grade 3) Residual Life - 8 to 12 years	
	IW 15 / 076 Unknown	**IW 15 / 076** Concrete wall. Steel landing stage and access ramp to pontoons. Condition - Very Good (Grade 1) Residual Life - 25 to 35 years	
	IW 15 / 077 Unknown	**IW 15 / 077** Earth / rubble embankment. Remains of timber breast work. Condition - Poor (Grade 4) Residual Life - 5 to 7 years	
	IW 15 / 078 Unknown	**IW 15 / 078** Concrete / concrete block work masonry wall. Concrete slipway. Condition - Poor (Grade 4) Residual Life - 5 to 7 years	
	IW 15 / 079 Unknown	**IW 15 / 079** Concrete block work masonry wall. Concrete / piled bull head rail wall with concrete capping. Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 15 / 080 Unknown	**IW 15 / 080** Concrete slipway. Steel and timber landing stage with ramp access to pontoon. Concrete wall. Steel / timber access ramp to pontoons. Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 15 / 081 Unknown	**IW 15 / 081** Concrete revetment. Concrete slipway. Access ramp to pontoons. Condition - Good (Grade 2) Residual Life - 15 to 25 years	

Location	Defence History	Present and Residual Life	Natural Features
	IW 15 / 082 Unknown	**IW 15 / 082** Timber slipway with concrete toe. Concrete wall. Timber slipway. Concrete slipway edged with timber sleepers. Condition - Very Good (Grade 1) Residual Life - 25 to 35 years	
	IW 15 / 083 Unknown	**IW 15 / 083** Timber fence. Condition - Poor (Grade 4) Residual Life - 2 to 7 years	
	IW 15 / 084 Unknown	**IW 15 / 084** Toll gate café. Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 15 / 085 Unknown	**IW 15 / 085** Concrete decking. Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 15 / 086 Unknown	**IW 15 / 086** Timber breast work. Condition - Good (Grade 2) Residual Life - 10 to 20 years	
	IW 15 / 087 Undefended	**IW 15 / 087** Undefended dunes. NFCDD Condition - Good (Grade 2)	
	IW 15 / 088 Unknown	**IW 15 / 088** Revetment created from outsourced material containing rubble. Condition - Very Poor (Grade 5) Residual Life - 0 years	

Location	Defence History	Present and Residual Life	Natural Features
	IW 15 / 089 Embankment constructed in 1880.	**IW 15 / 089** Embankment joining St Helens to Bembridge constructed to a level of +3.0m above Ordnance Datum Newlyn (ODN). Condition - Good (Grade 2) Residual Life - 15 to 25 years	
IW 16 **BEMBRIDGE POINT** OS Grid Reference: **SZ64113, 88851** **SZ64553, 88758** Length: **462m**	**IW 16 / 001** Groyne constructed 1940. **IW 16 / 002** Undefended **IW 16 / 003** Undefended **IW 16 / 004** Revetment constructed 1988. Timber groynes constructed 1940. **IW 16 / 005** Seawall constructed unknown. Revetment constructed unknown. Timber groynes constructed 1940. **IW 16 / 006** Unknown	**IW 16 / 001** Bembridge point groyne constructed from bull head piles and timber. Condition - Poor (Grade 4) Residual Life - 2 to 7 years **IW 16 / 002** Natural sand dunes of crest level of +2.8m Ordnance Datum Newlyn (ODN). **IW 16 / 003** Natural shingle ridge with sand to lower area. **IW 16 / 004** Timber groynes. Rock armour revetment. Concrete slipway. Condition (Groynes) - Poor (Grade 4) Residual Life - 2 to 7 years Condition (Rock) - Poor (Grade 4) Residual Life - 5 to 7 years **IW 16 / 005** Rock armour revetment. Stone masonry wall. Concrete slipway. Remains of stone masonry groyne. Remains of timber groynes on foreshore. Condition (Groynes) - Poor (Grade 4) Residual Life - 2 to 7 years Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Rock) - Good (Grade 2) Residual Life - 15 to 25 years **IW 16 / 006** Timber piled groynes. Concrete slipway. Various remains of timber / stone	Convergent sand and gravel spits flanking the Bembridge Harbour inlet. The larger spit (the Duver) comprises a sand dune system stabilised by vegetation. Nearshore water depths are shallow, owing to the presence of a substantial ebb tidal delta comprised of sand and gravel.

Location	Defence History	Present and Residual Life	Natural Features
		masonry groynes. Condition (Groynes) - Poor (Grade 4) Residual Life - 2 to 7 years	
IW 17 **BEMBRIDGE** OS Grid Reference: **SZ64553, 88758** **SZ65643, 88084** Length: **1384m**	**IW 17 / 001** Timber piled breastwork constructed 1988. Seawall construction unknown. **IW 17 / 002** Unknown **IW 17 / 003** Timber breast work completed 1988. **IW 17 / 004** Unknown	**IW 17 / 001** Concrete step block. Various remains of timber / stone masonry groynes. Timber piled breastwork of crest level of +3.3m Ordnance Datum Newlyn (ODN). Concrete wall. Various timber piled groynes. Condition (Timber) - Good (Grade 3) Residual Life - 10 to 20 years Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Groynes) - Good (Grade 2) Residual Life - 10 to 20 years **IW 17 / 002** Various remains of timber / stone masonry groynes / outfalls. Concrete groynes. Concrete landing stage. Condition (Groynes) - Poor (Grade 4) Residual Life - 2 to 7 years Condition (Hard) - Fair (Grade 3) Residual Life - 10 to 15 years **IW 17 / 003** Recently installed timber piled breastwork. Various remains of timber / stone masonry groynes / outfalls. Condition - Very Good (Grade 1) Residual Life - 15 to 25 years Condition (Groynes) - Poor (Grade 4) Residual Life - 2 to 7 years **IW 17 / 004** Stone masonry / concrete groynes. Undefended frontage. Concrete step block. Condition (Groynes) - Poor (Grade 4) Residual Life - 2 to 7 years	Acute platform defined extensive of Bembridge Limestone shore platform (Bembridge Ledges). Relatively thin and narrow sand and shingle upper beach. Low relict cliffs in the west fronted by eroding slipped debris. Actively eroding cliffs in the east.

Location	Defence History	Present and Residual Life	Natural Features
	IW 17 / 005 Unknown	**IW 17 / 005** Stone masonry / concrete groynes / outfalls. Undefended frontage. Condition (Groynes) - Fair (Grade 3) Residual Life - 10 to 15 years	
	IW 17 / 006 Unknown	**IW 17 / 006** Concrete step block. Steel sheet piling of crest level of +2.7 ordnance Datum Newlyn (ODN). Concrete groyne. Concrete slipway. Concrete rendered wall. Stone filled gabions. Condition - Fair (Grade 3) Residual Life - 10 to 15 years Condition (Groynes) - Fair (Grade 3) Residual Life - 10 to 15 years	
	IW 17 / 007 Toe and encasement to existing seawall completed in 1984.	**IW 17 / 007** Concrete access steps. Concrete wall of crest level of +3.8 ordnance Datum Newlyn (ODN). Outfall. Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 17 / 008 Unknown	**IW 17 / 008** Stone masonry groyne. Concrete slipway. Brick masonry / concrete wall. RNLI life boat station. Condition (Groyne) - Poor (Grade 4) Residual Life - 5 to 7 years Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years	
IW 18 **FORLAND POINT** OS Grid Reference: **SZ65643, 88084** **SZ65448, 87251**	**IW 18 / 001** Underpinning and encasement of seawall completed 1988.	**IW 18 / 001** Outfall. Concrete wall of crest level of +3.5 ordnance Datum Newlyn (ODN). Four concrete groynes. Concrete access steps. Condition (Groyne) - Poor (Grade 4) Residual Life - 5 to 7 years Condition (Wall) - Fair (Grade 3) Residual Life - 10 to 15 years	Acute platform defined extensive of Bembridge Limestone shore platform (Bembridge Ledges). Relatively thin and narrow sand and shingle upper beach.

Location	Defence History	Present and Residual Life	Natural Features
Length: **1104m**	**IW 18 / 002** Beach recycling scheme fronting hotel. Undefended. **IW 18 / 003** Seawall and groynes underpinned 1988. **IW 18 / 004** Undefended **IW 18 / 005** Seawall constructed in two stages and completed in 1984 / 1988.	**IW 18 / 002** Undefended section. Natural shingle ridge with sand to lower area to a level of +2.5m above Ordnance Datum Newlyn (ODN). Concrete access ramp. Concrete outfall. **IW 18 / 003** Concrete wall with short concrete groynes of +2.7 ordnance Datum Newlyn (ODN). Condition - Fair (Grade 3) Residual Life - 10 to 15 years **IW 18 / 004** Undefended section. Natural shingle ridge with sand to lower area to a level of +2.5m above Ordnance Datum Newlyn (ODN). **IW 18 / 005** Concrete access ramp. Concrete wall with stepped apron and sheet piled toe. Curved wave return section to top constructed to a level of +4.3m above Ordnance Datum Newlyn (ODN). Three concrete step blocks. Bull head rail and timber groyne. Concrete groyne. Steel sheet piled section to the East. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Timber Groyne) - Poor (Grade 4) Residual Life - 2 to 7 years Condition (Groyne) - Poor (Grade 4) Residual Life - 5 to 7 years	Low relict cliffs in the west fronted by eroding slipped debris. Actively eroding cliffs in the east.
IW 19 **WHITECLIFF BAY** OS Grid Reference: **SZ65448, 87251** **SZ63851, 85460** Length: **2831m**	**IW 19 / 001** Undefended **IW 19 / 002** Unknown	**IW 19 / 001** Undefended section. Natural shingle ridge with sand to lower area. Beach hut structures located on cliff terrace. Concrete outfall. Gault clay cliffs. Deep rock ledges forming terraced beach. Boulder strewn foreshore. **IW 19 / 002** Concrete access ramp. Timber piling.	Low cliffs increasing in height and landslide activity south westward, terminating in near-vertical chalk cliffs. A wide range of failure mechanisms is exhibited, including

Location	Defence History	Present and Residual Life	Natural Features
		Condition - Very poor (Grade 5) Residual Life - 0 years	rotational and translational slides, rock falls and mud sliding. A wide intertidal foreshore is developed with discontinuous rock shore platforms and ledges.
	IW 19 / 003 Unknown	**IW 19 / 003** Timber piling. Concrete stepped apron. Concrete wall. Concrete access ramps. Concrete slipway.	
		Condition - Poor (Grade 4) Residual Life - 5 to 7 years	
	IW 19 / 004 Unknown	**IW 19 / 004** Timber piling. Rock filled gabions.	
		Condition - Good (Grade 2) Residual Life - 10 to 20 years	
	IW 19 / 005 Unknown	**IW 19 / 005** Concrete access ramp. Concrete wall.	
		Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 19 / 006 Unknown	**IW 19 / 006** Timber piled breast work.	
		Condition - Poor (Grade 4) Residual Life - 5 to 7 years	
	IW 19 / 007 Undefended	**IW 19 / 007** Undefended green sand and gault clay cliffs.	
	IW 19 / 008 Undefended	**IW 19 / 008** Undefended chalk cliff.	
IW 20 **CULVER CLIFF** OS Grid Reference: **SZ63851, 85460** **SZ61843, 85256**	**IW 20 / 001** Undefended	**IW 20 / 001** Near-vertical chalk cliffs. A wide intertidal foreshore is developed with discontinuous rock shore platforms and ledges.	The headland of Culver Cliff is composed of Upper Chalk, moving westwards and southwards through the middle and lower chalk. Whitecliff Ledge forms

Location	Defence History	Present and Residual Life	Natural Features
Length: **2161m**			the foreshore and comprising of ridges of chalk and upper green sand.
IW 21 **YAVERLAND CLIFFS** OS Grid Reference: **SZ61843, 85256** **SZ61258, 85049** Length: **624m**	**IW 21 / 001** Remains of stake alignment and sea defences on foreshore. Brick well exposed in cliff face. Undefended	**IW 21 / 001** Vertical ferruginous sandstone cliffs above sand shingle beach, gives way to coastal slope. Mixture of clays underlying weak sandstone / gravel layer, with inclined stratification. Remains of timber groyne and stone structure.	Red / brown vertical ferruginous sandstone cliffs above. Mixture of clays underlying weak sandstone / gravel layer. Peddle accumulation at cliff toe. Yellow and brown sandy foreshore derived from the lower green sand. Clay exposed east of Yaverland car park during periods of low sediment levels.
IW 22 **YAVERLAND CAR PARK** OS Grid Reference: **SZ61258, 85049** **SZ61082, 84938** Length: **258m**	**IW 22 / 001** Revetment constructed 1960. Lower stepped apron and sheet toe piling constructed 1977 to protect toe of concrete revetment. Groynes constructed 1977. Concrete cope constructed 1992 on crest of revetment. Slipway extended 1994. Stone masonry splash	**IW 22 / 001** Rock filled gabions adjacent to slipway. Concrete step block. Timber groyne extending from concrete flank wall. Navigation aid. Concrete slipway. Outfall. Concrete revetment fronting public car park, with steel sheet piled toe and stepped concrete apron of crest level +4.8m Ordnance Datum Newlyn (ODN). Double step block. Timber groyne. Concrete step block. Timber groyne. Double concrete step block. Condition (Revetment) - Fair (Grade 3) Residual Life - 10 to 15 years Condition (Groynes) - Good (Grade 2) Residual Life - 10 to 20 years	Yellow and brown sandy foreshore derived from the lower green sand. Outcrops of a brown calcareous sandstone in the Wessex Marls exposed at MLW during periods of low sediment levels.

Location	Defence History	Present and Residual Life	Natural Features
	wall constructed 2008.		
IW 23 **SANDOWN ZOO** OS Grid Reference: **SZ61082, 84938** **SZ60878, 84795** Length: **256m**	**IW 23 / 001** Seawall constructed 1930. Lower stepped apron and sheet toe piling constructed 1977. Groynes constructed 1930, encased with concrete and height extended with bull head rails and timber planks during the 1990's. **IW 23 / 002** Seawall constructed 1930, concrete encased 1977. Lower stepped apron and sheet toe piling constructed 1977. Groynes constructed 1930 but extended with bull head rails and timber planking during the 1990's.	**IW 23 / 001** Masonry block wall, with concrete block coping to small re-curve section. Piled toe and stepped concrete apron of crest level +6.22m Ordnance Datum Newlyn (ODN). Double concrete step block. Masonry groyne with concrete capping, timber attached to bullhead railings. Double step block. Masonry groyne with concrete capping, timber attached to bullhead railings. Condition (Wall) - Fair (Grade 3) Residual Life - 10 to 15 years Condition (Groynes) - Good (Grade 2) Residual Life - 10 to 20 years **IW 23 / 002** Battered concrete wall with wave return and steel sheet piled toe and stepped apron of crest level +4.81m Ordnance Datum Newlyn (ODN). Two double step blocks. Two masonry groyne with concrete capping, timber attached to bullhead railings. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Groynes) - Good (Grade 2) Residual Life - 10 to 20 years	Yellow and brown sandy foreshore derived from the lower green sand. Clay exposed during periods of low sediment levels.
IW 24 **CULVER PARADE** OS Grid Reference: **SZ60878, 84795** **SZ60303, 84435**	**IW 24 / 001** Seawall constructed around 1911. Groyne constructed 1930 but extended with bull head rails and timber planking during the	**IW 24 / 001** Un-rendered vertical masonry wall with concrete coping of crest level +4.3m Ordnance Datum Newlyn (ODN). Double concrete step block. Masonry groyne with concrete capping, timber attached to bullhead railing. Outfall. Condition (Wall) - Fair (Grade 3) Residual Life - 10 to 15 years	Yellow and brown sandy foreshore derived from the lower green sand. Groynes are in poor condition which has an impact on sediment retention

Location	Defence History	Present and Residual Life	Natural Features
Length: **683m**	1990's. **IW 24 / 002** Seawall constructed around 1911, rendered 2006. Construction of groynes 1977. **IW 24 / 003** Seawall constructed 1930. Groynes constructed 1977. **IW 24 / 004** Constructed in 1893 replacing existing timber groyne. Encased 1992.	Condition (Groynes) - Good (Grade 2) Residual Life - 10 to 20 years **IW 24 / 002** Rendered vertical masonry block wall with concrete coping of crest level +4.3m Ordnance Datum Newlyn (ODN). Six double concrete step blocks. Six timber piled and boarded groynes. Two outfalls. Remains of timber groynes exposed during periods of low sediment levels. Condition (Wall) - Very Good (Grade 1) Residual Life - 25 to 35 years Condition (Groynes) - Poor (Grade 4) Residual Life - 2 to 7 years **IW 24 / 003** Concrete access steps. Remains of timber groyne. Concrete access ramp. Vertical stone masonry wall of crest level +4.3m Ordnance Datum Newlyn (ODN). Double concrete step block. Timber groyne. Concrete access steps. Condition (Wall) - Fair (Grade 3) Residual Life - 10 to 15 years Condition (Groynes) - Good (Grade 2) Residual Life - 10 to 20 years **IW 24 / 004** 'Herne Hill' concrete and masonry groyne. Condition (Groyne) - Fair (Grade 3) Residual Life - 10 to 15 years	along this frontage. Frequency exposed clay during periods of low sediment levels.
IW 25 **SANDOWN ESPLANADE** OS Grid Reference: **SZ60303, 84435** **SZ59636, 83864** Length:	**IW 25 / 001** Unknown **IW 25 / 002** Unknown	**IW 25 / 001** Concrete steps. Outfall. Beach widens, as height retained by Herne Hill Groyne. Concrete rendered wall to property frontage. Condition - Good (Grade 2) Residual Life - 15 to 25 years **IW 25 / 002** Concrete rendered retaining wall to highway at rear of beach huts. Beach ridge	Yellow and brown sandy foreshore derived from the lower green sand. Sediment accumulation against Herne Hill Groyne.

Location	Defence History	Present and Residual Life	Natural Features
1023m		level of +4.0m above Ordnance Datum Newlyn (ODN) Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 25 / 003 Unknown	**IW 25 / 003** Stone masonry retaining wall to highway at rear of beach huts. Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 25 / 004 Unknown	**IW 25 / 004** Concrete rendered wall forms Southern Water Pumping station and toilets. Access steps. Condition - Very Good (Grade 1) Residual Life - 25 to 35 years	
	IW 25 / 005 Seawall constructed pre 1900. Sandown Pier opened in 1897.	**IW 25 / 005** Vertical masonry wall, with battered section below. Concrete top forms nosing and parapet of crest level +5.0m Ordnance Datum Newlyn (ODN). Two access ramps. Double step block, now location of Sandown Life Guard Station. Two access ramps. Masonry buttresses. Double step block. Step block. Access ramp. Two step blocks either side of Sandown Pier. Sandown Pier. Masonry buttress. Step block. Access ramp. Step block. Bullhead piled, timber planked groyne with timber railing. Navigation aid. Step block. Access ramp. Condition (Wall) - Fair (Grade 3) Residual Life - 10 to 15 years Condition (Groynes) - Fair (Grade 3) Residual Life - 8 to 12 years	
IW 26 **LAKE CLIFFS** OS Grid Reference: **SZ59636, 83864** **SZ58818, 81864** Length:	**IW 26 / 001** Seawall constructed 1977. Groynes constructed 1977. **IW 26 / 002** Seawall constructed 1977. Groynes	**IW 26 / 001** Concrete wall. Condition (Wall) - Fair (Grade 3) Residual Life - 10 to 15 years **IW 26 / 002** Concrete stepped wall (apron) with steel sheet piled toe of crest level +3.4m Ordnance Datum Newlyn (ODN). Double step block. Bull head piled, timber	Coastal structure protects ferruginous sandstone cliffs from coastal erosion. Yellow and brown sandy foreshore derived from the lower green sand. Outcrops

Location	Defence History	Present and Residual Life	Natural Features
2474m	constructed 1977.	planked groyne with timber railing. Timber access ramp. Double step block. Bull head piled, timber planked groyne with timber railing. Concrete slipway (Inshore Rescue Slipway). Navigation aids. Condition (Wall)- Good (Grade 2) Residual Life - 15 to 25 years Condition (Groynes) - Fair (Grade 3) Residual Life - 8 to 12 years	of a brown calcareous sandstone in the Wessex Marls exposed adjacent to Small Hope Groyne. Sediment accumulation against Small Hope Groyne.
	IW 26 / 003 Seawall constructed 1971. Groynes constructed 1971.	**IW 26 / 003** Concrete wall with wave return and stepped concrete apron with steel piled toe section of crest level +3.6m Ordnance Datum Newlyn (ODN). Four double step blocks. Four bull head piled, timber planked groynes with timber railing. Concrete slipway (Lake Slipway). Double step block. Bull head piled, timber planked groyne with timber railing. Double step block. Three double step blocks. Three bull head piled, timber planked groynes with timber railing. Concrete slipway (Dunromin Slipway). Double step block. Bull head piled, timber planked groyne with timber railing. Bull head piled, timber planked groyne with timber railing. Concrete slipway (Wight Waters Slipway). Navigation aids. Condition (Wall)- Good (Grade 2) Residual Life - 15 to 25 years Condition (Groynes) - Fair (Grade 3) Residual Life - 8 to 12 years	
	IW 26 / 004 Littlestairs Sea Defence Scheme completed 1971.	**IW 26 / 004** Concrete wall with wave return and stepped concrete apron with steel piled toe section of crest level +3.6m Ordnance Datum Newlyn (ODN). Three double step blocks. Three bull head piled, timber planked groynes with timber railing. Concrete slipway (Winchester House Slipway). Bull head piled groyne with timber top railing and sheet-piled lower section below timbering. Step block. Four double step blocks. Four bull head piled, timber planked groynes with timber railing. Concrete / stone set slipway (Journeys End Slipway). Navigation aids. Condition (Wall)- Good (Grade 2) Residual Life - 15 to 25 years Condition (Groynes) - Fair (Grade 3) Residual Life - 8 to 12 years	
	IW 26 / 005	**IW 26 / 005**	

Location	Defence History	Present and Residual Life	Natural Features
	Reconstructed in 1901 but in existence prior to this date. Encased and extended 1992. **IW 26 / 006** Seawall constructed 1974. **IW 26 / 007** Seawall constructed 1920, and refurbished around 2002.	'Small Hope' Groyne constructed of masonry blocks, over capped with concrete. Seaward section is constructed with concrete planks laid in piled channels. Navigation aid. Condition (Groyne) - Fair (Garde 3) Residual Life - 10 to 15 years **IW 26 / 006** Concrete wall with single step and toe section of crest level +4.0m Ordnance Datum Newlyn (ODN). Concrete slipway (Small Hope Slipway). Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Groynes) - Fair (Grade 3) Residual Life - 8 to 12 years **IW 26 / 007** Concrete wall fronting pumping station with wave return and a stepped apron and foundation toe of crest level +5.0m Ordnance Datum Newlyn (ODN). Rock armouring has been added to the southern section. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Rock) - Good (Grade 2) Residual Life - 15 to 25 years	
IW 27 **SHANKLIN ESPLANADE** OS Grid Reference: **SZ58818, 81864** **SZ58538, 81059** Length: **1349m**	**IW 27 / 001** Constructed in 1901. Encased in 1990. **IW 27 / 002** Seawall constructed pre 1900. Groynes constructed 1980.	**IW 27 / 001** 'Hope' groyne constructed of concrete encasement over original masonry groyne. Condition (Hope Groyne) - Good (Grade 2) Residual Life - 15 to 25 years **IW 27 / 002** Concrete slipway (Shanklin Esplanade). Vertical wall with battered lower section in masonry block work, with a concrete coping and a parapet wall of crest level +4.5m Ordnance Datum Newlyn (ODN). Double groyne concrete step block. Bullhead piled timber planked groyne with timber top railing. Remains of timber groynes exposed when sediment levels are low. Double step block. Two double groyne concrete step blocks. Two bullhead piled timber planked groynes with timber top railing. Concrete steps. Brick masonry pier apron incorporating two step	Coastal structure protects ferruginous sandstone cliffs from coastal erosion. Yellow and brown sandy foreshore derived from the lower green sand. Increased accumulation of flint cobbles. Shanklin Chine.

Location	Defence History	Present and Residual Life	Natural Features
		blocks. Navigation aids. Condition (Wall) - Poor (Grade 4) Residual Life - 5 to 7 years Condition (Groynes) - Fair (Grade 3) Residual Life - 8 to 12 years	
	IW 27 / 003 Constructed in 1878 to replace existing timber groyne. Extended in 1907. Encased in 1990.	**IW 27 / 003** 'Osborne' concrete and masonry groyne. Condition (Osborne Groyne) – Good (Grade 2) Residual Life - 15 to 25 years	
	IW 27 / 004 Shanklin Pier constructed around 1880's.	**IW 27 / 004** Brick masonry Shanklin pier apron incorporating two step blocks. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 27 / 005 Seawall constructed pre 1900. Groynes constructed 1980. Palestine Slipway extended 1995.	**IW 27 / 005** Stone set slipway (Pier Slipway). Bull head piled, timber planked groyne with timber railing. Concrete step block. Battered concrete wall with a curved top forming coping section of crest level +4.5m Ordnance Datum Newlyn (ODN). Groyne concrete step block. Two bullhead piled timber planked groynes with timber top railing. Stone set / Concrete slipway (Palestine Slipway). Navigation aids. Condition (Wall) - Fair (Grade 3) Residual Life - 10 to 15 years Condition (Groynes) - Fair (Grade 3) Residual Life - 8 to 12 years	
	IW 27 / 006 Timber breast work constructed 1970. Groynes constructed 1980.	**IW 27 / 006** Timber revetment of crest level +3.4m Ordnance Datum Newlyn (ODN). Southern Water outfall from Shanklin Chine with natural stone masonry wall. Timber groyne with Southern Water outfall from Shanklin Chine on south side. Navigation aids. Condition (Revetment) - Fair (Grade 3) Residual Life - 8 to 12 years	

Location	Defence History	Present and Residual Life	Natural Features
		Condition (Groynes) - Fair (Grade 3) Residual Life - 8 to 12 years	
IW 28 **LUCCOMBE ROAD, SHANKLIN** OS Grid Reference: **SZ58538, 81059** **SZ58478, 80631** Length: **464m**	**IW 28 / 001** Timber breast work constructed 1970. Groynes constructed 1980.	**IW 28 / 001** Timber revetment of crest level +3.4m Ordnance Datum Newlyn (ODN). Two timber slipways. Six Timber groynes. Navigation aids. Condition (Revetment) - Fair (Grade 3) Residual Life - 8 to 12 years Condition (Groynes) - Fair (Grade 3) Residual Life - 8 to 12 years	Timber Breast work protects ferruginous sandstone cliffs from coastal erosion. Yellow and brown sandy foreshore derived from the lower green sand. Upper beach of flint cobbles.
IW 29 **LUCCOMBE** OS Grid Reference: **SZ58478, 80631** **SZ58092, 78132** Length: **2805m**	**IW 29 / 001** Groynes refurbished 1970. Undefended	**IW 29 / 001** Three steel planked permeable groynes on bull head rail piles. Rock filled gabions underneath Luccombe bay timber steps. Remains of concrete / stone masonry structures on shore. Remains of timber groynes. Navigation aids. Condition (Groynes) - Poor (Grade 4) Residual Life - 5 to 7 years	The headland of Knock Cliff is composed of Sandrock beds overlying the darker ferruginous sand. Yellow and brown sandy foreshore derived from the lower green sand. Upper beach of flint cobbles. Cross-bedded yellow sandstone forms Horse Ledge and Yellow Ledge. Luccombe Chine has cut into the sandrock beds. Boulder strewn / sandy foreshore. From Bordwood Ledge the cliff comprises of slumping gault clay

Location	Defence History	Present and Residual Life	Natural Features
			over sandrock extending towards Dunnose.
IW 30 **MONKS BAY** OS Grid Reference: **SZ58092, 78132** **SZ57843, 77925** Length: **350m**	**IW 30 / 001** Concrete groynes constructed around 1900, surrounded with rock armour in 1992. Seawall and rock groyne constructed 1992. **IW 30 / 002** Cliff stabilisation and drainage, reconstruction of sea wall, rock groynes and off shore break water and beach nourishment programme completed 1992. **IW 30 / 003** Concrete groynes constructed around 1900, surrounded with rock armour in 1992-1994.	**IW 30 / 001** Remains of concrete structure. Concrete groyne with rock buttressing to both sides. Concrete seawall with concrete buttress blocks and rock armouring of crest level +4.0m Ordnance Datum Newlyn (ODN). Concrete groyne with rock buttressing to both sides. Concrete decked footway to the rear of the sea wall. Concrete steps with timber handrail. Outfall flap valve. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Rock Groynes) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Rock) - Good (Grade 2) Residual Life - 15 to 25 years **IW 30 / 002** Rock groyne at eastern end of the main beach. Off shore rock armour breakwater of crest level +2.2m Ordnance Datum Newlyn (ODN), with recharged beach section constructed to +3.0m above Ordnance Datum Newlyn (ODN). The natural rock reef is seen seaward of the breakwater. Condition (Rock Groynes) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Rock Breakwater) - Fair (Grade 3) Residual Life - 10 to 15 years **IW 30 / 003** Short section of concrete wall with wave return profile. Concrete ramp. Concrete access road to the beach. Short section of concrete wall with wave return profile. Rock groyne at western end, incorporating surface water outlet. Steel sheet piled outfall structure. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Rock Groynes) - Good (Grade 2) Residual Life - 15 to 25 years	Brown Carstone and yellow sandrock cliff capped with gault clay. Recharged shingle beach protecting cliff toe. Scattered outlying boulders.

Location	Defence History	Present and Residual Life	Natural Features
IW 31 **BONCHURCH** OS Grid Reference: **SZ57843, 77925** **SZ57007, 77579** Length: **984m**	**IW 31 / 001** Concrete groynes constructed around 1900, surrounded with rock armour in 1992 - 1994. Seawall constructed 1979.	**IW 31 / 001** Concrete sea wall with raised parapet of crest level +4.5m Ordnance Datum Newlyn (ODN). Wave return to wall coping and stepped apron. Rock groynes at each end of frontage. Concrete slipway to beach, ends onto stepped apron. Rock armouring. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Rock Groynes) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Rock) - Good (Grade 2) Residual Life - 15 to 25 years	Coastal structure protects toe of lower chalk and upper greensand cliffs. Sandy cobble foreshore. Scattered outlying boulders.
	IW 31 / 002 Seawall Wheelers Bay to Bonchurch completed 1988.	**IW 31 / 002** Concrete and masonry groyne, buttressed on both sides with rock armouring. Concrete slipway. Outfall flap valve. Concrete sea wall with stepped apron above sheet piled toe parapet of crest level +4.1m Ordnance Datum Newlyn (ODN). Wave return coping section with concrete decking to rear. Timber catch fencing at rear of decking, below cliffs. Two concrete step blocks. Short timber groyne, and remains of old triangular segment flexible groyne (Mobs and English design). Concrete steps. Short timber groyne, and remains of old triangular segment flexible groyne (Mobs and English design). Concrete steps. Concrete slipway. Short timber groyne, and remains of old triangular segment flexible groyne (Mobs and English design). Two concrete steps. Short timber groyne, and remains of old triangular segment flexible groyne (Mobs and English design). Colin's Point outfall. Concrete and masonry groyne around disused outfall pipe. Timber groyne at western end of sea wall. Condition (Masonry Groyne) - Fair (Grade 3) Residual Life - 10 to 15 years Condition (Rock) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Timber Groynes) - Poor (Grade 4) Residual Life - 2 to 7 years Condition (Mobs Groynes) - Poor (Grade 4) Residual Life - 2 to 7 years	

Location	Defence History	Present and Residual Life	Natural Features
IW 32 **WHEELERS BAY** OS Grid Reference: **SZ57007, 77579** **SZ56854, 77431** Length: **260m**	**IW 32 / 001** Seawall constructed 1960. **IW 32 / 002** New concrete toe to existing wall, new concrete slipway. Additional rock armouring. Wheelers Bay Coastal Protection Work completed 1993. Wheelers Bay Coast Protection and Slope Stabilisation Scheme completed Spring 2000. **IW 32 / 003** Toe piling 1970. Seawall constructed 1984. Rock armour installed 1984.	**IW 32 / 001** Concrete steps. Sheet piled toe to concrete sea wall, with wide apron. Stepped toe to sloping concrete revetment of crest level +4.1m Ordnance Datum Newlyn (ODN). Concrete decking. Condition (Wall) - Poor (Grade 4) Residual Life - 5 to 10 years **IW 32 / 002** Concrete slipway. Concrete wall and rock armouring of crest level +4.3m Ordnance Datum Newlyn (ODN). Remains of timber groyne and outfall. Two outfall flap valves. Condition (Rock) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Wall) - Very Good (Grade 1) Residual Life - 25 to 55 years **IW 32 / 003** Concrete sea wall with battered face and coping with wave return and rock armouring of crest level +5.6m Ordnance Datum Newlyn (ODN). Outfall. Remains of timber breast work. Condition (Rock) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Wall) - Fair (Grade 3) Residual Life - 10 to 15 years	Coastal structure protects toe of lower chalk and upper greensand cliffs. Boulder strewn foreshore.
IW 33 **EASTERN CLIFFS, VENTNOR**	**IW 33 / 001** Toe piling 1970. Seawall constructed 1984. Tetrapod's	**IW 33 / 001** Concrete sea wall with battered face and coping with wave return of crest level +5.6m Ordnance Datum Newlyn (ODN). Precast concrete 'tetrapod' units armouring to wall base. Masonry buttress. Remains of timber groyne.	Coastal structure protects toe of lower chalk and upper greensand cliffs.

Location	Defence History	Present and Residual Life	Natural Features
OS Grid Reference: **SZ56854, 77431** **SZ56587, 77323** Length: **300m**	installed 1990. Seawall encased 1990. **IW 33 / 002** Original wall construction around 1900. Toe piling and apron constructed 1970.	Condition (Tetrapod) - Fair (Grade 3) Residual Life - 10 to 15 years Condition (Wall) - Fair (Grade 3) Residual Life - 10 to 15 years **IW 33 / 002** Concrete steps. Concrete sea wall with steel sheet piled toe, wide toe apron and sloping revetment face above stepped base of crest level +6.0m Ordnance Datum Newlyn (ODN). The wall has a wave return section. Concrete slipway. Condition (Wall) - Poor (Grade 4) Residual Life - 5 to 10 years	Boulder strewn foreshore.
IW 34 **VENTNOR HAVEN & EASTERN ESPLANADE** OS Grid Reference: **SZ56587, 77323** **SZ56291, 77341** Length: **347m**	**IW 34 / 001** Collins Point to Swale Groyne Rock Revetment completed June 1995. Seawall reconstructed 1995. Road realignments encasement works completed 2008. **IW 34 / 002** Ventnor Haven completed August 2003. **IW 34 / 003**	**IW 34 / 001** Concrete coping section with wave return of crest level +5.9m Ordnance Datum Newlyn (ODN), reinforced at the base with rock Armouring. Concrete and sandbag buttress. Stone masonry sea wall, reinforced at the base with rock armouring. Concrete coping section with wave return. Collins point Outfall surrounded by concrete, sheet piling. Wide former concrete slipway (now disused) at western end of wall. Recent concrete encasement section. Condition (Rock) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Outfall) - Good (Grade 2) Residual Life - 26 to 60 years **IW 34 / 002** Short rock armoured breakwater arm constructed to a level of +5.5m above Ordnance Datum Newlyn (ODN). Navigation aid. Pontoons. Ventnor haven fishery building. Rock armour breakwater arm to the western end of the haven, with a concrete decked walkway. Navigation aid. Remains of steel sheet piled slipway structure. Condition (Rock) - Very Good (Grade 1) Residual Life - 25 to 35 years **IW 34 / 003**	Boulder strewn foreshore. Sandy beach with splays of fine brown flint and chert shingle.

Location	Defence History	Present and Residual Life	Natural Features
	Southern Water 'Lion Point' pumping station completed 2002.	Masonry wall fronting Southern Water Pumping Station. Condition (Rock Breakwater) - V.Good (Grade 1) Residual Life - 25 to 35 years Condition (Wall) - Very Good (Grade 1) Residual Life - 25 to 35 years	
	IW 34 / 004 Southern Water 'Lion Point' pumping station completed 2002.	**IW 34 / 004** Stepped concrete revetment. Condition (Wall) - Very Good (Grade 1) Residual Life - 25 to 35 years	
IW 35 **VENTNOR BAY & WESTERN CLIFFS** OS Grid Reference: **SZ56291, 77341** **SZ55306, 76958** Length: **1137m**	**IW 35 / 001** Seawall constructed 1848. Seawall refaced 1995.	**IW 35 / 001** Concrete slipway. Concrete sea wall with stone facing constructed to a level of +4.5m above Ordnance Datum Newlyn (ODN). Concrete coping with decorative cast iron hand railing. Double concrete and stone step access. Timber access steps. Low timber revetment. Two sets of timber access steps. Double concrete and stone step access. Stone faced buttress. Single concrete and stone step access. Three stone faced buttresses. Timber piled groyne and walings. Condition (Wall) - Very Good (Grade 1) Residual Life - 25 to 35 years Condition (Groyne) - Fair (Grade 3) Residual Life - 8 to 12 years Condition (Timber Revetment) - Good (Grade 2) Residual Life - 10 to 20 years	Sandy beach with splays of fine brown flint and chert shingle. Rock revetment protects lower chalk and upper greensand cliffs. Boulder strewn foreshore.
	IW 35 / 002 Seawall constructed 1848. Concrete encasement to existing wall completed 1992. Ventnor Western Cliffs Rock Revetment completed 1992.	**IW 35 / 002** Stone masonry wall with concrete toe encasement and rock armour revetment fronting the 'Spyglass' Inn. Condition (Rock) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 35 / 003 Seawall constructed	**IW 35 / 003** Stone masonry wall, concrete toe encasement and rock armour revetment.	

Location	Defence History	Present and Residual Life	Natural Features
	1848. Concrete encasement to existing wall completed 1992. Ventnor Western Cliffs Rock Revetment completed 1992. **IW 35 / 004** Seawall constructed 1950. Ventnor Western Cliffs Rock Revetment completed 1992. **IW 35 / 005** Ventnor Western Cliffs Rock Revetment completed 1992. Flowers brook outfall encasement 1992.	Condition (Rock) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Wall) - Poor (Grade 4) Residual Life - 5 to 7 years **IW 35 / 004** Concrete block wall with slight batter and wave return. Faced with cement rendering of crest level +2.3m Ordnance Datum Newlyn (ODN). Rock armour revetment. Condition (Rock) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Wall) - Fair (Grade 3) Residual Life - 10 to 15 years **IW 35 / 005** Three rock groynes. Remains of timber groynes. Flowers brook sewage outfall encased with steel sheet piles / concrete and protected with rock armour constructed to a level of +4.5m above Ordnance Datum Newlyn (ODN). Steep near vertical cliffs consisting of weak chalks and marls. Rock armour revetment along base of cliff. Terminal rock groyne. Condition (Rock) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Rock Groynes) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Outfall) - Fair (Grade 3) Residual Life - 18 to 26 years	
IW 36 **CASTLE COVE & STEEPHILL COVE** OS Grid Reference: **SZ55306, 76958** **SZ54969, 76828**	**IW 36 / 001** Castle Cove, Ventnor Coast Protection Scheme completed 1996.	**IW 36 / 001** Concrete slipway. Rock armour revetment supporting concrete decked access track to Steephill Cove constructed to a level of +4.0m above Ordnance Datum Newlyn (ODN). Stone filled gabion basket rear splash wall. Two concrete step blocks. Terminal rock groyne. Outfall. Condition (Rock) - Good (Grade 2) Residual Life - 15 to 25 years	Rock revetment protects coastal slope. Sandy beach with splays of fine brown flint and chert shingle. Cobble / boulder strewn foreshore. Subsided

Location	Defence History	Present and Residual Life	Natural Features
Length: **441m**		Condition (Rock Groynes) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Gabions) - Good (Grade 2) Residual Life - 6 to 10 years	greensand cliff at Steephill Cove.
	IW 36 / 002 Castle Cove, Ventnor Coast Protection Scheme completed 1996.	**IW 36 / 002** Timber pole cribwork groyne, buttressed on all sides and infilled with rock armour stone constructed to a level of +2.95m above Ordnance Datum Newlyn (ODN). Concrete buttress. Terminal rock armour groyne. Condition (Rock) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Timber Groyne) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Rock Groyne) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 36 / 003 Steephill Cove Coast Protection Scheme completed 1992.	**IW 36 / 003** Toe piled wall encased with concrete and fronted with Purbeck stone. Concrete coping, flush with promenade decking of crest level +4.0m Ordnance Datum Newlyn (ODN). Low splash wall in Purbeck stone and concrete coping at rear of promenade. Rock armour revetment to front of wall. Concrete step block. Concrete slipway. Condition (Rock) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Wall) - Very Good (Grade 1) Residual Life - 25 to 35 years	
	IW 36 / 004 Steephill Cove Coast Protection Scheme completed 2006.	**IW 36 / 004** Private terrace's with masonry stone walls. Encased concrete apron. Island stone masonry wall constructed to a level of +4.25m above Ordnance Datum Newlyn (ODN). Concrete slipway. Condition (Rock) - Very Good (Grade 1) Residual Life - 25 to 35 years Condition (Wall) - Very Good (Grade 1) Residual Life - 25 to 35 years	

Location	Defence History	Present and Residual Life	Natural Features
	IW 36 / 005 Rock armour groyne enhanced during Steephill Cove Coast Protection Scheme 2006. **IW 36 / 006** Stepped apron constructed 1992. **IW 36 / 007** Seawall constructed around 1950. Wave return profile added to existing structure 2007. **IW 36 / 008** Seawall constructed around 1950. Rock armour groyne constructed during Steephill Cove Coast Protection Scheme 1992.	**IW 36 / 005** Timber pole and plank groyne. Concrete wall. Rock armour groyne. Condition (Groyne) - Fair (Grade 3) Residual Life - 10 to 15 years Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years **IW 36 / 006** Concrete step block. Concrete stepped apron. Stone masonry wall. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years **IW 36 / 007** Concrete wall with wave return. Condition (Rock) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years **IW 36 / 008** Short section of buttressed concrete wall constructed to a level of +4.1m above Ordnance Datum Newlyn (ODN). Rock armour revetment. Short rock armour groyne. Condition (Rock) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Wall) - Fair (Grade 3) Residual Life - 10 to 15 years Condition (Rock Groyne) - Good (Grade 2) Residual Life - 15 to 25 years	
IW 37 **ST LAWRENCE UNDERCLIFF** OS Grid Reference: **SZ54969, 76828**	**IW 37 / 001** Undefended **IW 37 / 002** Royal National Hospital for Diseases structure	**IW 37 / 001** Undefended near vertical cliffs consisting of weak chalks and marls. **IW 37 / 002** Concrete encased outfall / groyne from Ventnor Botanic Gardens. Stone brick masonry structure.	Subsided and tilted upper greensand / upper chalk cliffs. Scattered outlying boulders with a sand and shingle beach.

Location	Defence History	Present and Residual Life	Natural Features
SZ51053, 75522 Length: **4510m**	constructed pre 1900. **IW 37 / 003** Undefended **IW 37 / 004** Seawall constructed pre 1900. **IW 37 / 005** Undefended **IW 37 / 006** Undefended **IW 37 / 007** Remains of pre 1900 harbour wall constructed by William Spindler. Undefended	Condition (Outfall) - Fair (Grade 3) Residual Life - 10 to 15 years **IW 37 / 003** Undefended near vertical cliffs consisting of weak chalks and marls. **IW 37 / 004** - Orchard Bay Stone masonry wall fronting Orchard Bay House. Concrete ramp. Stone access steps. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Wall - Parts) - Poor (Grade 4) Residual Life - 5 to 7 years **IW 37 / 005** - Mount Bay / Stir Richard's Cove Undefended near vertical cliffs consisting of weak chalks and marls. **IW 37 / 006** - Woody Bay Undefended near vertical cliffs consisting of weak chalks and marls to a level of +22.0m above Ordnance Datum Newlyn (ODN). Timber access steps. Old outfall enclosed with stone filled gabions and concrete. Condition (Gabions) - Poor (Grade 4) Residual Life - 1 to 3 years **IW 37 / 007** - Binnel Bay Undefended near vertical cliffs consisting of weak chalks and marls. Remains of stone masonry haven structure. Condition (Structure) - Failed (Abandoned) Residual Life - 0 years	
IW 38 **CASTLEHAVEN / REETH BAY** OS Grid Reference:	**IW 38 / 001** Castle Haven Coast Protection Scheme completed 2004.	**IW 38 / 001** Rock armour revetment constructed to a level of +5.0m above Ordnance Datum Newlyn (ODN). Condition (Rock) - Very Good (Grade 1) Residual Life - 25 to 35 years	Rock revetment protecting layered grey-green Sandrock, over which landslides of Gault clay and sandstone debris.

Location	Defence History	Present and Residual Life	Natural Features
SZ51053, 75522 **SZ50406, 75410** Length: **785m**	**IW 38 / 002** Unknown	**IW 38 / 002** Concrete step block. Two timber groynes. Concrete slipway**.** Condition (Slipway) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Groyne) - Good (Grade 2) Residual Life - 10 to 20 years	Sandy / boulder strewn foreshore.
	IW 38 / 003 Unknown	**IW 38 / 003** Timber cribwork with stone infill. Condition (Cribwork) - Good (Grade 2) Residual Life - 10 to 20 years	
	IW 38 / 004 Unknown	**IW 38 / 004** Stone masonry wall. Condition (Wall) - Fair (Grade 3) Residual Life - 10 to 15 years	
	IW 38 / 005 Unknown	**IW 38 / 005** Timber cribwork with stone infill. Condition (Cribwork) - Good (Grade 2) Residual Life - 10 to 20 years	
	IW 38 / 006 Unknown	**IW 38 / 006** Rock groyne. Rock revetment constructed to a level of +4.0m above Ordnance Datum Newlyn (ODN). Stone masonry wall. Outfall. Condition (Rock) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Wall) - Fair (Grade 3) Residual Life - 10 to 15 years Condition (Rock Groyne) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 38 / 007 Unknown	**IW 38 / 007** Rock armour revetment constructed to a level of +4.0m above Ordnance Datum Newlyn (ODN).	

Location	Defence History	Present and Residual Life	Natural Features
		Condition (Rock) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 38 / 008 Gabions installed 2005.	**IW 38 / 008** Remains of timber groyne. Rock armour revetment. Rock filled gabions. Condition (Rock) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Gabions) – Very Good (Grade 1) Residual Life - 10 to 25 years	
IW 39 **ST CATHERINES POINT & BLACKGANG** OS Grid Reference: **SZ50406, 75410** **SZ48086, 77075** Length: **3431m**	**IW 39 / 001** Undefended **IW 39 / 002** Undefended	**IW 39 / 001** - St Catherine's Point Undefended near vertical cliffs consisting of weak chalks and marls. **IW 39 / 002** - Blackgang and Chale Undefended near vertical cliffs consisting of weak sand stone to a level of +80.0m above Ordnance Datum Newlyn (ODN).	Chalk and upper green sand cliff. Boulder strewn foreshore. From Rocken End the cliffs cut in to Sandrock and Ferruginous sands, rising towards Blackgang which is fronted by a terrace of gault clay.
IW 40 **SOUTH-WEST COAST** OS Grid Reference: **SZ48086, 77075** **SZ34766, 85709** Length: **16725m**	**IW 40 / 001** Undefended **IW 40 / 002** Undefended **IW 40 / 003** Undefended	**IW 40 / 001** Whale Chine. Timber access steps. Remains of concrete structure. Natural undefended cliff. **IW 40 / 002** Shepherd's Chine. Steel sheet piled weir. Pump house. Timber access steps. Concrete filled gabions. Natural undefended cliff. Condition (Weir) - Good (Grade 2) Residual Life - 15 to 25 years **IW 40 / 003** Cowlease Chine. Remains of pipes and concrete structure. Natural undefended cliff.	The headland between Blackgang and Compton comprises of the Wealdon and Lower Greensand beds. Various Chines. Sandy / cobble foreshore. Beyond Compton Chine Upper Greensand and Chalk cliffs.

Location	Defence History	Present and Residual Life	Natural Features
	IW 40 / 004 Undefended **IW 40 / 005** Undefended **IW 40 / 006** Undefended **IW 40 / 007** Undefended **IW 40 / 008** Stabilisation of two sections of Highway over Afton Down completed 2000.	**IW 40 / 004** Grange Chine. Timber bridge. Natural undefended cliff. **IW 40 / 005** Chilton Chine. Natural undefended cliff. **IW 40 / 006** Brooke Bay. Natural undefended cliff. Hanover Point masonry structure. Condition (Hanover Point) - Fair (Grade 3) Residual Life - 10 to 15 years **IW 40 / 007** Shippard' s Chine. Timber and steel access steps. Steel sheet piled outfall, with rock filled gabions at the base. Compton Chine. Timber access steps. Natural undefended cliff to a level of +55.0m above Ordnance Datum Newlyn (ODN). Condition (Outfall) - Fair (Grade 3) Residual Life - 18 to 26 years **IW 40 / 008** Freshwater chalk cliffs.	
IW 41 **FRESHWATER BAY** OS Grid Reference: **SZ34766, 85709** **SZ34518, 85638** Length: **309m**	**IW 41 / 001** Seawall constructed 1960. Groynes constructed 1976. New Lifeboat ramp constructed 1991.	**IW 41 / 001** Timber access steps. Ramped end of revetment. Coastal structure comprising of steel sheet piled toe with reinforced concrete bull nosed wall of crest level +3.4m Ordnance Datum Newlyn (ODN). Macadam surfaced concrete promenade with concrete splash wall at rear. Concrete step block. Timber groyne. Freshwater life boat slipway comprising of steel sheet piled sides in filled with concrete overlaid with Plaswood planking. Timber boat park slipway with Plaswood planking to the lower section. Timber groyne. Concrete step block. Condition (Wall) - Fair (Grade 3) Residual Life - 10 to 15 years Condition (Groynes) - Very Poor (Grade 5) Residual Life - 0 years	Residual stacks – Mermaid Rock / Arched Rock and Stag Rock. Upper chalk and coombe rock cliffs, with a capping of Brick earth. Shingle foreshore.

Location	Defence History	Present and Residual Life	Natural Features
		Condition (Piled Slipway) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 41 / 002 Seawall constructed 1955. Toe piling constructed 1976.	**IW 41 / 002** Steel sheet piled toe, with stepped concrete apron and wall with wave return of crest level +3.8m Ordnance Datum Newlyn (ODN). Concrete step block. Condition (Wall) - Fair (Grade 3) Residual Life -10 to 15 years	
	IW 41 / 003 Seawall constructed 1955. Toe piling constructed 1976. Concrete encasement constructed 1989 to protect toe of existing structure.	**IW 41 / 003** Steel sheet piled toe, with stepped concrete apron, concrete encasement and wall with bull nosed wave return of crest level +3.8m Ordnance Datum Newlyn (ODN). Condition (Wall) - Good (Grade 2) Residual Life -15 to 25 years	
	IW 41 / 004 Seawall constructed 1978. Concrete encasement constructed 1989 to protect toe of existing structure.	**IW 41 / 004** Steel sheet piled toe with concrete apron, concrete wall with wave return of crest level +3.8m Ordnance Datum Newlyn (ODN). Concrete step block. Condition (Wall) - Good (Grade 2) Residual Life -15 to 25 years	
	IW 41 / 005 Seawall constructed 1978.	**IW 41 / 005** Steel sheet piled toe with concrete apron, concrete wall with wave return of crest level +3.8m Ordnance Datum Newlyn (ODN). Low stone parapet wall. Condition (Wall) - Good (Grade 2) Residual Life -15 to 25 years	
	IW 41 / 006 Unknown	**IW 41 / 006** Concrete step block. Stone masonry wall. Condition (Wall) - Fair (Grade 3) Residual Life -10 to 15 years	

Location	Defence History	Present and Residual Life	Natural Features
IW 42 **TENNYSON DOWN & THE NEDDLES** OS Grid Reference: **SZ34518, 85638** **SZ30538, 85202** Length: **7271m**	**IW 42 / 001** Undefended **IW 42 / 002** Unknown **IW 42 / 003** Unknown **IW 42 / 004** Unknown **IW 42 / 005** Unknown **IW 42 / 006** Lighthouse structure constructed 1876.	**IW 42 / 001** Natural undefended cliff. Needles light house structure. **IW 42 / 002** Remains of concrete steel sheet piled / stone masonry groyne. Condition (Groyne) - Poor (Grade 4) Residual Life - 5 to 7 years **IW 42 / 003** Steel reinforced concrete cylinder structures. Condition - Poor (Grade 4) Residual Life - 5 to 7 years **IW 42 / 004** Steel access steps with concrete encased foundation. Condition - Poor (Grade 4) Residual Life - 5 to 7 years **IW 42 / 005** Remains of concrete / steel structure. Condition - Poor (Grade 4) Residual Life - 5 to 7 years **IW 42 / 006** Needles Light House Structure. Condition (Wall) - Good (Grade 2) Residual Life -15 to 25	Upper chalk cliffs to Alum Bay. Goose rock is the outermost chalk stack of the Needles.
IW 43 **ALUM BAY** OS Grid Reference: **SZ30538, 85202** **SZ30500, 85726**	**IW 43 / 001** Undefended **IW 43 / 002** Unknown	**IW 43 / 001** Natural undefended cliff to a level of +50.0m above Ordnance Datum Newlyn (ODN). Steel piled and timber landing stage. Steel. **IW 43 / 002** Sheet piled and concrete chair lift structure	The west facing side of Alum Bay has cliffs formed of clays, and distinctively coloured Alum Bay Sands. The cliffs are generally

Location	Defence History	Present and Residual Life	Natural Features
Length: **559m**	**IW 43 / 003** Unknown	Condition - Good (Grade 2) Residual Life -15 to 25 years **IW 43 / 003** Timber access steps with rock armour at base. Condition (Rock) - Fair (Grade 3) Residual Life -10 to 15 years	steep and erode by rock falls and slides and are fronted by a steep shingle beach.
IW 44 **HEADON WARREN** OS Grid Reference: **SZ30500, 85726** **SZ31951, 86547** Length: **1954m**	**IW 44 / 001** Undefended	**IW 44 / 001** Natural undefended cliff.	Slumping clay and lobes of truncated Bracklesham beds to Hatherwood Point. Plateau Gravel capping over Osborne Marls. Horizontal Limestone cliffs separated by clay or marl. Sections or narrow sand and gravel beach. Strewn Boulders of pale sandstone and limestone.
IW 45 **TOTLAND & COLWELL** OS Grid Reference: **SZ31951, 86547** **SZ32896, 88068** Length: **1973m**	**IW 45 / 001** Seawall constructed 1960. Groynes constructed 1993. **IW 45 / 002** Seawall constructed	**IW 45 / 001** Coastal Structure comprising of steel sheet piled toe with stepped concrete apron and concrete wall with wave return of crest level +2.7m Ordnance Datum Newlyn (ODN). Four concrete step blocks. Five timber groynes. Various outfalls. Concrete slipway. Condition (Wall) - Good (Grade 2) Residual Life -15 to 25 years Condition (Groynes) - Fair (Grade 3) Residual Life - 8 to 12 years **IW 45 / 002** Concrete step block. Concrete wall with wave return section of crest level +2.8m	Low cliff of stratified clayey sands protected from coastal erosion by coastal defence. Shingle beaches and sandy foreshore.

Location	Defence History	Present and Residual Life	Natural Features
	1960. Groynes refurbished 1993.	Ordnance Datum Newlyn (ODN). Four timber groynes. Two double step blocks. Timber catch fencing. Condition (Wall) - Poor (Grade 4) Residual Life - 5 to 7 years Condition (Groynes) - Poor (Grade 4) Residual Life - 2 to 7 years	
	IW 45 / 003 Totland Bay Groynes and Seawall completed 1993. Totland Pier constructed 1880.	**IW 45 / 003** Steel sheet piled toe with stepped concrete apron and concrete wall with wave return of crest level +3.5m Ordnance Datum Newlyn (ODN). Four timber groynes. Three concrete step blocks. Remains of timber structures exposed when sediment levels are low. Timber slipway. Totland Pier. Highway outfall structure. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Groynes) - Poor (Grade 4) Residual Life - 2 to 7 years	
	IW 45 / 004 Seawall constructed 1960. Rock groynes. completed 1993, as part of the Totland Bay Groynes and Seawall Works.	**IW 45 / 004** Rock Groyne incorporating navigation aid. Steel sheet piled toe with stepped concrete apron and concrete wall with overhung coping of crest level +2.7m Ordnance Datum Newlyn (ODN). Concrete step block. Rock Groyne incorporating navigation aid. Concrete step block. Concrete splash wall to the rear. Condition (Wall) - Fair (Grade 3) Residual Life - 10 to 15 years Condition (Rock Groynes) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 45 / 005 Seawall constructed 1960. Rock protection. completed 1993, as part of the Totland Bay Groynes and Seawall Works.	**IW 45 / 005** Steel sheet piled toe with stepped concrete apron and concrete wall with overhung coping of crest level +3.0m Ordnance Datum Newlyn (ODN). Rock armouring to part of wall frontage. Rock Groyne. Two steel access ladders. Various outfalls. Concrete splash wall to the rear. Concrete step block. Timber groyne with outfall pipe fixed on near side of groyne. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Rock Groynes) - Good (Grade 2) Residual Life - 15 to 25 years	

Location	Defence History	Present and Residual Life	Natural Features
		Condition (Rock) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Groyne) - Fair (Grade 3) Residual Life - 8 to 12 years	
	IW 45 / 006 Seawall constructed 1960. Groynes constructed 1976.	**IW 45 / 006** Stone set wall, stone coping flush with promenade decking constructed to a level of +2.9m above Ordnance Datum Newlyn (ODN). Stepped concrete apron / toe. Concrete step block. Timber groyne with outfall pipe fixed on near side of groyne. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Groyne) - Fair (Grade 3) Residual Life - 8 to 12 years	
	IW 45 / 007 Seawall constructed 1976. Groynes constructed 1976.	**IW 45 / 007** Concrete wall with vertical plain face above concrete stepped apron. Splash wall to the rear. Concrete step block. Timber groyne with outfall pipe fixed on near side of groyne. Navigation aid. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Groyne) - Good (Grade 2) Residual Life - 10 to 20 years	
	IW 45 / 008 Seawall constructed 1982. Groynes constructed 1976.	**IW 45 / 008** Concrete stepped apron and concrete wall with wave return of crest level +2.5m Ordnance Datum Newlyn (ODN). Splash wall to the rear. Various outfalls. Two concrete step blocks. Two timber groynes with outfall pipe fixed on near side of groyne. Navigation aids. Remains of concrete structure on shore. Two concrete slipways. Condition (Wall) - Good (Grade 2) Residual Life - 5 to 7 years Condition (Groynes) - Good (Grade 2) Residual Life - 10 to 20 years	
	IW 45 / 009 Seawall constructed 1982. Groynes	**IW 45 / 009** Concrete stepped apron and concrete wall with wave return of crest level +2.5m Ordnance Datum Newlyn (ODN). Splash wall to the rear. Various outfalls. Two	

Location	Defence History	Present and Residual Life	Natural Features
	constructed 1976.	concrete step blocks. Two timber groynes. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Groynes) - Good (Grade 2) Residual Life - 10 to 20 years	
	IW 45 / 010 Timber breast work constructed 1977. Groynes constructed 1960.	**IW 45 / 010** Timber boarded revetment constructed to a level of +2.5m above Ordnance Datum Newlyn (ODN). Horizontal boarding, on bullhead rail piles, with single rail bracing, backed filled with rock. Remains of timber structures exposed when sediment levels are low. Two sets of timber steps. Timber groyne. Condition (Wall) - Good (Grade 2) Residual Life - 10 to 20 years Condition (Groynes) - Fair (Grade 3) Residual Life - 8 to 12 years	
IW 46 **CENTRAL COLWELL BAY** OS Grid Reference: **SZ32896, 88068** **SZ33021, 88745** Length: **757m**	**IW 46 / 001** Groyne constructed 1960. Undefended **IW 46 / 002** Rock armour installed 1992 during Fort Albert works. **IW 46 / 003** Brambles Chine groyne works and beach nourishment completed 1993. Undefended **IW 46 / 004** Fort Albert Coast	**IW 46 / 001** Undefended cliff. Timber groyne with timber access steps. Condition (Groyne) - Fair (Grade 3) Residual Life - 8 to 12 years **IW 46 / 002** Steel sheet piling extending into coastal slope. Rock armour. Condition (Piling) - Fair (Grade 3) Residual Life - 18 to 26 years Condition (Rock) - Fair (Grade 3) Residual Life - 10 to 15 years **IW 46 / 003** Undefended cliff to a level of +15.0m above Ordnance Datum Newlyn (ODN). Two timber groynes detached from cliff toe. Condition (Groyne) - Fair (Grade 3) Residual Life - 8 to 12 years **IW 46 / 004** Concrete slipway. Rock / concrete armour.	Low cliff of stratified clayey sands protected from coastal erosion by coastal defence. Limestone running out across the foreshore. Cliff steepens in to the Colwell Bay beds, grey marls overlain by light brown and yellow beds that dip northward, passing across Brambles Chine. Sandy foreshore with sections of shingle beach.

Location	Defence History	Present and Residual Life	Natural Features
	Protection Works completed 1993. Rock armour installed 1992 during Fort Albert works. **IW 46 / 005** Undefended	Condition (Slipway) - Fair (Grade 3) Residual Life - 10 to 15 years Condition (Rock) - Fair (Grade 3) Residual Life - 10 to 15 years **IW 46 / 005** Concrete access steps. Undefended cliff. Three timber groynes detached from cliff toe. Old sewer outfall. Rock filled gabions. Condition (Gabions) - Good (Grade 2) Residual Life - 6 to 10 years Condition (Groyne) - Fair (Grade 3) Residual Life - 8 to 12 years	
IW 47 **FORT ALBERT** OS Grid Reference: **SZ33021, 88745** **SZ33185, 89265** Length: **809m**	**IW 47 / 001** Steel sheet piling installed 1950. **IW 47 / 002** Unknown **IW 47 / 003** Sea wall and rock armour constructed 1993. **IW 47 / 004** Sea wall constructed 1993.	**IW 47 / 001** Sheet piled and concrete remains of former sea wall of crest level +1.8m Ordnance Datum Newlyn (ODN), and military installations. Condition (Piling) - Poor (Grade 4) Residual Life - 5 to 10 years **IW 47 / 002** Remains of concrete wall. Condition (Wall) - Poor (Grade 4) Residual Life - 5 to 7 years **IW 47 / 003** Rock armour revetment of crest level +3.5m Ordnance Datum Newlyn (ODN). Concrete wall adjacent to slipway. Condition (Rock) - Good (Grade 2) Residual Life - 15 to 25 years **IW 47 / 004** Concrete sea wall. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years	Sloping cliffs in Osbourne Marls are protected by rock revetment to Fort Albert.

Location	Defence History	Present and Residual Life	Natural Features
	IW 47 / 005 Fort Albert former coastal battery of 1888 on an artificial island. Originating a coastal battery structure of 1854. **IW 47 / 006** Seawall constructed 1930. Toe piling 1950.	**IW 47 / 005** Steel sheet piled and concrete slipway. Sheet piled and concrete coping wall to Fort Albert of crest level +2.7m Ordnance Datum Newlyn (ODN). Condition (Piling) - Good (Grade 2) Residual Life - 26 to 60 years Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years **IW 47 / 006** Concrete sea wall, with battered face and cope section above sheet piled toe constructed to a level of +2.2m above Ordnance Datum Newlyn (ODN). Condition (Wall) - Fair (Grade 3) Residual Life - 10 to 15 years	
IW 48 **FORT VICTORIA COUNRY PARK** OS Grid Reference: **SZ33185, 89265** **SZ33730, 89718** Length: **742m**	**IW 48 / 001** Undefended	**IW 48 / 001** Undefended cliff.	Limestone has accumulated on the shore near Round Tower Point. Sandy foreshore with locations of exposed clay.
IW 49 **FORT VICORIA & NORTON** OS Grid Reference: **SZ33730, 89718** **SZ34695, 89721** Length: **1088m**	**IW 49 / 001** Unknown **IW 49 / 002** Constructed 1980, and refurbished in 2009.	**IW 49 / 001** Remains of concrete war structure. Condition (Wall) - Poor (Grade 4) Residual Life - 5 to 7 years **IW 49 / 002** Low timber breastwork consisting of timber poled driven into beach, with timber waling of crest level +1.5m Ordnance Datum Newlyn (ODN).	Narrow sandy / shingle foreshore exposed during MLW in front of coastal defences. Shingle beach extents towards Norton.

Location	Defence History	Present and Residual Life	Natural Features
		Condition (Wall) - Good (Grade 2) Residual Life - 10 to 20 years	
	IW 49 / 003 Seawall constructed pre 1900. Groynes constructed 1960.	**IW 49 / 003** Concrete sea wall with concrete toe section of crest level +1.7m Ordnance Datum Newlyn (ODN). Two steel sheet piled groynes with navigation aids. Four timber groynes. Concrete rendered masonry block wall. Concrete slipway. Condition (Wall) - Poor (Grade 4) Residual Life - 5 to 7 years Condition (Steel Groynes) - Poor (Grade 4) Residual Life - 5 to 10 years Condition (Timber Groynes) - Good (Grade 2) Residual Life - 10 to 20 years	
	IW 49 / 004 Unknown	**IW 49 / 004** Concrete rendered masonry block wall. Remains of Fort Victoria Pier. Concrete slipway. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 49 / 005 Undefended	**IW 49 / 005** Low concrete decking fronting Old boat house, café and residential buildings. Condition (Wall) - Good (Grade 2) Residual Life - 10 to 20 years	
	IW 49 / 006 Groynes constructed 1990. Undefended	**IW 49 / 006** Undefended frontage protected by shingle ridge. Three timber groynes. Condition (Groynes) - Good (Grade 2) Residual Life - 10 to 20 years	
	IW 49 / 007 Groynes and gabions constructed 1990.	**IW 49 / 007** Rock filled gabions of crest level +3.1m Ordnance Datum Newlyn (ODN). Timber groyne. Condition (Gabions) - Good (Grade 2) Residual Life - 6 to 10 years Condition (Groyne) - Good (Grade 2) Residual Life - 10 to 20 years	

Location	Defence History	Present and Residual Life	Natural Features
	IW 49 / 008 Groynes and gabions constructed 1990.	**IW 49 / 008** Rock filled gabions. Short section of concrete wall. Old concrete abutment and wall, with remains of steel piles protruding. Condition (Gabions) - Poor (Grade 4) Residual Life - 1 to 3 years Condition (Wall) - Good (Grade 2) Residual Life - 10 to 20 years Condition (Concrete Structure) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 49 / 009 Gabions constructed 1982.	**IW 49 / 009** Rock filled gabions to toe and sloping apron covered with asphalt constructed to a level of +2.7m above Ordnance Datum Newlyn (ODN). Condition (Gabions) - Poor (Grade 4) Residual Life - 1 to 3 years	
	IW 49 / 010 Norton, Freshwater Coast protection Scheme completed 1983.	**IW 49 / 010** Steel sheet piled toe concrete apron. Concrete wall. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 49 / 011 Norton, Freshwater Coast protection Scheme completed 1983.	**IW 49 / 011** Steel sheet piled toe stepped concrete apron. Concrete wall with wave return of crest level +2.0m Ordnance Datum Newlyn (ODN). Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 49 / 012 IW 49 / 013 Seawall extended 1907. Rebuilt between 1907 – 1939. Norton, Freshwater Coast protection Scheme completed 1983.	**IW 49 / 012** Steel sheet piled toe with wall consisting of full height stepped apron of crest level +2.3m Ordnance Datum Newlyn (ODN). Concrete splash wall to the rear. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years	

Location	Defence History	Present and Residual Life	Natural Features
	IW 49 / 013 Seawall in existence prior 1896. Rebuilt between 1907 – 1939. Norton, Freshwater Coast protection Scheme completed 1983. **IW 49 / 014** Unknown	**IW 49 / 013** Steel sheet piled toe with concrete wall of crest level +1.4m Ordnance Datum Newlyn (ODN). Opening in wall forms small boat dock. Stone masonry / concrete filled sandbag wall to eastern side. Condition (Wall) - Fair (Grade 3) Residual Life - 10 to 15 years **IW 49 / 014** Two timber groynes. Condition (Groyne) - Fair (Grade 3) Residual Life - 8 to 12 years	
IW 50 **YARMOUTH ESTUARY** OS Grid Reference: **SZ34695, 89721** **SZ35374, 89774** Length: **9107m**	**IW 50 / 001** Timber breast work and groynes constructed 1975. **IW 50 / 002** Timber breast work and groynes constructed 1975. **IW 50 / 003** Timber breast work and groynes constructed 1975.	**IW 50 / 001** Timber piled toe with timber boarded breastwork on steel piles, of crest level +1.6m Ordnance Datum Newlyn (ODN). Two timber groynes incorporating navigation aids. Condition (Wall) - Good (Grade 2) Residual Life - 10 to 20 years Condition (Groynes) - Good (Grade 2) Residual Life - 15 to 25 years **IW 50 / 002** Timber boarded breastwork on timber piles of crest level +1.7m Ordnance Datum Newlyn (ODN). Two timber groynes incorporating navigation aids. Condition (Wall) - Good (Grade 2) Residual Life - 10 to 20 years Condition (Groynes) - Good (Grade 2) Residual Life - 15 to 25 years **IW 50 / 003** Short section of timber boarded breastwork on sheet piles. Rock armour to frontage.	Estuary bordered by tidal mudflats and salt marshes.

Location	Defence History	Present and Residual Life		Natural Features
		Condition (Wall) - Good (Grade 2)	Residual Life - 10 to 20 years	
		Condition (Rock) - Fair (Grade 3)	Residual Life - 10 to 15 years	
	IW 50 / 004 Timber breastwork breakwater constructed 1960. Rock armour constructed 1972.	**IW 50 / 004** Timber boarded breastwork breakwater on steel piles of crest level +2.2m Ordnance Datum Newlyn (ODN). Rock armouring to frontage.		
		Condition (Wall) - Good (Grade 2)	Residual Life - 10 to 20 years	
		Condition (Rock) - Fair (Grade 3)	Residual Life - 10 to 15 years	
	IW 50 / 005 Undefended	**IW 50 / 005** Natural salt marsh. Timber Landing stage.		
		NFCCD Condition - Good (Grade 2)		
	IW 50 / 006 Unknown	**IW 50 / 006** Stone masonry / concrete wall. Landing stages.		
		Condition (Wall) - Good (Grade 2)	Residual Life - 10 to 15 years	
	IW 50 / 007 Unknown	**IW 50 / 007** Rock revetment. Concrete wall. Outfall.		
		Condition (Wall) - Good (Grade 2)	Residual Life - 15 to 25 years	
		Condition (Rock) - Good (Grade 2)	Residual Life - 15 to 25 years	
	IW 50 / 008 The New Yar Bridge completed 1987.	**IW 50 / 008** Rock revetment. Concrete wall. Block revetment. The River Yar Bridge structure.		
		Condition (Wall) - Good (Grade 2)	Residual Life - 15 to 25 years	
		Condition (Rock) - Good (Grade 2)	Residual Life - 15 to 25 years	
	IW 50 / 009	**IW 50 / 009**		

Location	Defence History	Present and Residual Life	Natural Features
	Unknown	Earth embankment. Condition (Embankment) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 50 / 010 Undefended	**IW 50 / 010** Natural salt marsh. Remains of brick masonry structure. NFCDD Condition (Marsh) - Good (Grade 2)	
	IW 50 / 011 Unknown	**IW 50 / 011** Earth revetment fronting industrial buildings. Condition (Revetment) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 50 / 012 Unknown	**IW 50 / 012** Concrete wall. Concrete apron. Condition (Wall) - Fair (Grade 3) Residual Life - 10 to 15 years	
	IW 50 / 013 Unknown	**IW 50 / 013** Rubble / earth revetment. Short section of steel sheet breast work. Short concrete slipway. Concrete wall. Timber landing stage. Condition (Revetment) - Fair (Grade 3) Residual Life - 10 to 15 years Condition (Breast work) - Poor (Grade 4) Residual Life - 5 to 10 years Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 50 / 014 Unknown	**IW 50 / 014** Rubble / earth revetment. Condition (Revetment) - Fair (Grade 3) Residual Life - 10 to 15 years	
	IW 50 / 015 Undefended	**IW 50 / 015** Natural salt marsh. Short section of timber breast work.	

Location	Defence History	Present and Residual Life	Natural Features
		NFCDD Condition (Marsh) - Good (Grade 2)	
	IW 50 / 016 Unknown	**IW 50 / 016** Remains of timber piles and landing stages. Concrete encasements supporting access bridge. Ponttons. Condition (Piles) - Poor (Grade 4) Residual Life - 2 to 7 years Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 50 / 017 Undefended	**IW 50 / 017** Natural salt marsh. Steel piled pipe structure. NFCDD Condition (Marsh) - Good (Grade 2)	
	IW 50 / 018 Unknown	**IW 50 / 018** Concrete encasement at landward side of landing stage. Pontoon. Stone masonry wall fronting Kings Manor Farm. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 50 / 019 Undefended	**IW 50 / 019** Natural salt marsh. NFCDD Condition (Marsh) - Good (Grade 2)	
	IW 50 / 020 Unknown	**IW 50 / 020** Concrete pill box. Low stone masonry wall Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 50 / 021 Unknown	**IW 50 / 021** Stone masonry bridge. Two flap valves. Condition (Wall) - Fair (Grade 3) Residual Life - 10 to 15 years	

Location	Defence History	Present and Residual Life	Natural Features
	IW 50 / 022 Unknown	**IW 50 / 022** Concrete wall. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 50 / 023 Undefended	**IW 50 / 023** Natural salt marsh. Old boat house concrete foundation. Remains of timber landing stage. NFCDD Condition (Marsh) - Good (Grade 2)	
	IW 50 / 024 Undefended	**IW 50 / 024** Concrete access bridge structure. Condition (Bridge) – Good (Grade 2) Residual Life - 15 to 25 years	
	IW 50 / 025 Undefended	**IW 50 / 025** Natural salt marsh. NFCDD Condition (Marsh) - Good (Grade 2)	
	IW 50 / 026 Unknown	**IW 50 / 026** Rock revetment. Remains of timber posts. Condition (Revetment) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 50 / 027 Revetment constructed 1950.	**IW 50 / 027** Slopping concrete revetment of crest level +1.8m Ordnance Datum Newlyn (ODN). Condition (Revetment) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 50 / 028 Seawall constructed 1920.	**IW 50 / 028** Stone / brick masonry wall with concrete toe. Concrete weir to Thorley Brook. Two flap valves. Stone masonry wall. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years	

Location	Defence History	Present and Residual Life	Natural Features
	IW 50 / 029 Gabions constructed 1989.	**IW 50 / 029** Stone filled gabion mattress revetment of crest level +1.6m Ordnance Datum Newlyn (ODN). Condition (Revetment) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 50 / 030 Unknown	**IW 50 / 030** Timber landing stage. Concrete revetment. Concrete / timber slipway. Sloping revetment consisting of profiled sections over chalk fill of crest level +1.8m Ordnance Datum Newlyn (ODN). Various outfalls. Timber slipway. Timber piles. Condition (Revetment) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 50 / 031 The New Yar Bridge completed 1987.	**IW 50 / 031** Rock revetment. Concrete wall. Block revetment. The River Yar Bridge structure. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Rock) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 50 / 032 Unknown	**IW 50 / 032** Remains of timber breast work. Rubble / rock revetment. Concrete wall. Condition (Wall) - Fair (Grade 3) Residual Life - 10 to 15 years Condition (Rock) - Fair (Grade 3) Residual Life - 10 to 15 years	
	IW 50 / 033 Unknown	**IW 50 / 033** Steel sheet piling with concrete capping beam. Timber landing stage. Timber access ramps. Concrete slipway. Steel sheet piling / timber breast work with concrete capping beam. Access ladders. Access ramp. Condition (Wall) - Good (Grade 2) Residual Life - 26 to 60 years	

Location	Defence History	Present and Residual Life	Natural Features
	IW 50 / 034 Unknown	**IW 50 / 034** Steel piles. Timber piled wall reinforced with steel beams. Steel sheet piling / timber breast work with concrete capping beam. Access ladders. Condition (Wall) - Good (Grade 2) Residual Life - 26 to 60 years	
	IW 50 / 035 Unknown	**IW 50 / 035** Steel sheet piled / concrete slipway. Condition (Slipway) - Good (Grade 2) Residual Life - 26 to 60 years	
	IW 50 / 036 Unknown	**IW 50 / 036** Stone masonry wall of crest level +1.7m Ordnance Datum Newlyn (ODN). Timber piles. Access ladders. Concrete step block. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 50 / 037 Unknown	**IW 50 / 037** Steel sheet piling with concrete capping beam. Timber breast work. Wightlink access ramp. Steel piled landing stage. Condition (Wall) - Good (Grade 2) Residual Life - 26 to 60 years	
	IW 50 / 038 Unknown	**IW 50 / 038** Stone masonry wall. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years	
IW 51 **YARMOUTH TOWN & BOULDNOR** OS Grid Reference: **SZ35374, 89774** **SZ37139, 90057**	**IW 51 / 001** Unknown	**IW 51 / 001** Stone masonry wall. Short section of steel sheet piling to minimise erosion from the 'Wight Link' ferry. Stone masonry buttress. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Piling) - Good (Grade 2) Residual Life - 26 to 60 years	Minor shingle beaches exposed during MLW. Sandy foreshore.

Location	Defence History	Present and Residual Life	Natural Features
Length: **1946m**	**IW 51 / 002** Unknown	**IW 51 / 002** Stone masonry wall. Access steps. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 51 / 003 Unknown	**IW 51 / 003** Timber groyne. Concrete columns support concrete pad foundation. Yarmouth Pier. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Groyne) - Fair (Grade 3) Residual Life - 8 to 12 years	
	IW 51 / 004 Seawall constructed 1920.	**IW 51 / 004** Timber groyne. Stone masonry wall of crest level +2.2m Ordnance Datum Newlyn (ODN). Timber slipway. Timber landing stage. Access steps. Condition (Wall) - Fair (Grade 3) Residual Life - 10 to 15 years Condition (Groyne) - Fair (Grade 3) Residual Life - 8 to 12 years	
	IW 51 / 005 Seawall constructed 1920.	**IW 51 / 005** Stone masonry wall. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 51 / 006 Seawall constructed 1920.	**IW 51 / 006** Steel piled timber landing stage with a number of steel piles encased with concrete. Stone masonry wall. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 51 / 007 Seawall constructed 1920.	**IW 51 / 007** Timber slipway. Timber breast work. Rock armour. Stone masonry wall. Condition (Breast work) - Good (Grade 2) Residual Life - 10 to 20 years	

Location	Defence History	Present and Residual Life	Natural Features
		Condition (Rock) - Fair (Grade 3) Residual Life - 10 to 15 years Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 51 / 008 Unknown	**IW 51 / 008** Concrete wall. Stone masonry wall. Timber landing stage. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 51 / 009 Seawall constructed 1920.	**IW 51 / 009** Timber landing stage. Stone masonry wall. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 51 / 010 Seawall constructed 1920.	**IW 51 / 010** Stone masonry wall with concrete revetment. Access steps. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 51 / 011 Unknown	**IW 51 / 011** Steel sheet piling. Concrete slipway. Stone brick masonry wall. Steel piled timber landing stage. Concrete slipway. Timber landing stage with a number of timber piles encased with concrete. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Piling) - Good (Grade 2) Residual Life - 26 to 60 years	
	IW 51 / 012 Unknown	**IW 51 / 012** Steel sheet piling. Concrete revetment. Stone / brick masonry wall. Steel piled timber landing stage. Condition (Wall) - Fair (Grade 3) Residual Life - 10 to 15 years Condition (Piling) - Good (Grade 2) Residual Life - 26 to 60 years	

Location	Defence History	Present and Residual Life	Natural Features
	IW 51 / 013 Unknown	**IW 51 / 013** Concrete wall. Stone brick masonry wall. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 51 / 014 Unknown	**IW 51 / 014** Concrete wall. Concrete revetment. Concrete rendered stone / brick wall. Timber landing stage. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 51 / 015 Seawall constructed 1930. Encasement and filling of voids to the stepped apron 1987.	**IW 51 / 015** Steel sheet piled toe, stepped concrete apron, concrete wall with wave return of crest level +2.55m Ordnance Datum Newlyn (ODN). Nine concrete groynes. Four concrete step blocks. Remains of timber landing stage. Condition (Wall) - Poor (Grade 4) Residual Life - 5 to 10 years Condition (Groynes) - Fair (Grade 3) Residual Life - 10 to 15 years	
	IW 51 / 016 Unknown	**IW 51 / 016** Steel sheet piled toe. Concrete slopping apron. Vertical concrete wall. Concrete encased outfalls. Concrete step block. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 51 / 017 Unknown	**IW 51 / 017** Steel access ladder. Timber landing stage. Concrete wall toe with slight batter, concrete wall. Condition (Wall) - Fair (Grade 3) Residual Life - 10 to 15 years	
	IW 51 / 018 Reconstruction of Seawall. Underpinning and part encasement of the Seawall fronting	**IW 51 / 018** Concrete access steps. Timber landing stage. Steel access ladder. Concrete wall, with plain face to batter, with overhung cope section of crest level +2.55m Ordnance Datum Newlyn (ODN). Remains of timber piles. Concrete slipway.	

Location	Defence History	Present and Residual Life	Natural Features
	Bouldnor Coastal Slope. Installation of a limited number of cliff drains 1987.	Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 51 / 019 Unknown	**IW 51 / 019** Concrete encasement. Brick masonry wall. Steel sheet piled groyne, with timber waling on top. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Groyne) - Fair (Grade 3) Residual Life - 18 to 26 years	
	IW 51 / 020 Unknown	**IW 51 / 020** Steel sheet piled toe with concrete capping beam. Concrete block masonry wall. Condition (Wall) - Poor (Grade 4) Residual Life - 5 to 10 years Condition (Groyne) - Fair (Grade 3) Residual Life - 18 to 26 years	
	IW 51 / 021 Unknown	**IW 51 / 021** Steel sheet piled toe back filled with concrete, concrete wall with concrete capping beam constructed to a level of +1.8m above Ordnance Datum Newlyn (ODN). Concrete block masonry wall. Three short timber groynes. Condition (Wall) - Good (Grade 2) Residual Life - 26 to 60 years Condition (Groyne) - Fair (Grade 3) Residual Life - 18 to 26 years	
	IW 51 / 022 Unknown	**IW 51 / 022** Steel sheet piled toe with concrete capping beam. Concrete block masonry wall. Short timber groyne. Timber pile. Condition (Wall) - Good (Grade 2) Residual Life - 26 to 60 years Condition (Groyne) - Fair (Grade 3) Residual Life - 18 to 26 years	

Location	Defence History	Present and Residual Life	Natural Features
	IW 51 / 023 Unknown	**IW 51 / 023** Steel sheet piled groyne, with timber waling on top. Concrete slipway. Steel sheet piled toe back filled with concrete, concrete wall with concrete capping beam. Concrete block masonry wall. Steel piled timber groyne. Condition (Wall) - Good (Grade 2) Residual Life - 26 to 60 years Condition (Groyne) - Fair (Grade 3) Residual Life - 18 to 26 years	
	IW 51 / 024 Unknown	**IW 51 / 024** Sheet piled wall with concrete capping beam. Rock armour to section. Condition (Wall) - Good (Grade 2) Residual Life - 26 to 60 years Condition (Rock) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 51 / 025 Unknown	**IW 51 / 025** Rock revetment. Timber breastwork. Condition (Rock) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Breast work) - Good (Grade 2) Residual Life - 10 to 20 years	
	IW 51 / 026 Unknown	**IW 51 / 026** Concrete wall. Sheet piled groyne, with timber waling to top. Sheet piled concrete slipway. Timber pile. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Groyne) - Fair (Grade 3) Residual Life - 18 to 26 years	
	IW 51 / 027 Unknown	**IW 51 / 027** Concrete encased steel sheet piling. Five timber groynes. Steel / timber piles. Steel access ladders. Outfalls. Steel sheet piled concrete slipway. Timber / steel piles. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years	

Location	Defence History	Present and Residual Life	Natural Features
		Condition (Groynes) - Good (Grade 2) Residual Life - 10 to 20 years	
	IW 51 / 028 Unknown	**IW 51 / 028** Rock filled gabions of crest level +1.4m Ordnance Datum Newlyn (ODN). Timber landing stage. Condition (Gabions) - Good (Grade 2) Residual Life - 6 to 10 years	
IW 52 **BOULDNOR COPSE & HAMSTEAD** OS Grid Reference: **SZ37139, 90057** **SZ40661, 92064** Length: **4249m**	**IW 52 / 001** Undefended	**IW 52 / 001** Natural undefended cliff. Remains of structures. Condition (Structure) - Failed (Abandoned) Residual Life - 0 years	Low receding cliffs in grey clay above a narrow gravel beach. Shingle ridge extends from Hamstead Ledge continues to a split that curves back into Newtown Estuary.
	IW 52 / 002 Unknown	**IW 52 / 002** Concrete slipway revetment. Condition (Revetment) - Fair (Grade 3) Residual Life - 10 to 15 years	
	IW 52 / 003 Undefended	**IW 52 / 003** Natural shingle ridge.	
IW 53 **NEWTOWN ESTUARY** OS Grid Reference: **SZ40661, 92064** **SZ42508, 92274** Length: **28263m**	**IW 53 / 001** Undefended	**IW 53 / 001** Natural shingle ridge. Various timber boardwalks. Natural estuary salt marsh and bank. Timber landing stage. Timber piled posts. Remains of timber landing stage. Timber landing stage with rock underneath. Timber piled posts. Timber landing stage. Stone masonry bridge. Timber board walk. Remains of timber posts. NFCDD Condition (Shingle ridge) - Good (Grade 2) NFCDD Condition (Marsh) - Good (Grade 2)	Estuary bordered by tidal mudflats and salt marshes.
	IW 53 / 002 Unknown	**IW 53 / 002** Stone masonry wall, with concrete coping repaired in placed with rock filled	

Location	Defence History	Present and Residual Life	Natural Features
		gabions. Stone masonry wall. Condition (Gabions) - Fair (Grade 3) Residual Life - 4 to 7 years Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 53 / 003 Unknown	**IW 53 / 003** Timber piled wall. Concrete slipway. Condition (Wall) - Fair (Grade 3) Residual Life - 8 to 12 years	
	IW 53 / 004 Unknown	**IW 53 / 004** Stone masonry wall, with timber breast work. Concrete slipway. Condition (Wall) - Fair (Grade 3) Residual Life - 10 to 15 years	
	IW 53 / 005 Unknown	**IW 53 / 005** Stone masonry wall. Timber access ramp. Steel piles. Condition (Wall) - Fair (Grade 3) Residual Life - 10 to 15 years	
	IW 53 / 006 Unknown	**IW 53 / 006** Rock wall. Timber breast work. Condition (Breast work) - Good (Grade 2) Residual Life - 10 to 20 years	
	IW 53 / 007 Unknown	**IW 53 / 007** Remains of stone masonry wall. Earth rock / revetment. Condition (Revetment) - Poor (Grade 4) Residual Life - 5 to 7 years	
	IW 53 / 008 Unknown	**IW 53 / 008** Concrete filled sand bag wall. Timber posts. Condition (Wall) - Fair (Grade 3) Residual Life - 10 to 15 years	

Location	Defence History	Present and Residual Life	Natural Features
	IW 53 / 009 Unknown	**IW 53 / 009** Concrete rubble filled gabions. Remains of timber landing stage. Condition (Gabions) - Fair (Grade 3) Residual Life - 4 to 7 years	
	IW 53 / 010 Undefended	**IW 53 / 010** Natural estuary bank. Remains of timber posts. NFCDD Condition (Marsh) - Good (Grade 2)	
	IW 53 / 011 Unknown	**IW 53 / 011** Stone masonry wall. Timber breast work. Condition (Wall) - Fair (Grade 3) Residual Life - 10 to 15 years Condition (Breast work) - Good (Grade 2) Residual Life - 10 to 20 years	
	IW 53 / 012 Unknown	**IW 53 / 012** Timber bridge. Timber breast work. Timber / metal bridge. Corf Camp timber landing stage. Condition (Breast work) - Good (Grade 2) Residual Life - 10 to 20 years	
	IW 53 / 013 Undefended	**IW 53 / 013** Undefended frontage. NFCDD Condition - Good (Grade 2)	
	IW 53 / 014 Unknown	**IW 53 / 014** Stone masonry wall with timber breast work to section. Stone masonry bridge. Condition (Wall) - Fair (Grade 3) Residual Life - 10 to 15 years	
	IW 53 / 015 Undefended	**IW 53 / 015** Timber boardwalk. Natural estuary salt marsh and bank. NFCDD Condition (Marsh) - Good (Grade 2)	

Location	Defence History	Present and Residual Life	Natural Features
	IW 53 / 016 Unknown	**IW 53 / 016** Timber piled wall. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 53 / 017 Unknown	**IW 53 / 017** Stone / concrete masonry wall. Timber access ladders. Timber breast work. Weir. Timber board walk. Remains of brick masonry structure. Remains of timber posts. Timber slipway. Rock revetment. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Breast work) - Good (Grade 2) Residual Life - 10 to 20 years Condition (Revetment) - Poor (Grade 4) Residual Life - 5 to 7 years	
	IW 53 / 018 Undefended	**IW 53 / 018** Remains of timber post structure. Condition (Breast work) - Very Poor (Grade 5) Residual Life - 0 years NFCDD Condition (Marsh) - Good (Grade 2)	
	IW 53 / 019 Undefended	**IW 53 / 019** Natural estuary salt marsh and bank. NFCDD Condition (Marsh) - Good (Grade 2)	
IW 54 **THORNESS BAY** OS Grid Reference: **SZ42808, 92274** **SZ47077, 95372**	**IW 54 / 001** Undefended	**IW 54 / 001** Natural undefended cliff. Remains of timber posts. Outfall. Concrete bridge. Remains of metal posts. Remains of timber structure. Steel sheet piling. Outfall. Natural undefended cliff. Remains of concrete block structure on shore. Timber piled posts. Condition (Piling) - Good (Grade 2) Residual Life - 15 to 25 years	Bembridge marl, overlying bembridge limestone and Osborne Marl cliffs. Limestone outcrops on shore. Wide muddy foreshore backed by sandy

Location	Defence History	Present and Residual Life	Natural Features
Length: **6215m**	**IW 54 / 002** Unknown **IW 54 / 003** Undefended **IW 54 / 004** Unknown **IW 54 / 005** Undefended	**IW 54 / 002** Rock filled gabions. Condition (Rock Gabions) - Good (Grade 2) Residual Life - 6 to 10 years **IW 54 / 003** Undefended frontage. Remains of concrete on the shore. **IW 54 / 004** Rubble filled gabions. Condition (Rubble Gabions) - Poor (Grade 4) Residual Life - 1 to 3 years **IW 54 / 005** Remains of brick / concrete structure on shore.	beach. Stream. Bembridge Limestone forms Gurnard Ledge.
IW 55 **COWES ESPLANADE** OS Grid Reference: **SZ47077, 95372** **SZ47425, 95552** Length: **574m**	**IW 55 / 001** Seawall and rock armour constructed 1970. **IW 55 / 002** Unknown **IW 55 / 003** Unknown	**IW 55 / 001** Timber groyne. Rock armouring fronting masonry wall with cement rendering to part and stone block parapet of crest level +3.5m Ordnance Datum Newlyn (ODN). Remains of timber breast work. Condition (Rock) - Fair (Grade 3) Residual Life - 10 to 15 years Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years **IW 55 / 002** Concrete block masonry wall. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years **IW 55 / 003** Rubble revetment. Timber breast work. Timber piled posts. Condition (Revetment) - Poor (Grade 4) Residual Life - 5 to 7 years	Sand / shingle foreshore. Outcrops of Bembridge limestone on the shore.

Location	Defence History	Present and Residual Life	Natural Features
		Condition (Breast work) - Fair (Grade 3) Residual Life - 8 to 12 years	
	IW 55 / 004 Concrete encasement states 'Cheek Bros 1984'	**IW 55 / 004** Stone masonry bridge incorporating four flap valves. Timber breast work. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Breast work) - Fair (Grade 3) Residual Life - 8 to 12 years	
	IW 55 / 005 Undefended	**IW 55 / 005** Natural earth bank containing traces of concrete rubble.	
	IW 55 / 006 Seawall constructed 1993.	**IW 55 / 006** Concrete access steps. Concrete block wall supporting capping beam and slab. Apron slab foundation acts as foundation for concrete block upper wall. Concrete parapet to upper wall of crest level +2.3m Ordnance Datum Newlyn (ODN). Concrete groyne. Concrete slipway. Concrete groyne. Remains of disused concrete slipway. Rock groyne. Timber groyne. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Concrete Groynes) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Rock Groynes) - Fair (Grade 3) Residual Life - 5 to 7 years Condition (Timber Groynes) - Good (Grade 2) Residual Life - 10 to 20 years	
	IW 55 / 007 Seawall constructed 1981.	**IW 55 / 007** Concrete wall with concrete slab forming walkway and masonry block wall to the rear constructed to a level of +2.2m above Ordnance Datum Newlyn (ODN). Remains of two timber groynes exposed when sediment levels are low. Concrete slipway. Rock / concrete groyne. Rock groyne. Concrete slipway. Two rock groynes. Outfall pipe. Concrete steps. Condition (Wall) - Poor (Grade 4) Residual Life - 5 to 7 years Condition (Timber Groynes) - Poor (Grade 4) Residual Life - 15 to 25 years	

Location	Defence History	Present and Residual Life	Natural Features
		Condition (Rock Groynes) - Fair (Grade 3) Residual Life - 5 to 7 years	
	IW 55 / 008 Unknown	**IW 55 / 008** Steel sheet piled wall with concrete slab. Rock groyne. Mains electricity cable structure. Condition (Wall) - Fair (Grade 3) Residual Life - 18 to 26 years Condition (Rock Groyne) - Fair (Grade 3) Residual Life - 5 to 7 years	
	IW 55 / 009 Unknown	**IW 55 / 009** Concrete wall with slight wave return to nosing. Concrete retaining wall to top. Concrete slipway. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 55 / 010 Unknown	**IW 55 / 010** Concrete toe with apron. Stone and concrete block masonry wall constructed to a level of +2.5m above Ordnance Datum Newlyn (ODN). Concrete steps. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 55 / 011 Unknown	**IW 55 / 011** Concrete toe. Timber breast work. Series of short timber post groynes. Condition (Breast work) - Good (Grade 2) Residual Life - 10 to 20 years	
IW 56 **COWES ESPLANADE** OS Grid Reference: **SZ47425, 95552** **SZ49420, 96543**	**IW 56 / 001** Undefended **IW 56 / 002** Unknown	**IW 56 / 001** Rock strewn foreshore. Remains of concrete structure. Remains of timber structures on foreshore. **IW 56 / 002** Piled timber structure supported by steel walings. Remains of concrete structure.	Sand / shingle foreshore. Outcrops of Bembridge limestone on the shore.

Location	Defence History	Present and Residual Life	Natural Features
Length: **2768m**		Condition (Breast work) - Good (Grade 2) Residual Life - 10 to 20 years	
	IW 56 / 003 Undefended	**IW 56 / 003** Rock groyne. Rock strewn foreshore. Remains of concrete structure. Recently constructed 'unapproved' bedrock structure. Condition (Rock Groyne) - Fair (Grade 3) Residual Life - 5 to 7 years	
	IW 56 / 004 Undefended	**IW 56 / 004** Remains of concrete structure. Remains of concrete slipway. Rock strewn foreshore. Remains of timber landing stage.	
	IW 56 / 005 Undefended	**IW 56 / 005** Rock strewn foreshore.	
	IW 56 / 006 Unknown	**IW 56 / 006** Timber piled structure. Timber slipway. Condition - Good (Grade 2) Residual Life - 10 to 20 years	
	IW 56 / 007 Seawall constructed 1960.	**IW 56 / 007** Rock groyne. Timber pile. Concrete / rock wall of crest level +2.2m Ordnance Datum Newlyn (ODN). Concrete decking slab, with rock masonry wall to the rear. Timber slipway. Remains of short timber groyne with rock groyne to seaward end. Rock groyne. Concrete slipway access buttress to timber slipway. Concrete steps onto concrete revetment. Condition (Rock Groyne) - Fair (Grade 3) Residual Life - 5 to 7 years Condition (Wall) - Fair (Grade 3) Residual Life - 10 to 15 years	
	IW 56 / 008 Seawall constructed 1997.	**IW 56 / 008** Gurnard Sailing Club - Concrete slipway. Concrete wall with wave return, apron and steel sheet piled toe. Concrete slipway with timber fendering. Concrete blocks with pre-cast coping section. Concrete block masonry wall. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years	

Location	Defence History	Present and Residual Life	Natural Features
	IW 56 / 009 Seawall constructed 1980. Rock groynes constructed 1970.	**IW 56 / 009** Concrete slipway. Outfall. Concrete wall. Outfall pipe. Timber plank structure fronting car park. Concrete masonry block wall with pre-cast coping section. Concrete slipway. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 56 / 010 Seawall constructed 1980. Rock groynes constructed 1970.	**IW 56 / 010** Concrete block masonry wall with pre-cast coping sections of crest level +2.5m Ordnance Datum Newlyn (ODN). Double concrete step block. Rock groyne. Concrete step block. Rock groyne. Concrete stub groyne extending to rock groyne. Rock groyne. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Rock Groynes) - Fair (Grade 3) Residual Life - 5 to 7 years	
	IW 56 / 011 Gurnard to Egypt Point Coast Protection Scheme Reconstruction of Sea Wall completed 1995.	**IW 56 / 011** Concrete step block. Steel sheet piled toe and concrete apron. Concrete wall with wave return of crest level +2.7m Ordnance Datum Newlyn (ODN). Concrete / rock groyne with pipe exposed at low sediment levels. Concrete step block. Four rock groynes. Concrete step block. Rock groyne. Concrete step block. Rock groyne. Four concrete step blocks. Outfalls various locations. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Rock Groynes) - Fair (Grade 3) Residual Life - 5 to 7 years	
	IW 56 / 012 Seawall constructed 1970.	**IW 56 / 012** Concrete slipway. Concrete wall with toe and apron of crest level +2.4m Ordnance Datum Newlyn (ODN). Concrete outfall structure. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 56 / 013 Seawall constructed	**IW 56 / 013** Concrete wall buried into high natural shingle ridge of crest level +2.2m Ordnance	

Location	Defence History	Present and Residual Life	Natural Features
	1940.	Datum Newlyn (ODN). Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 56 / 014 Seawall constructed 1992.	**IW 56 / 014** Masonry concrete block wall with concrete coping section of crest level +2.1m Ordnance Datum Newlyn (ODN). Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 56 / 015 Seawall constructed 1950.	**IW 56 / 015** Concrete block masonry wall with concrete sections forming coping to part of wall. Dwarf parapet wall of crest level +2.4m Ordnance Datum Newlyn (ODN). Various outfalls. Concrete groyne. Condition (Wall) - Fair (Grade 3) Residual Life - 10 to 15 years Condition (Groyne) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Rock) - Good (Grade 2) Residual Life - 10 to 15 years	
	IW 56 / 016 Unknown	**IW 56 / 016** Rock armour. Sloping pitched stone apron. Concrete block masonry wall with concrete sections forming coping to part of wall. Dwarf parapet wall of crest level +2.4m Ordnance Datum Newlyn (ODN). Dwarf stone parapet wall. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Revetment) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Rock) - Fair (Grade 3) Residual Life - 10 to 15 years	
	IW 56 / 017 The Royal Yacht Squadron Jubilee Haven completed 2006.	**IW 56 / 017** Rock armour breakwater arm fronting pre cast concrete sections. Stone masonry wall with wave return coping. Access ramp. Pitched stone revetment to flagstone promenade. Brick / stone masonry wall to the rear.	

Location	Defence History	Present and Residual Life	Natural Features
	IW 56 / 018 Unknown **IW 56 / 019** Unknown	Condition (Wall) - Very Good (Grade 1) Residual Life - 25 to 35 years Condition (Rock) - Very Good (Grade 1) Residual Life - 25 to 35 years **IW 56 / 018** Concrete landing stage. Pipe exposed when sediment levels are low. Stone block masonry wall with concrete coping. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Revetment) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Landing Stage) - Good (Grade 2) Residual Life - 15 to 25 years **IW 56 / 019** Stone masonry wall with concrete coping. Stepped landing stage. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Landing Stage) - Good (Grade 2) Residual Life - 15 to 25 years	
IW 57 **COWES PARADE & HARBOUR** OS Grid Reference: **SZ49420, 96543** **SZ45000, 95616** Length: **2278m**	**IW 57 / 001** Victoria Parade completed 1897. **IW 57 / 002** Unknown	**IW 57 / 001** Stone block masonry landing stage. Masonry block wall with slight batter and curve at top. Decorative moulded balustrade with large moulded top rail of crest level +2.5m Ordnance Datum Newlyn (ODN). Stone block masonry landing stage. Steel sheet landing stage leading onto pontoon access ramp. Steel access ladder. Remains of old stone slipway. Steel sheet piled landing stage. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Landing Stages) - Good (Grade 2) Residual Life - 15 to 25 years **IW 57 / 002** Steel sheet piled concrete decked slipway. Condition (Piling) - Good (Grade 2) Residual Life - 26 to 60 years	Sand / shingle foreshore. Outcrops of Bembridge limestone on the shore.

Location	Defence History	Present and Residual Life	Natural Features
	IW 57 / 003 Unknown	**IW 57 / 003** Concrete wall with steel sheet piling to section of crest level +2.2m Ordnance Datum Newlyn (ODN). Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Piling) - Good (Grade 2) Residual Life - 26 to 60 years	
	IW 57 / 004 Unknown	**IW 57 / 004** Concrete slipway. Concrete wall. Concrete pad foundation supported on concrete columns. Concrete slipway. Remains of old slipway underneath structure. Access ramp to pontoons. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 57 / 005 Unknown	**IW 57 / 005** Concrete slipway. Stone masonry / concrete wall. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 57 / 006 Unknown	**IW 57 / 006** Stone masonry wall. Timber slipway. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 57 / 007 Unknown	**IW 57 / 007** Landing stage, with concrete encased timber piles. Stone masonry wall to section. Steel sheet piling. Concrete rendered wall. Stone masonry wall to section. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Piling) - Good (Grade 2) Residual Life - 26 to 60 years	
	IW 57 / 008 Unknown	**IW 57 / 008** Stone masonry wall. Concrete pad foundation supported by steel / timber piles.	

Location	Defence History	Present and Residual Life	Natural Features
		Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 57 / 009 Unknown	**IW 57 / 009** Steel sheet piling with concrete coping. Brick masonry wall. Concrete slipway.	
		Condition (Wall) - Good (Grade 2) Residual Life - 26 to 60 years	
	IW 57 / 010 Unknown	**IW 57 / 010** Stone masonry wall to section. Concrete encased wall.	
		Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 57 / 011 Unknown	**IW 57 / 011** Concrete foundation supported by columns. Slipway.	
		Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 57 / 012 Unknown	**IW 57 / 012** Steel sheet piling. Red funnel landing stage.	
		Condition (Wall) - Good (Grade 2) Residual Life - 26 to 60 years	
	IW 57 / 013 Unknown.	**IW 57 / 013** Stone / brick masonry wall of crest level +2.6m Ordnance Datum Newlyn (ODN).	
		Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 57 / 014 Unknown	**IW 57 / 014** Concrete pad foundation supported by steel piled columns. Access ramp to pontoons. Concrete wall.	
		Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 57 / 015 Unknown	**IW 57 / 015** Stone masonry wall.	

Location	Defence History	Present and Residual Life	Natural Features
		Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 57 / 016 Unknown	**IW 57 / 016** Steel sheet piled wall with concrete capping beam. Vertical timber fendering. Condition (Wall) - Good (Grade 2) Residual Life - 26 to 60 years	
	IW 57 / 017 Unknown	**IW 57 / 017** Steel sheet piling with concrete capping beam, of crest level +2.3m Ordnance Datum Newlyn (ODN). Concrete beam structure protecting marina. Pontoons. Condition (Wall) - Good (Grade 2) Residual Life - 26 to 60 years	
	IW 57 / 018 Unknown	**IW 57 / 018** Concrete slipway. Steel sheet piling with concrete capping beam. Landing stage and access ramp to pontoons. Condition (Wall) - Good (Grade 2) Residual Life - 26 to 60 years	
	IW 57 / 019 Unknown	**IW 57 / 019** Concrete / stone masonry wall. Landing stage to pontoon. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 57 / 020 Unknown	**IW 57 / 020** Stone masonry wall. Timber access ramp. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 57 / 021 Unknown	**IW 57 / 021** Stone masonry wall? Landing stage. Boat yard / landing stage to access ramp and pontoons. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 57 / 022	**IW 57 / 022**	

Location	Defence History	Present and Residual Life	Natural Features
	Unknown	Concrete slipway. Condition (Slipway) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 57 / 023 Unknown	**IW 57 / 023** Concrete slipways, fronting properties. Landing stage. Condition (Slipway) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 57 / 024 Unknown	**IW 57 / 024** Concrete wall. Landing stage to fuel berth. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 57 / 025 Unknown	**IW 57 / 025** Concrete slipways fronting boat yards constructed to a level of +2.3m above Ordnance Datum Newlyn (ODN).. Condition (Slipway) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 57 / 026 Unknown	**IW 57 / 026** Concrete slipway. Condition (Slipway) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 57 / 027 Unknown	**IW 57 / 027** Stone masonry wall. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 57 / 028 Unknown	**IW 57 / 028** Steel sheet piling with concrete capping beam. Pontoons. Condition (Wall) - Good (Grade 2) Residual Life - 26 to 60 years	
	IW 57 / 029 Unknown	**IW 57 / 029** Steel sheet piling with concrete capping beam. Pontoons. Concrete wall. Concrete	

Location	Defence History	Present and Residual Life	Natural Features
		slipway. Condition (Wall) - Very Good (Grade 1) Residual Life - 30 to 70 years Condition (Slipway) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 57 / 030 Unknown	**IW 57 / 030** Concrete pad foundation supported by concrete columns. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 57 / 031 Unknown	**IW 57 / 031** Concrete slipway. Chain ferry infrastructure. Condition (Slipway) - Fair (Grade 3) Residual Life - 10 to 15 years	
IW 58 **MEDINA ESTUARY** OS Grid Reference: **SZ45000, 95616** **SZ50162, 95528** Length: **18331m**	**IW 58 / 001** Unknown	**IW 58 / 001** Stone masonry wall which forms foundation to property. Condition - Fair (Grade 3) Residual Life - 10 to 15 years	Wide shallow valley with a gentle incline on either side and the build up of sediment has formed characteristic mudflats and salt marshes.
	IW 58 / 002 Unknown	**IW 58 / 002** Concrete wall. Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 58 / 003 Unknown	**IW 58 / 003** Steel sheet piling and timber fenders. Condition - Fair (Grade 3) Residual Life - 18 to 26 years	
	IW 58 / 004 Unknown	**IW 58 / 004** Timber landing stage and piles. Concrete wall. Condition - Poor (Grade 4) Residual Life - 5 to 7 years	

Location	Defence History	Present and Residual Life	Natural Features
	IW 58 / 005 Unknown	**IW 58 / 005** Timber / steel sheet piling with concrete coping constructed to a level of +2.6m above Ordnance Datum Newlyn (ODN). Condition - Fair (Grade 3) Residual Life - 18 to 26 years	
	IW 58 / 006 Unknown	**IW 58 / 006** Mixture on concrete wall and slipways with some steel sheet piling with concrete coping. Condition - Fair (Grade 3) Residual Life - 10 to 15 years Condition (Piling) - Fair (Grade 3) Residual Life - 18 to 26 years	
	IW 58 / 007 Unknown	**IW 58 / 007** GBR boat yard. Concrete wall. Concrete slipway. Condition - Poor (Grade 4) Residual Life - 5 to 7 years	
	IW 58 / 008 Unknown	**IW 58 / 008** GBR boatshed. Concrete wall. Concrete slipway. Condition - Fair (Grade 3) Residual Life - 10 to 15 years	
	IW 58 / 009 Unknown	**IW 58 / 009** Rubble revetment. Condition - Very Poor (Grade 5) Residual Life - 0 years	
	IW 58 / 010 Unknown	**IW 58 / 010** IYWAC. Concrete wall and concrete slipway. Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 58 / 011 Unknown	**IW 58 / 011** Steel sheet piling with concrete coping at the Cowes UK Sailing Academy (UKSA).	

Location	Defence History	Present and Residual Life	Natural Features
		Timber landing stage. Condition - Good (Grade 2) Residual Life - 26 to 60 years	
	IW 58 / 012 Unknown	**IW 58 / 012** UK Sailing Academy (UKSA) property. Concrete slipway. Timber landing stage. Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 58 / 013 Unknown	**IW 58 / 013** Concrete block and timber breastwork wall with concrete coping. Timber access steps from timber landing stage to concrete deck at UKSA. Condition - Fair (Grade 3) Residual Life - 10 to 15 years	
	IW 58 / 014 Unknown	**IW 58 / 014** Remnant of a concrete wall Condition - Poor (Grade 4) Residual Life - 5 to 7 years	
	IW 58 / 015 Undefended	**IW 58 / 015** Undefended frontage with rubble dumped. NFCDD Condition - Poor (Grade 4)	
	IW 58 / 016 Unknown	**IW 58 / 016** Disused dry docks at Cowes. Timber landing stage. Stone masonry wall. Condition - Fair (Grade 3) Residual Life - 10 to 15 years	
	IW 58 / 017 Unknown	**IW 58 / 017** Concrete wall and steel frame slipway. Condition - Fair (Grade 3) Residual Life - 10 to 15 years	
	IW 58 / 018 Unknown	**IW 58 / 018** Concrete slipway. Concrete wall with steel frame extension, Concrete deck.	

Location	Defence History	Present and Residual Life	Natural Features
		Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 58 / 019 Undefended	**IW 58 / 019** Timber fencing and rubble revetment constructed to a level of +2.6m above Ordnance Datum Newlyn (ODN).. Effectively undefended frontage. NFCDD Condition - Good (Grade 2)	
	IW 58 / 020 Unknown	**IW 58 / 020** Aggregate store. Steel sheet piling with concrete coping constructed to a level of +2.8m above Ordnance Datum Newlyn (ODN).. Condition - Good (Grade 2) Residual Life - 26 to 60 years	
	IW 58 / 021 Undefended	**IW 58 / 021** Undefended frontage. Rubble. NFCCD Condition - Good (Grade 2)	
	IW 58 / 022 Unknown	**IW 58 / 022** Short length of rock filled gabions. Condition - Fair (Grade 3) Residual Life - 4 to 7 years	
	IW 58 / 023 Undefended	**IW 58 / 023** Formerly semi-defended area of salt marsh. Now undefended frontage. NFCDD Condition (Marsh) - Good (Grade 2) Condition (Structure) - Failed (Abandoned) Residual Life - 0 years	
	IW 58 / 024 Undefended	**IW 58 / 024** Undefended frontage. Rubble. NFCCD Condition - Good (Grade 2)	

Location	Defence History	Present and Residual Life	Natural Features
	IW 58 / 025 Unknown	**IW 58 / 025** Steel sheet piling and timber fender boards. Condition - Poor (Grade 4) Residual Life - 5 to 10 years	
	IW 58 / 026 Unknown	**IW 58 / 026** Concrete wall. Condition - Fair (Grade 3) Residual Life - 10 to 15 years	
	IW 58 / 027 Unknown	**IW 58 / 027** Steel sheet piling with concrete coping. Condition - Fair (Grade 3) Residual Life - 18 to 26 years	
	IW 58 / 028 Unknown	**IW 58 / 028** Concrete wall. Condition - Very Poor (Grade 5) Residual Life - 0 years	
	IW 58 / 029 Unknown	**IW 58 / 029** Concrete wall with culverts. Condition - Fair (Grade 3) Residual Life - 10 to 15 years	
	IW 58 / 030 Unknown	**IW 58 / 030** Concrete wall. Condition - Fair (Grade 3) Residual Life - 10 to 15 years	
	IW 58 / 031 Unknown	**IW 58 / 031** Inclined concrete wall. Condition - Very Good (Grade 1) Residual Life - 25 to 35 years	
	IW 58 / 032 Unknown	**IW 58 / 032** Concrete wall.	

Location	Defence History	Present and Residual Life	Natural Features
		Condition - Fair (Grade 3) Residual Life - 10 to 15 years	
	IW 58 / 033 Unknown	**IW 58 / 033** Medina View. Timber pontoons. Stone masonry wall encased in concrete – showing some signs of repair. Condition - Fair (Grade 3) Residual Life - 10 to 15 years	
	IW 58 / 034 Undefended	**IW 58 / 034** Undefended frontage. Rubble NFCCD Condition - Good (Grade 2)	
	IW 58 / 035 Unknown	**IW 58 / 035** Concrete slipway. Blockwork wall. Timber landing stage and pontoon. Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 58 / 036 Undefended	**IW 58 / 036** Undefended frontage. Brick masonry structure. Concrete landing stage with steel piles. NFCCD Condition - Good (Grade 2)	
	IW 58 / 037 Unknown	**IW 58 / 037** Downstream of Newport Rowing Club. Concrete wall. Timber landing stage. Steel sheet piling. Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 58 / 038 Undefended	**IW 58 / 038** Upstream of Newport Rowing club. Undefended frontage. Medina Riverside Park. NFCDD Condition - Good (Grade 2)	
	IW 58 / 039	**IW 58 / 039**	

Location	Defence History	Present and Residual Life	Natural Features
	Unknown	Medina Riverside Park. Timber piles and timber breastwork. Condition - Good (Grade 2) Residual Life - 10 to 20 years	
	IW 58 / 040 Unknown	**IW 58 / 040** Timber bridge with concrete landing platforms. Condition - Very Good (Grade 1) Residual Life - 25 to 35 years	
	IW 58 / 041 Undefended	**IW 58 / 041** Undefended frontage. NFCDD Condition - Fair (Grade 3)	
	IW 58 / 042 Unknown	**IW 58 / 042** Steel sheet piling, part with concrete coping. Condition - Fair (Grade 3) Residual Life - 18 to 26 years	
	IW 58 / 043 Unknown	**IW 58 / 043** Steel sheet piling, part with concrete coping. Condition - Fair (Grade 3) Residual Life - 18 to 26 years	
	IW 58 / 044 Unknown	**IW 58 / 044** Concrete slipway. Concrete wall. Condition - Fair (Grade 3) Residual Life - 10 to 15 years	
	IW 58 / 045 Unknown	**IW 58 / 045** Stone masonry wall at seaward end of private garden. Condition - Fair (Grade 3) Residual Life - 10 to 15 years	
	IW 58 / 046 Unknown	**IW 58 / 046** Concrete wall.	

Location	Defence History	Present and Residual Life	Natural Features
		Condition - Very Good (Grade 1) Residual Life - 25 to 35 years	
	IW 58 / 047 Unknown	**IW 58 / 047** Stone masonry wall / concrete block wall with timber fender boards. Condition - Fair (Grade 3) Residual Life - 10 to 15 years	
	IW 58 / 048 Unknown	**IW 58 / 048** Concrete block work / brick masonry wall with timber fender boards. Condition - Fair (Grade 3) Residual Life - 10 to 15 years	
	IW 58 / 049 Unknown	**IW 58 / 049** Steel sheet piles with concrete coping. Road bridge base showing steel corrosion. Condition - Fair (Grade 3) Residual Life - 18 to 26 years	
	IW 58 / 050 Unknown	**IW 58 / 050** Stone and brick wall below Quay Arts Centre, with concrete wall below exhibition rooms. Condition - Fair (Grade 3) Residual Life - 10 to 15 years	
	IW 58 / 051 Unknown	**IW 58 / 051** Stone pitching slipway and stone masonry wall. Condition - Fair (Grade 3) Residual Life - 10 to 15 years	
	IW 58 / 052 Unknown	**IW 58 / 052** Stone masonry and brick wall. Access ladder. Foot bridge. Condition - Fair (Grade 3) Residual Life - 10 to 15 years	
	IW 58 / 053 Unknown	**IW 58 / 053** Steel sheet piling with concrete coping. Condition - Fair (Grade 3) Residual Life - 18 to 26 years	

Location	Defence History	Present and Residual Life	Natural Features
	IW 58 / 054 Unknown	**IW 58 / 054** Stone masonry wall with access ladder and timber fender boards. Condition - Fair (Grade 3) Residual Life - 10 to 15 years	
	IW 58 / 055 Unknown	**IW 58 / 055** Concrete wall. Condition - Fair (Grade 3) Residual Life - 10 to 15 years	
	IW 58 / 056 Unknown	**IW 58 / 056** Steel sheet piling with concrete coping. Condition - Fair (Grade 3) Residual Life - 18 to 26 years	
	IW 58 / 057 Unknown	**IW 58 / 057** Stone masonry wall. Concrete slipway. Condition - Fair (Grade 3) Residual Life - 10 to 15 years	
	IW 58 / 058 Unknown	**IW 58 / 058** Concrete capped steel sheet piles. Condition - Fair (Grade 3) Residual Life - 18 to 26 years	
	IW 58 / 059 Undefended	**IW 58 / 059** Undefended frontage. NFCDD Condition - Fair (Grade 3)	
	IW 58 / 060 Unknown	**IW 58 / 060** Short length of rock-filled gabions. Condition - Fair (Grade 3) Residual Life - 4 to 7 years	
	IW 58 / 061	**IW 58 / 061**	

Location	Defence History	Present and Residual Life	Natural Features
	Undefended	Undefended frontage. NFCDD Condition - Good (Grade 2)	
	IW 58 / 062 Unknown	**IW 58 / 062** Steel sheet piling. Condition - Good (Grade 2) Residual Life - 26 to 60 years	
	IW 58 / 063 Undefended	**IW 58 / 063** Undefended frontage. NFCDD Condition - Good (Grade 2)	
	IW 58 / 064 Unknown	**IW 58 / 064** Remains of concrete structure. Rubble revetment. Condition - Poor (Grade 4) Residual Life - 5 to 7 years	
	IW 58 / 065 Unknown	**IW 58 / 065** Landing stage. Entrance to Island Harbour. Concrete lock chamber. Condition - Very Good (Grade 1) Residual Life - 25 to 35 years	
	IW 58 / 066 Unknown	**IW 58 / 066** Island Harbour. Earth embankment. Condition - Very Good (Grade 1) Residual Life - 25 to 35 years	
	IW 58 / 067 Unknown	**IW 58 / 067** Island Harbour. Steel sheet piling. Accommodation sits on steel piles and buoyancy tanks. Condition - Very Good (Grade 1) Residual Life - 30 to 70 years	
	IW 58 / 068 Undefended	**IW 58 / 068** Undefended frontage.	

Location	Defence History	Present and Residual Life	Natural Features
		NFCDD Condition - Unknown	
	IW 58 / 069 Unknown	**IW 58 / 069** Island Harbour. Earth embankment with rock armour on seaward side. Condition - Very Good (Grade 1) Residual Life - 25 to 35 years	
	IW 58 / 070 Unknown	**IW 58 / 070** Side wall of lock chamber. Steel sheet piling with concrete coping. Condition – Very Good (Grade 1) Residual Life - 25 to 35 years	
	IW 58 / 071 Unknown	**IW 58 / 071** Rubble revetment. Condition - Poor (Grade 4) Residual Life - 5 to 7 years	
	IW 58 / 072 Undefended	**IW 58 / 072** Undefended frontage around upstream of the Folly Inn. Concrete slipway. NFCDD Condition - Good (Grade 2)	
	IW 58 / 073 Unknown	**IW 58 / 073** Concrete slipway. Access ramp to pontoons. Concrete wall fronting folly Inn Public House. Condition - Poor (Grade 4) Residual Life - 5 to 7 years	
	IW 58 / 074 Undefended	**IW 58 / 074** Undefended frontage. Remains of concrete structures. Rubble. NFCDD Condition - Good (Grade 2)	
	IW 58 / 075 Unknown	**IW 58 / 075** Damaged concrete wall. Ad-hoc rubble defence along coastal fringe. Concrete wall / slipway.	

Location	Defence History	Present and Residual Life	Natural Features
		Condition - Very Poor (Grade 5) Residual Life - 0 years	
	IW 58 / 076 Undefended	**IW 58 / 076** Undefended frontage. NFCDD Condition - Good (Grade 2)	
	IW 58 / 077 Unknown	**IW 58 / 077** Stone pitch wall. Condition - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 58 / 078 Unknown	**IW 58 / 078** Steel sheet piling landing stage. Condition - Good (Grade 2) Residual Life - 26 to 60 years	
	IW 58 / 079 Undefended	**IW 58 / 079** Undefended frontage. Earth embankment leading to Cowes power station. NFCDD Condition - Fair (Grade 3)	
	IW 58 / 080 Unknown	**IW 58 / 080** Steel sheet piling with concrete coping and timber fender-boards. Condition - Good (Grade 2) Residual Life - 26 to 60 years	
	IW 58 / 081 Unknown	**IW 58 / 081** Steel sheet piling with concrete coping. Condition - Good (Grade 2) Residual Life - 26 to 60 years	
	IW 58 / 082 Unknown	**IW 58 / 082** Steel sheet piling with concrete coping. Condition - Good (Grade 2) Residual Life - 26 to 60 years	

Location	Defence History	Present and Residual Life	Natural Features
	IW 58 / 083 Undefended	**IW 58 / 083** Undefended frontage. NFCDD Condition - Fair (Grade 3)	
	IW 58 / 084 Unknown	**IW 58 / 084** Steel sheet piling with concrete coping. Condition - Good (Grade 2) Residual Life - 26 to 60 years	
	IW 58 / 085 Undefended	**IW 58 / 085** Undefended frontage. NFCDD Condition - Fair (Grade 3)	
	IW 58 / 086 Unknown	**IW 58 / 086** Steel sheet piling with concrete coping constructed to a level of +2.6m above Ordnance Datum Newlyn (ODN).. Timber pontoons and steel piles. Condition - Very Good (Grade 1) Residual Life - 30 to 70 years	
	IW 58 / 087 Unknown	**IW 58 / 087** Concrete block work masonry wall with concrete coping constructed to a level of +2.6m above Ordnance Datum Newlyn (ODN). Timber pontoons. Condition - Very Good (Grade 1) Residual Life - 25 to 35 years	
	IW 58 / 088 Unknown	**IW 58 / 088** Concrete slipways. Steel sheet piling. Concrete wall constructed to a level of +2.6m above Ordnance Datum Newlyn (ODN).. Boat yards. Condition - Fair (Grade 3) Residual Life - 15 to 25 years Condition (Piling) - Good (Grade 2) Residual Life - 26 to 60 years	

Location	Defence History	Present and Residual Life	Natural Features
	IW 58 / 089 Unknown	**IW 58 / 089** Steel sheet piling with concrete coping. Timber pontoon. Steel piles. Condition - Good (Grade 2) Residual Life - 26 to 60 years	
	IW 58 / 090 Unknown	**IW 58 / 090** Stone / concrete block work masonry wall. Concrete slipway for Floating Bridge which connects Cowes with East Cowes. Condition - Fair (Grade 3) Residual Life - 10 to 15 years	
IW 59 **EAST COWES OUTER HARBOUR** OS Grid Reference: **SZ50162, 95528** **SZ50261, 96172** Length: **917m**	**IW 59 / 001** Unknown	**IW 59 / 001** Concrete slipway. Chain ferry infrastructure. Condition (Wall) - Fair (Grade 3) Residual Life - 10 to 15 years	Wide muddy foreshore backed by sandy beach with sections of shingle.
	IW 59 / 002 Unknown	**IW 59 / 002** Stone masonry wall. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 59 / 003 Unknown	**IW 59 / 003** Stone masonry / concrete wall. Navigation aids. Access steps. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 59 / 004 Unknown	**IW 59 / 004** Brick masonry wall fronting boat yard. Steel rail runners for boat launching cradle. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 59 / 005 Unknown	**IW 59 / 005** Concrete block work masonry wall. Timber / concrete landing stage. Access ramp to steel pontoon. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years	

Location	Defence History	Present and Residual Life	Natural Features
	IW 59 / 006 Unknown	**IW 59 / 006** Concrete pad foundation supported on concrete columns. Concrete access steps. Pontoons. Concrete wall. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 59 / 007 Unknown	**IW 59 / 007** Stone masonry wall. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 59 / 008 Unknown	**IW 59 / 008** Concrete slipway. Red funnel terminal infrastructure. Condition (Slipway) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 59 / 009 Unknown	**IW 59 / 009** Red funnel terminal infrastructure. Concrete docking stations supported on piles. Concrete / concrete block work masonry wall. Vehicle access ramp above disused concrete slipway. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 59 / 010 Unknown	**IW 59 / 010** Stone / brick masonry wall with concrete copping of crest level +3.0m Ordnance Datum Newlyn (ODN).. Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years	
	IW 59 / 011 Unknown	**IW 59 / 011** Rock revetment. Steel sheet piling with concrete capping beam. Landing stage. Access ramp to pontoons. Outfall. Condition (Revetment) - Very Good (Grade 1) Residual Life - 25 to 35 years Condition (Wall) - Very Good (Grade 1) Residual Life - 30 to 70 years	

Location	Defence History	Present and Residual Life	Natural Features
	IW 59 / 012 The Shedden Esplanade built by Direct Labour as a Scheme for the Relief of unemployment completed 1924. **IW 59 / 013** Breakwater constructed 1930.	**IW 59 / 012** Stone / brick masonry wall with stone / concrete round coping of crest level +3.3m Ordnance Datum Newlyn (ODN).. Steel sheet piled / concrete stepped landing stage. Stone set slipway. Seven concrete groynes. Remains of old concrete apron / slipway. Outfall. Condition (Wall) - Fair (Grade 3) Residual Life - 10 to 15 years Condition (Groynes) - Good (Grade 2) Residual Life - 15 to 25 years Condition (Landing Stage) - Good (Grade 2) Residual Life - 26 to 60 years **IW 59 / 013** Breakwater consisting of concrete wall, concrete braces on southern side at intervals along its length of crest level +3.1m Ordnance Datum Newlyn (ODN). Condition (Wall) - Good (Grade 2) Residual Life - 15 to 25 years	

Isle of Wight Shoreline Management Plan 2

ISLE of WIGHT COUNCIL

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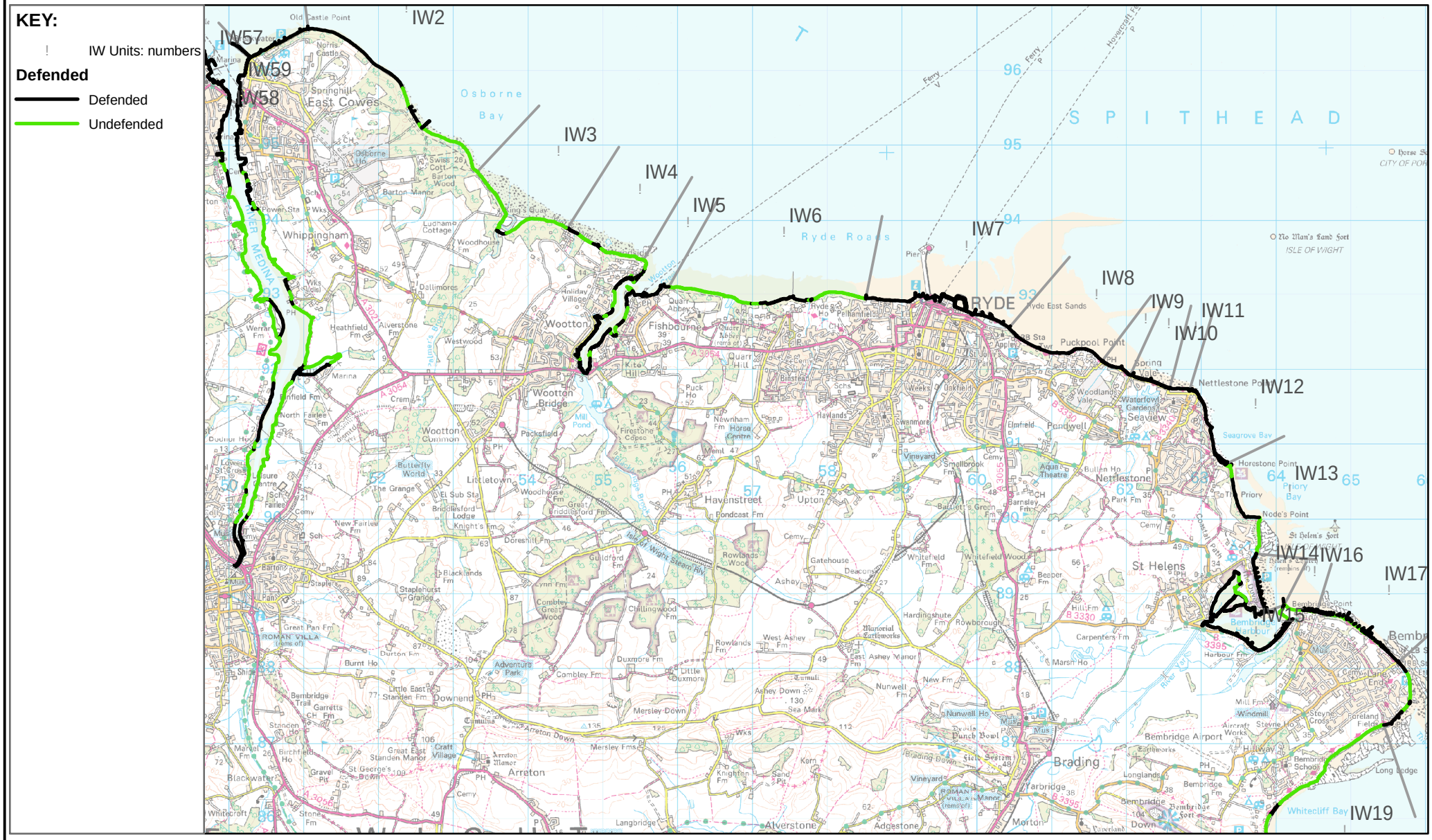

Coastal Defences: Defended or undefended coastline

Ordnance Survey

Isle of Wight Shoreline Management Plan 2

ISLE of WIGHT COUNCIL

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Coastal Defences: Defended or undefended coastline

Ordnance Survey

Isle of Wight Shoreline Management Plan 2

1:70,000 Miles

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KEY:

! IW Units: numbers

Defended

Defended

Undefended

Coastal Defences: Defended or undefended coastline

Isle of Wight Shoreline Management Plan 2

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Miles
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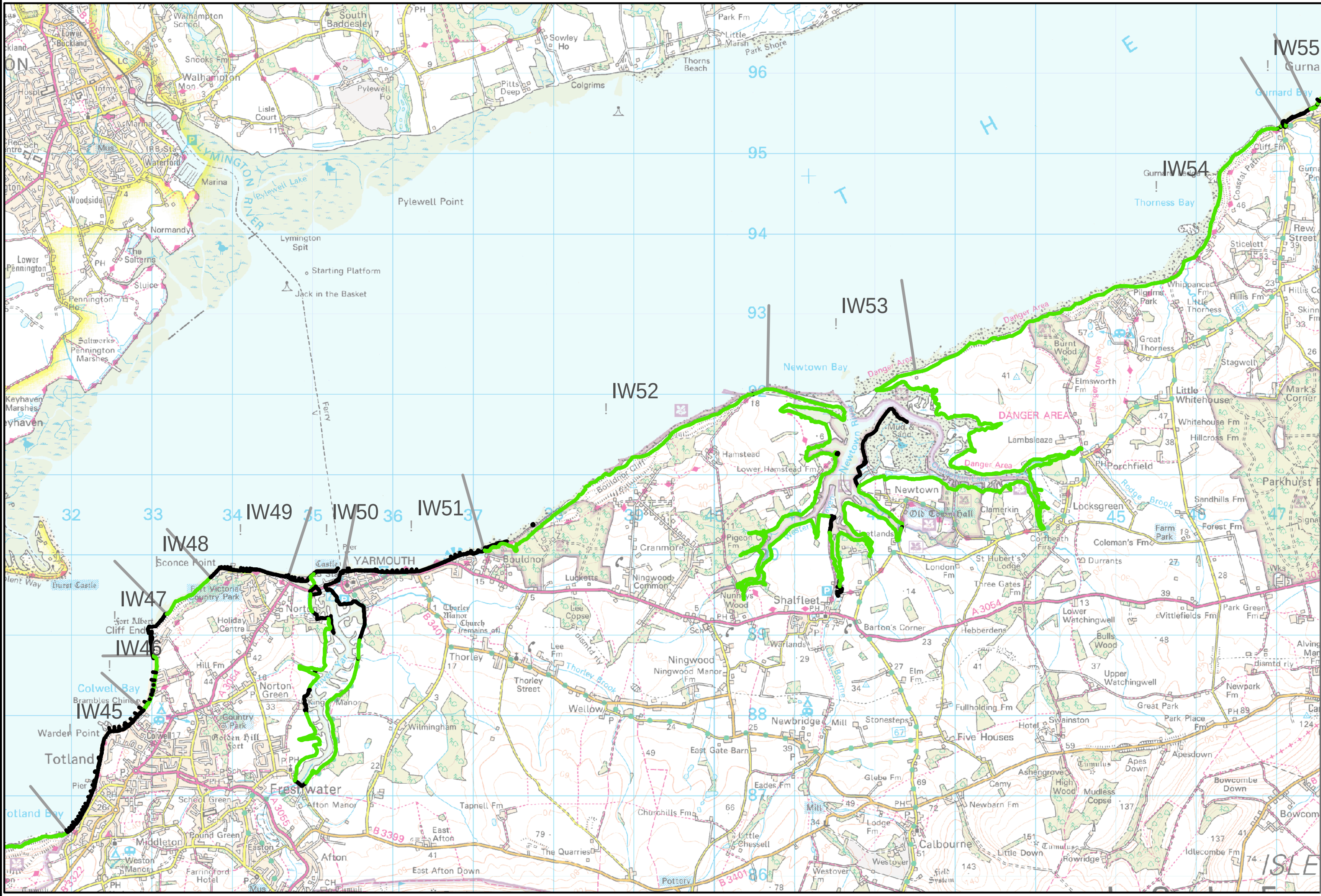

KEY:

! IW Units: numbers

Defended

Defended

Undefended

Coastal Defences: Defended or undefended coastline

Ordnance Survey

Isle of Wight Shoreline Management Plan 2

ISLE of WIGHT COUNCIL

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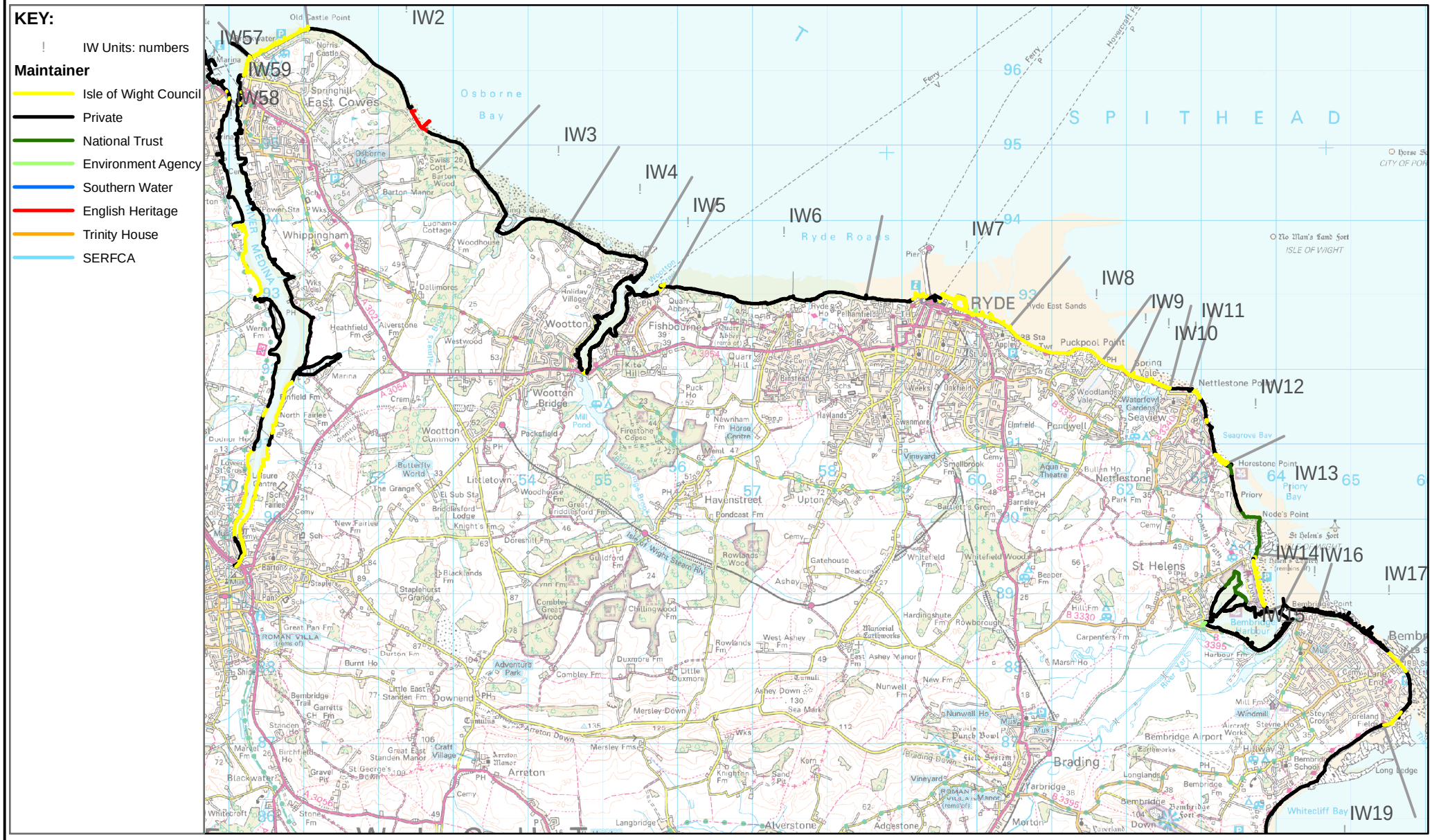

Coastal Defences: Maintainer

Ordnance Survey

Isle of Wight Shoreline Management Plan 2

ISLE of WIGHT COUNCIL

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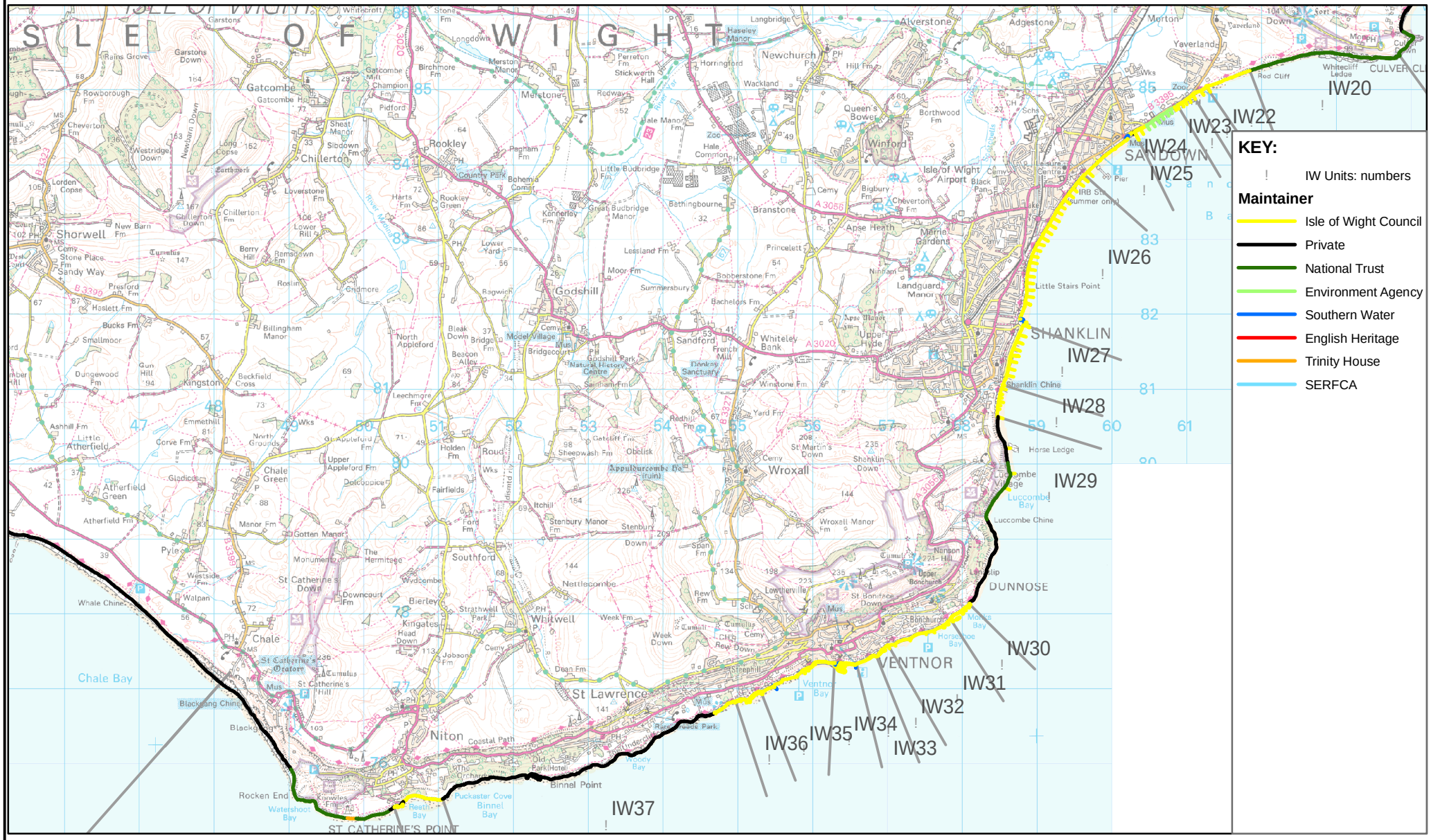

Coastal Defences: Maintainer

Ordnance Survey

Isle of Wight Shoreline Management Plan 2

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KEY:

! IW Units: numbers

Maintainer

- Isle of Wight Council
- Private
- National Trust
- Environment Agency
- Southern Water
- English Heritage
- Trinity House
- SERFCA

Coastal Defences: Maintainer

Isle of Wight Shoreline Management Plan 2

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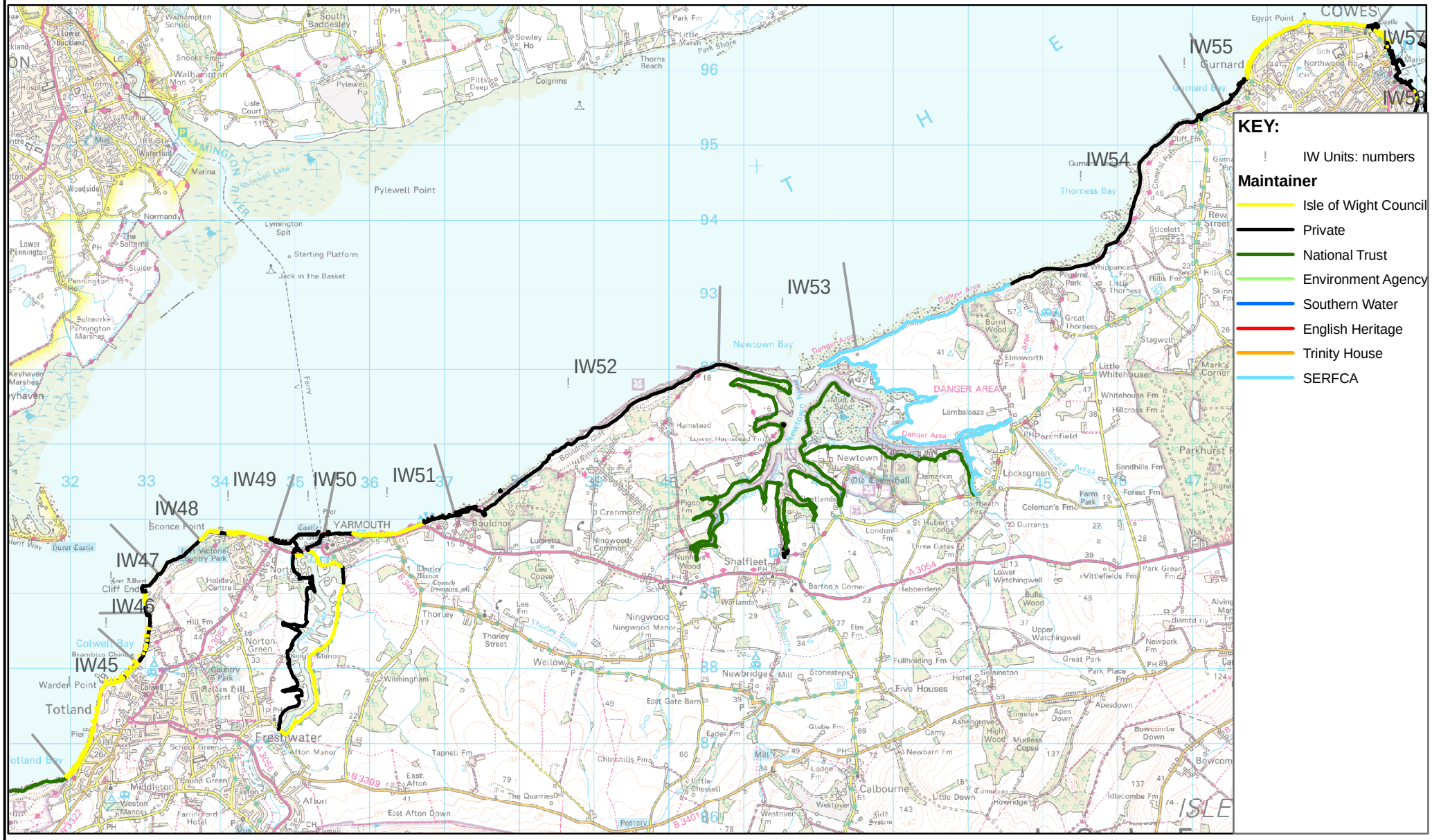

KEY:

! IW Units: numbers

Maintainer

- Isle of Wight Council
- Private
- National Trust
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- English Heritage
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- SERFCA

Coastal Defences: Maintainer

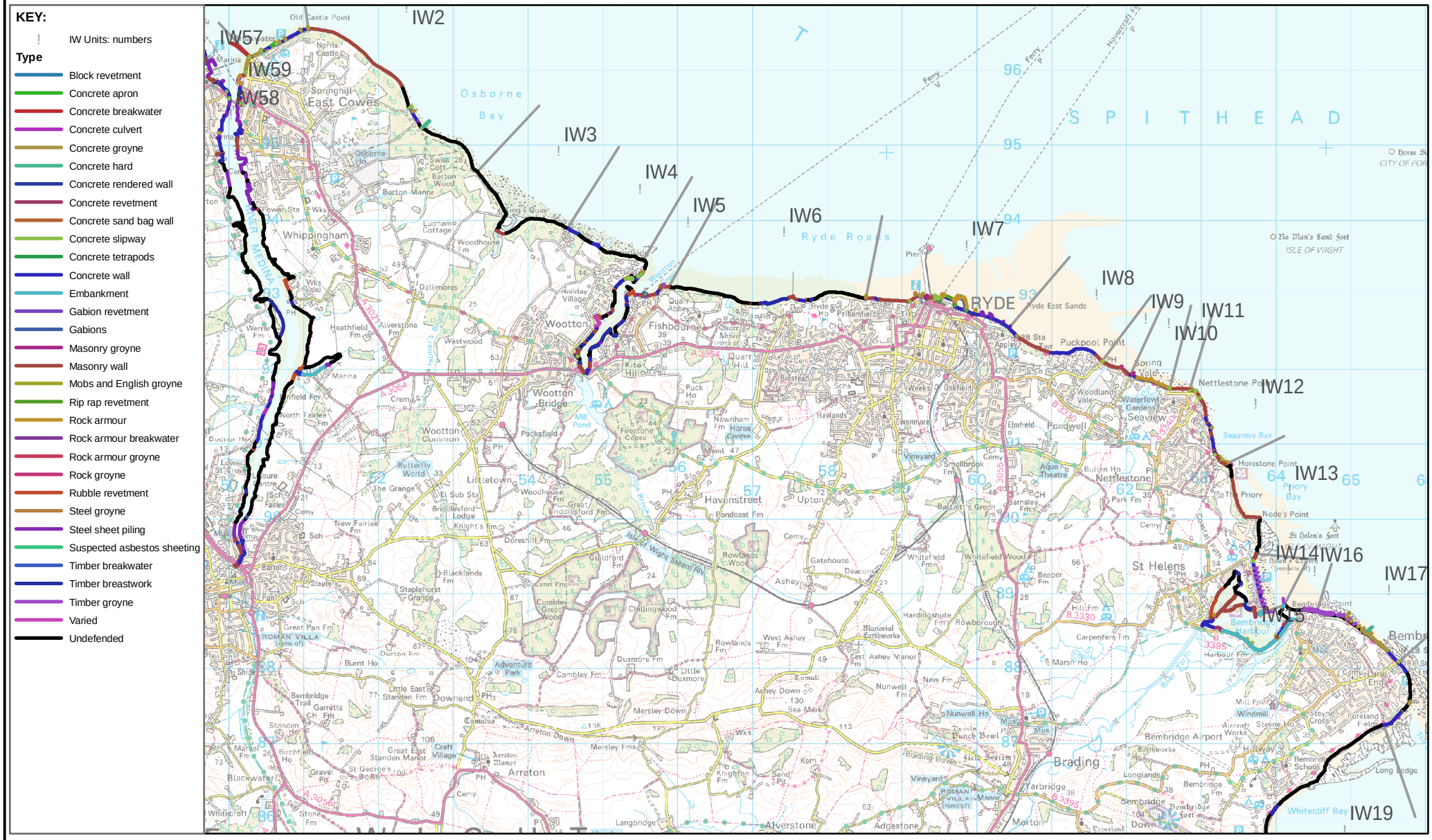
Isle of Wight Shoreline Management Plan 2

ISLE of WIGHT COUNCIL

1:70,000

Miles

0 0.5 1



Coastal Defences: Defence Type

Ordnance Survey

Isle of Wight Shoreline Management Plan 2

ISLE of WIGHT COUNCIL

1:70,000

0 0.5 1 Miles

Coastal Defences: Defence Type

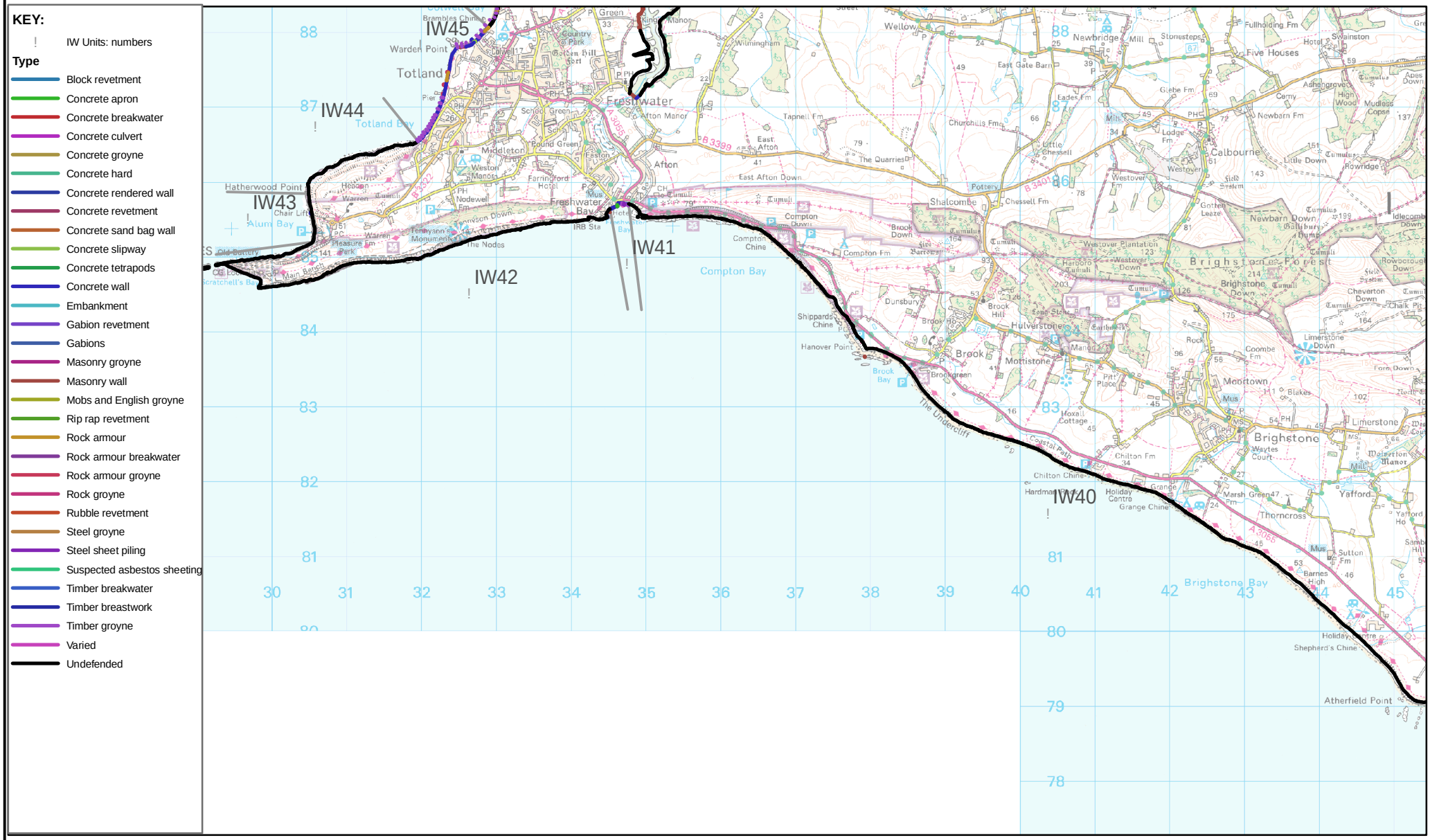
Ordnance Survey

Isle of Wight Shoreline Management Plan 2

ISLE of WIGHT COUNCIL

1:70,000 Miles

0 0.5 1



Coastal Defences: Defence Type

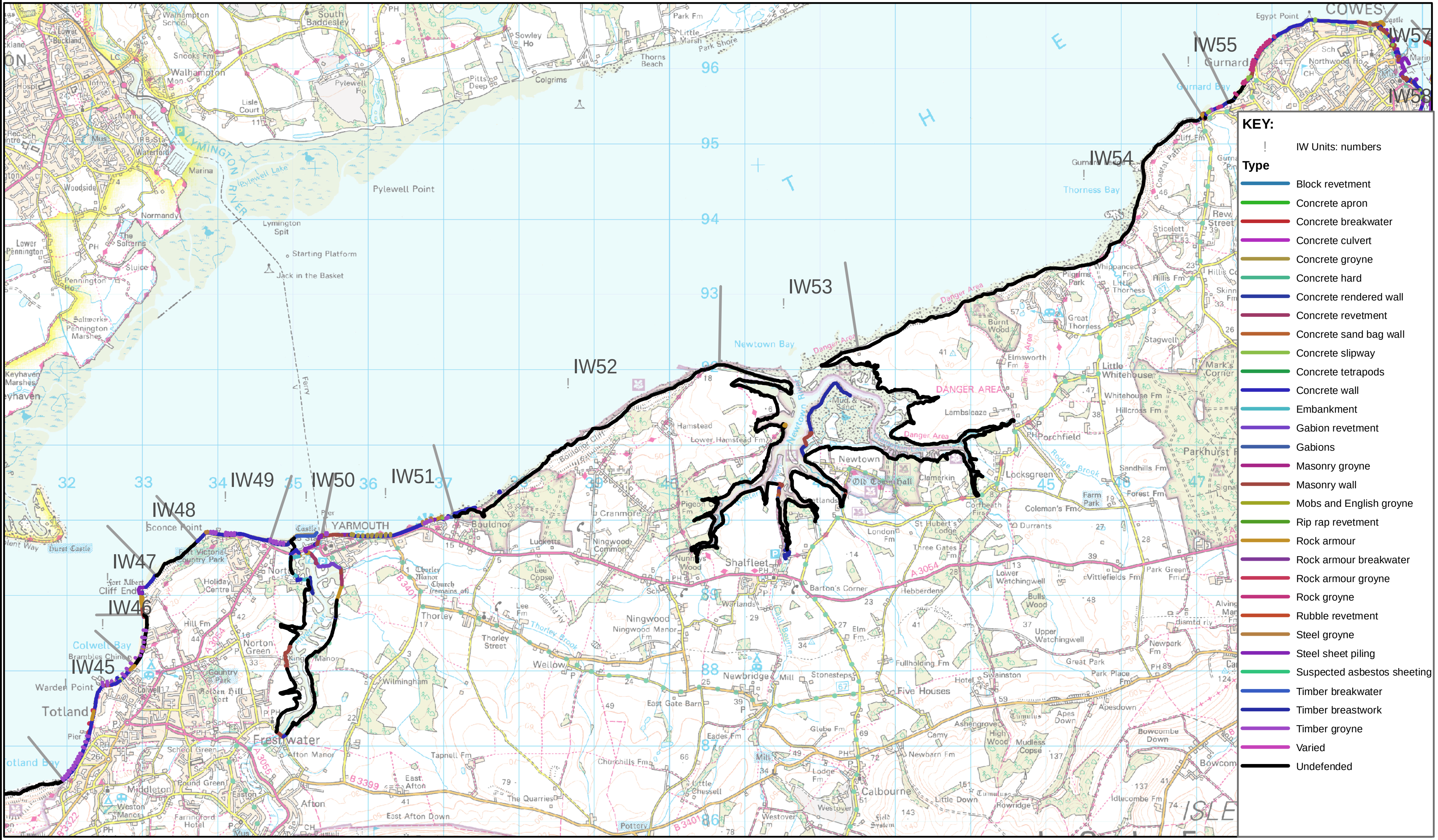
Ordnance Survey

Isle of Wight Shoreline Management Plan 2

ISLE of WIGHT COUNCIL

1:70,000

Miles
0 0.5 1



Coastal Defences: Defence Type

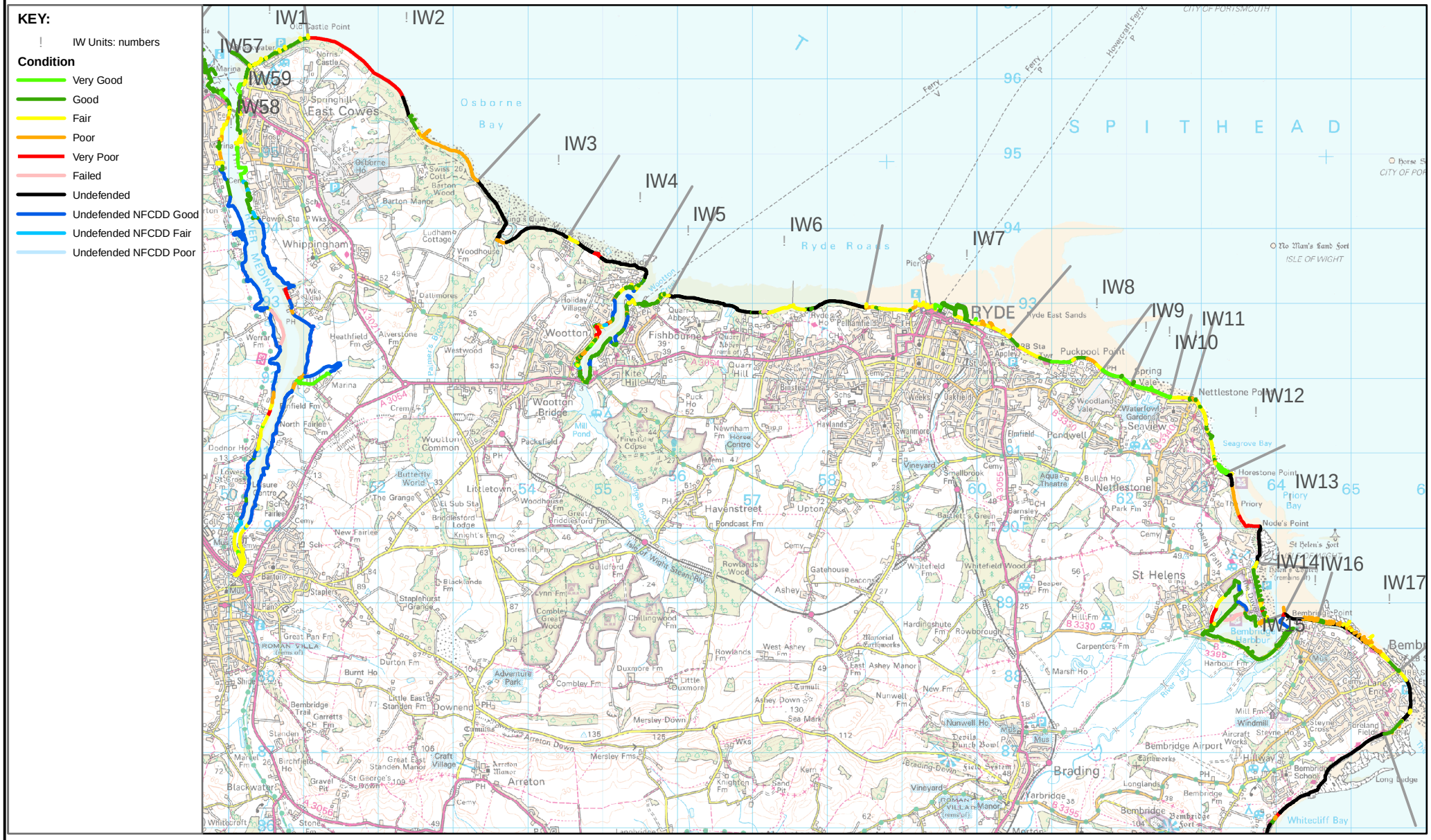
Ordnance Survey

Isle of Wight Shoreline Management Plan 2

ISLE of WIGHT COUNCIL

1:70,000 Miles

0 0.5 1



Coastal Defences: Condition

Isle of Wight Shoreline Management Plan 2

ISLE of WIGHT COUNCIL

1:70,000 Miles

0 0.5 1

Coastal Defences: Condition

Isle of Wight Shoreline Management Plan 2

1:70,000

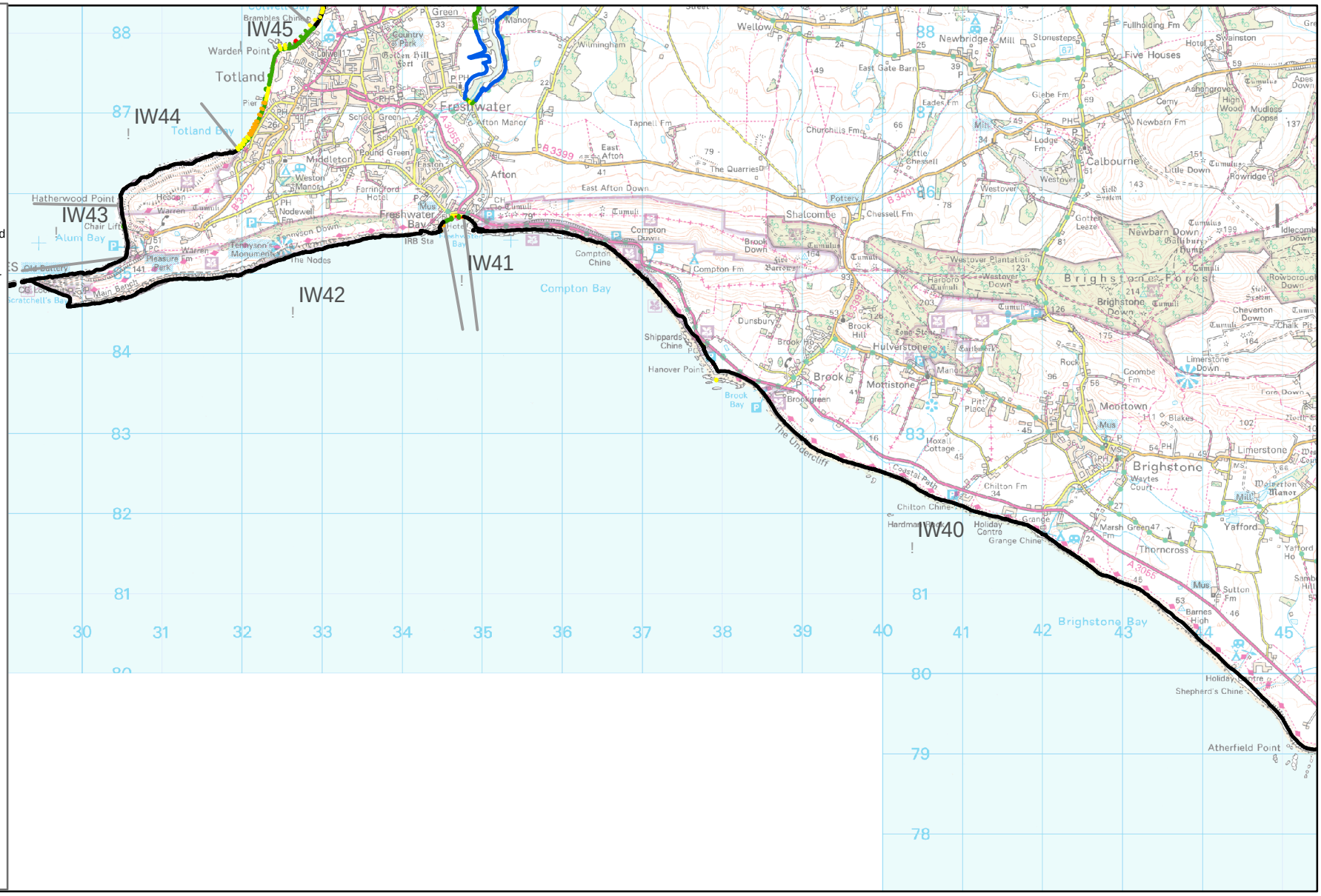
0 0.5 1 Miles

KEY:

! IW Units: numbers

Condition

- Very Good
- Good
- Fair
- Poor
- Very Poor
- Failed
- Undefended
- Undefended NFCDD Good
- Undefended NFCDD Fair
- Undefended NFCDD Poor



Coastal Defences: Condition

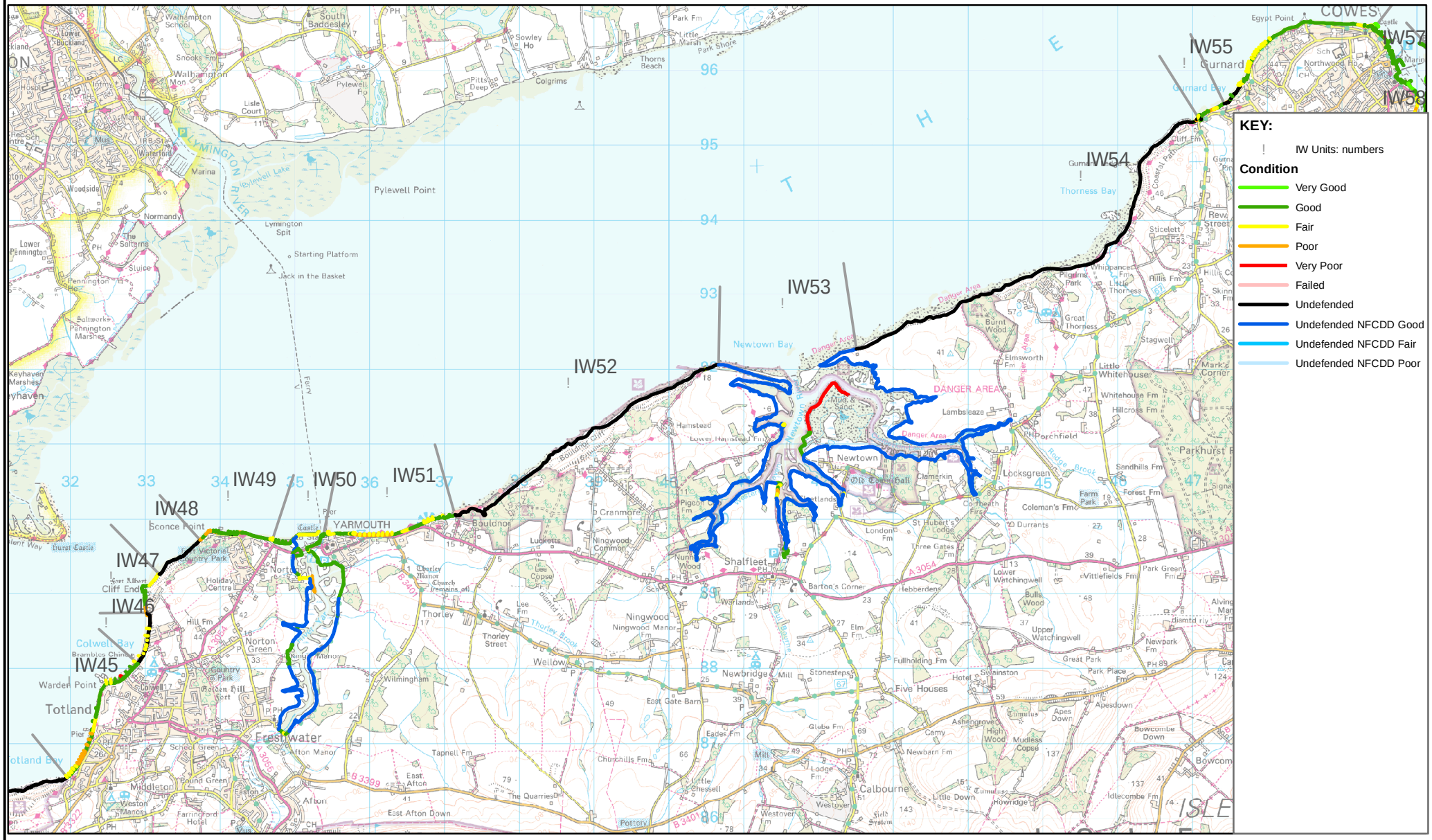
Isle of Wight Shoreline Management Plan 2

ISLE of WIGHT COUNCIL

1:70,000

Miles

0 0.5 1



Coastal Defences: Condition

Ordnance Survey

Isle of Wight Shoreline Management Plan 2

1:70,000

Miles

0 0.5 1

KEY:

! IW Units: numbers

Residual Life

- 30 to 70 years
- 26 to 60 years
- 25 to 35 years
- 18 to 26 years
- 15 to 25 years
- 10 to 25 years
- 10 to 20 years
- 10 to 15 years
- 8 to 12 years
- 6 to 10 years
- 5 to 10 years
- 5 to 7 years
- 4 to 7 years
- 2 to 7 years
- 1 to 3 years
- 0 years
- Undefended

Coastal Defences: Residual Life

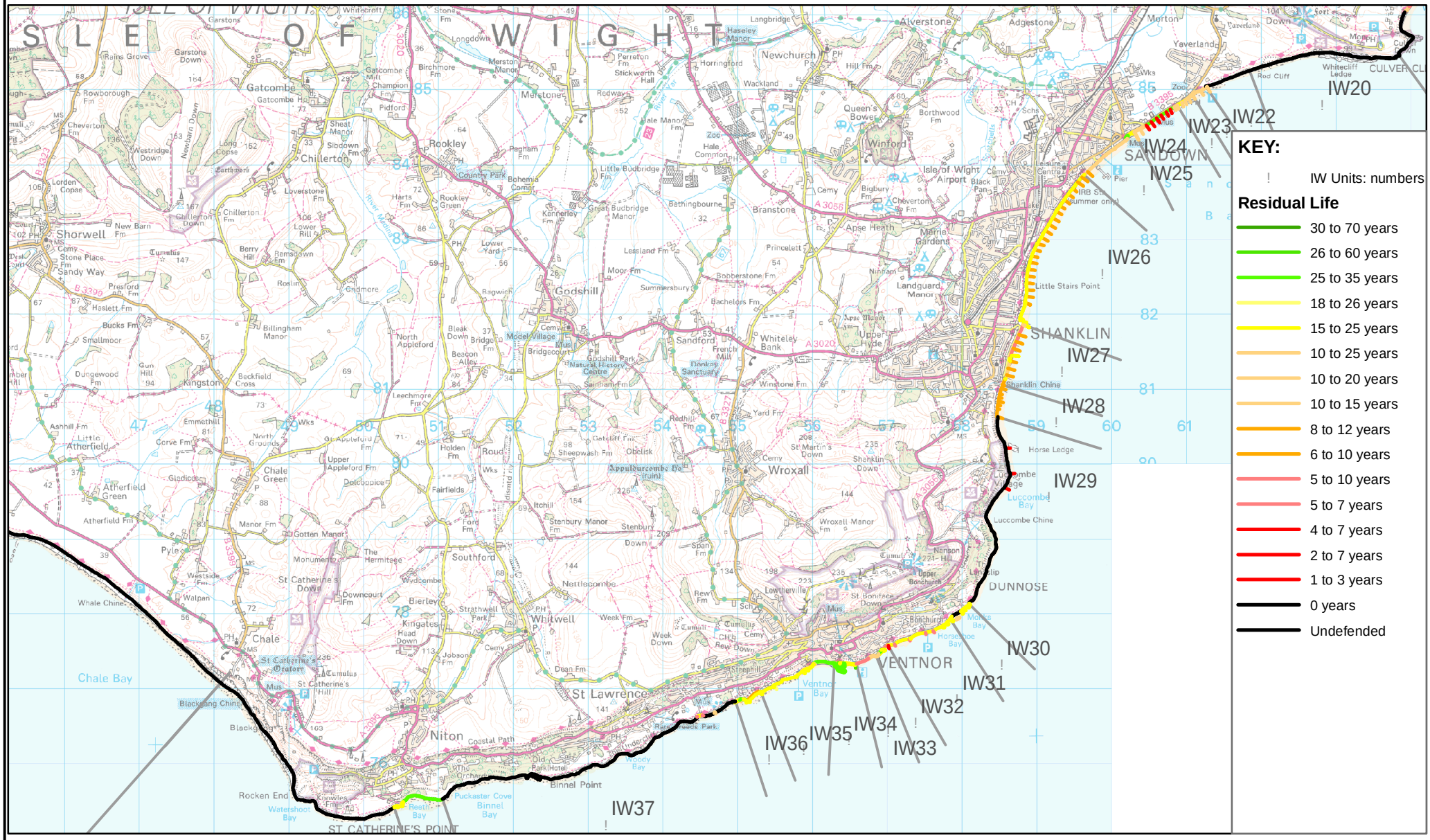
Ordnance Survey

Isle of Wight Shoreline Management Plan 2

ISLE of WIGHT COUNCIL

1:70,000 Miles

0 0.5 1



Coastal Defences: Residual Life

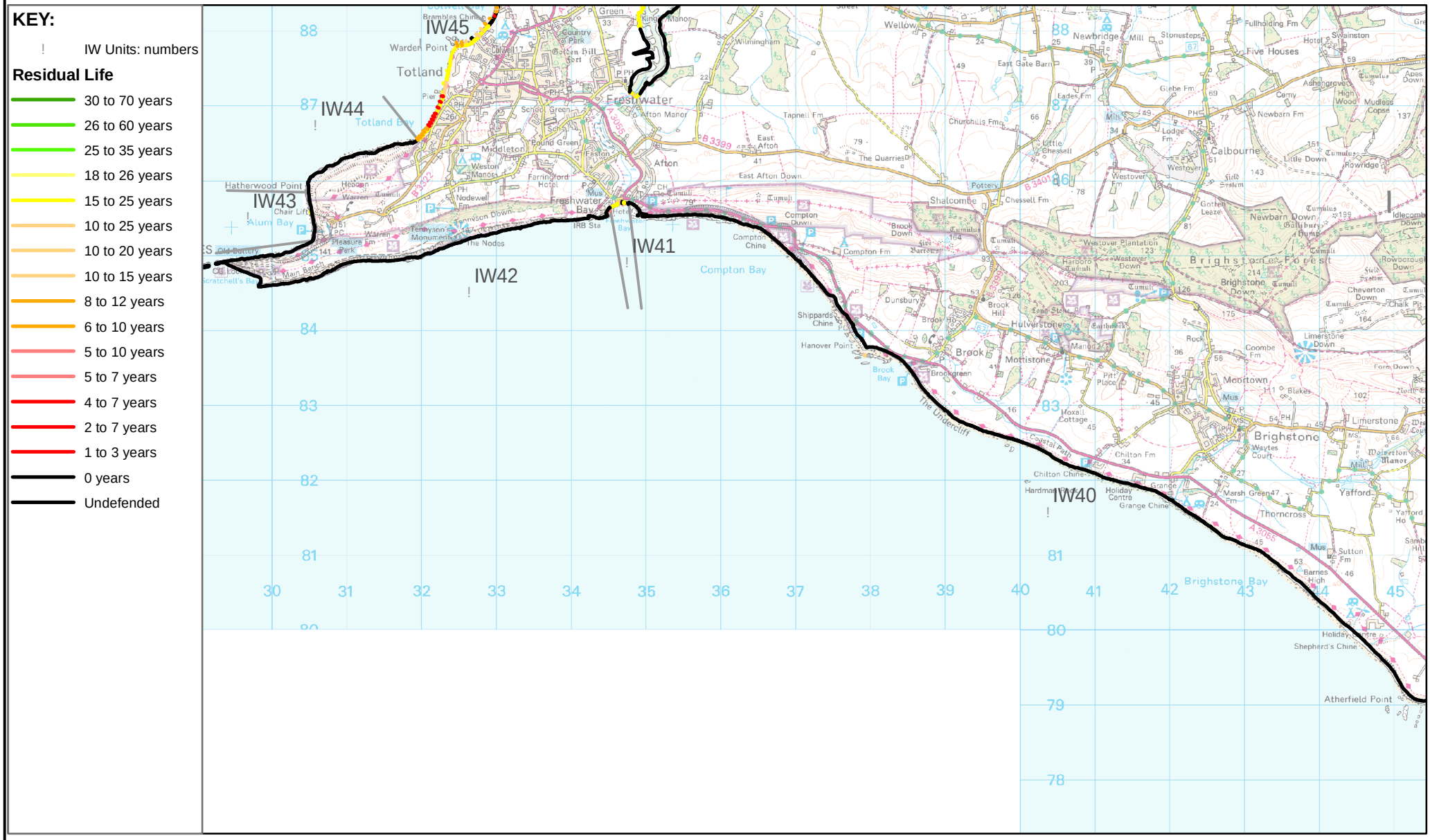
Ordnance Survey

Isle of Wight Shoreline Management Plan 2

ISLE of WIGHT COUNCIL

1:70,000 Miles

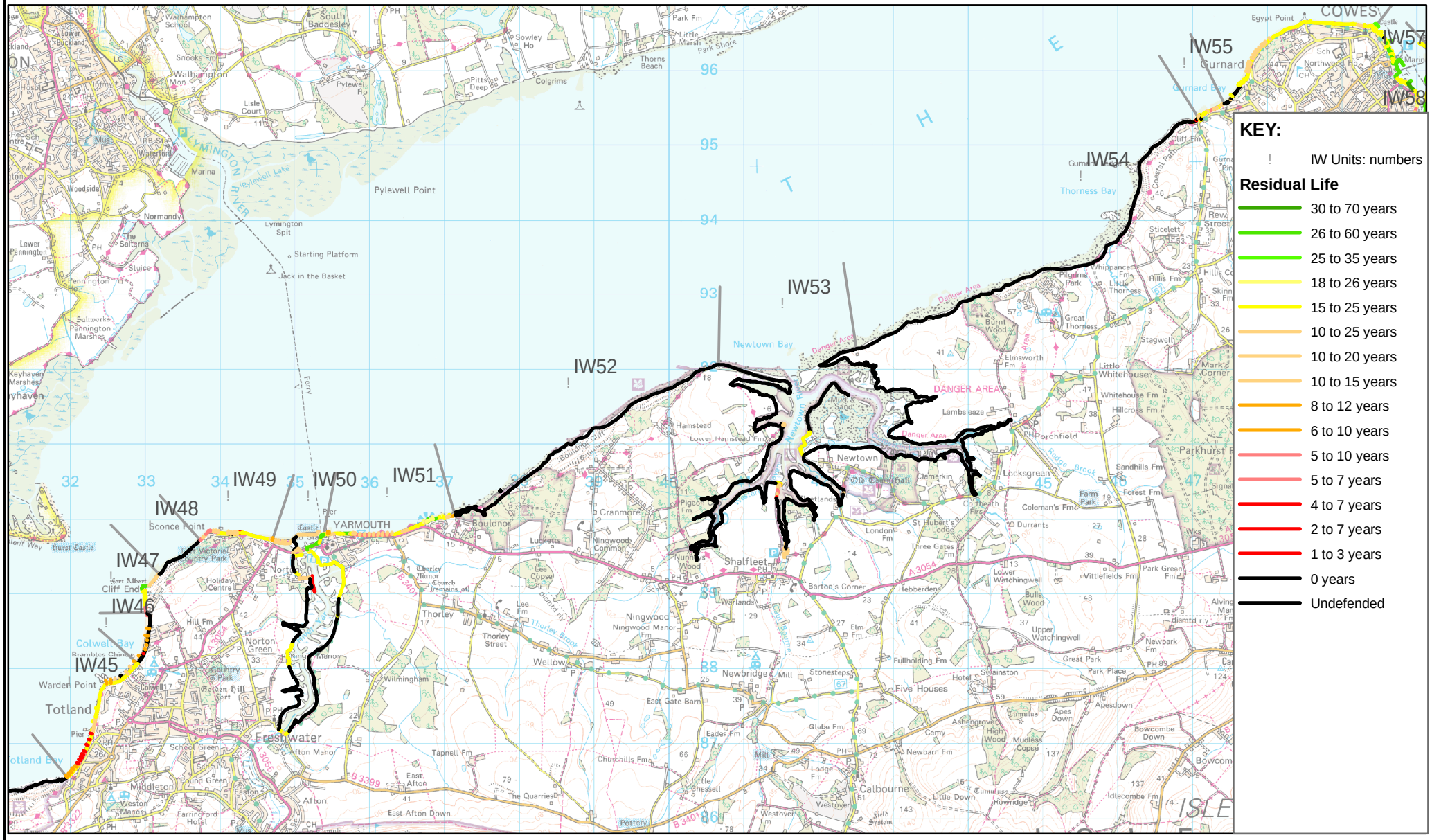
0 0.5 1



Coastal Defences: Residual Life

Isle of Wight Shoreline Management Plan 2

1:70,000 Miles
0 0.5 1



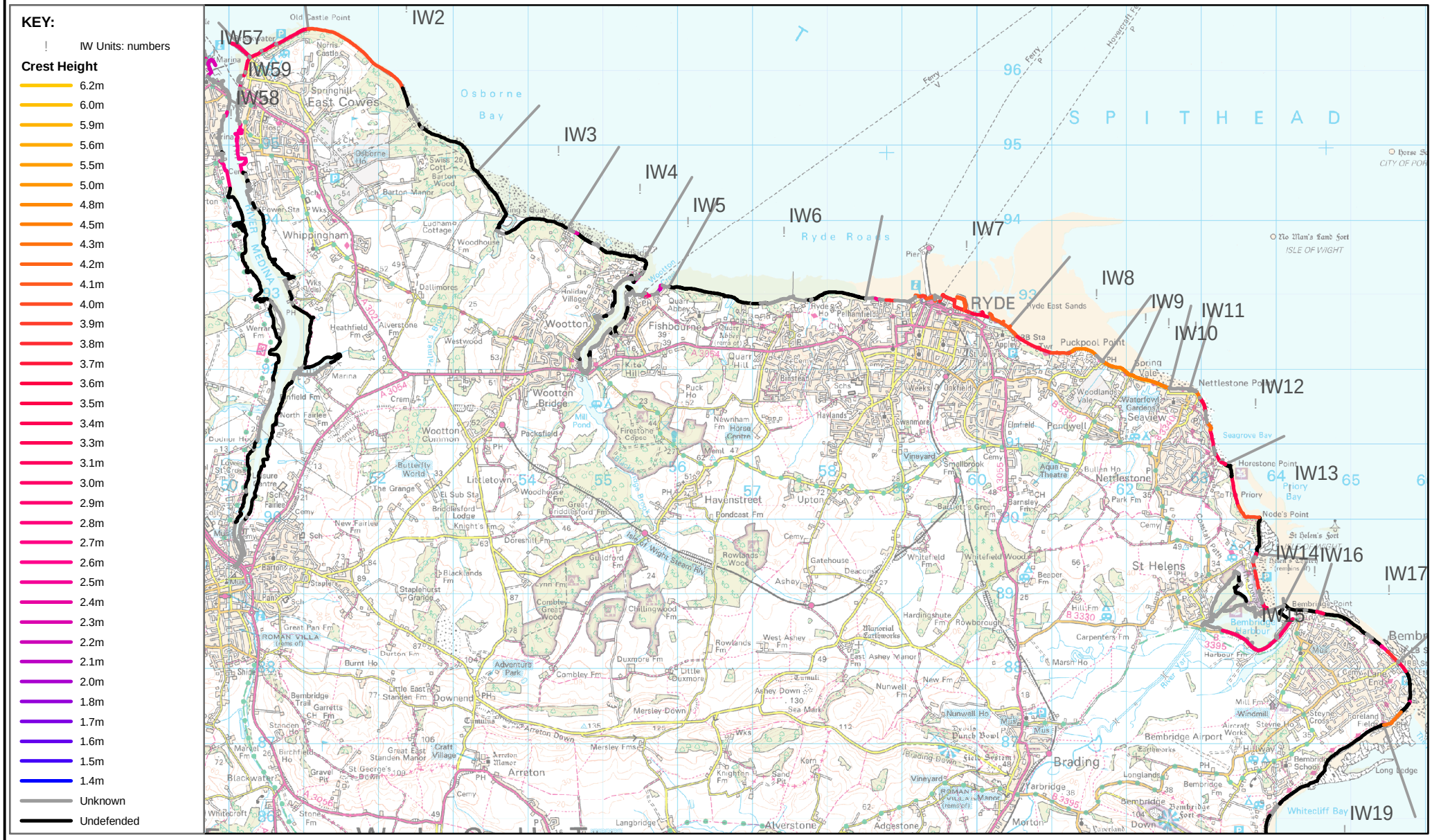
Coastal Defences: Residual Life

Isle of Wight Shoreline Management Plan 2

ISLE of WIGHT COUNCIL

1:70,000 Miles

0 0.5 1



Isle of Wight Shoreline Management Plan 2

ISLE of WIGHT COUNCIL

1:70,000

0 0.5 1 Miles

Coastal Defences: Crest Height

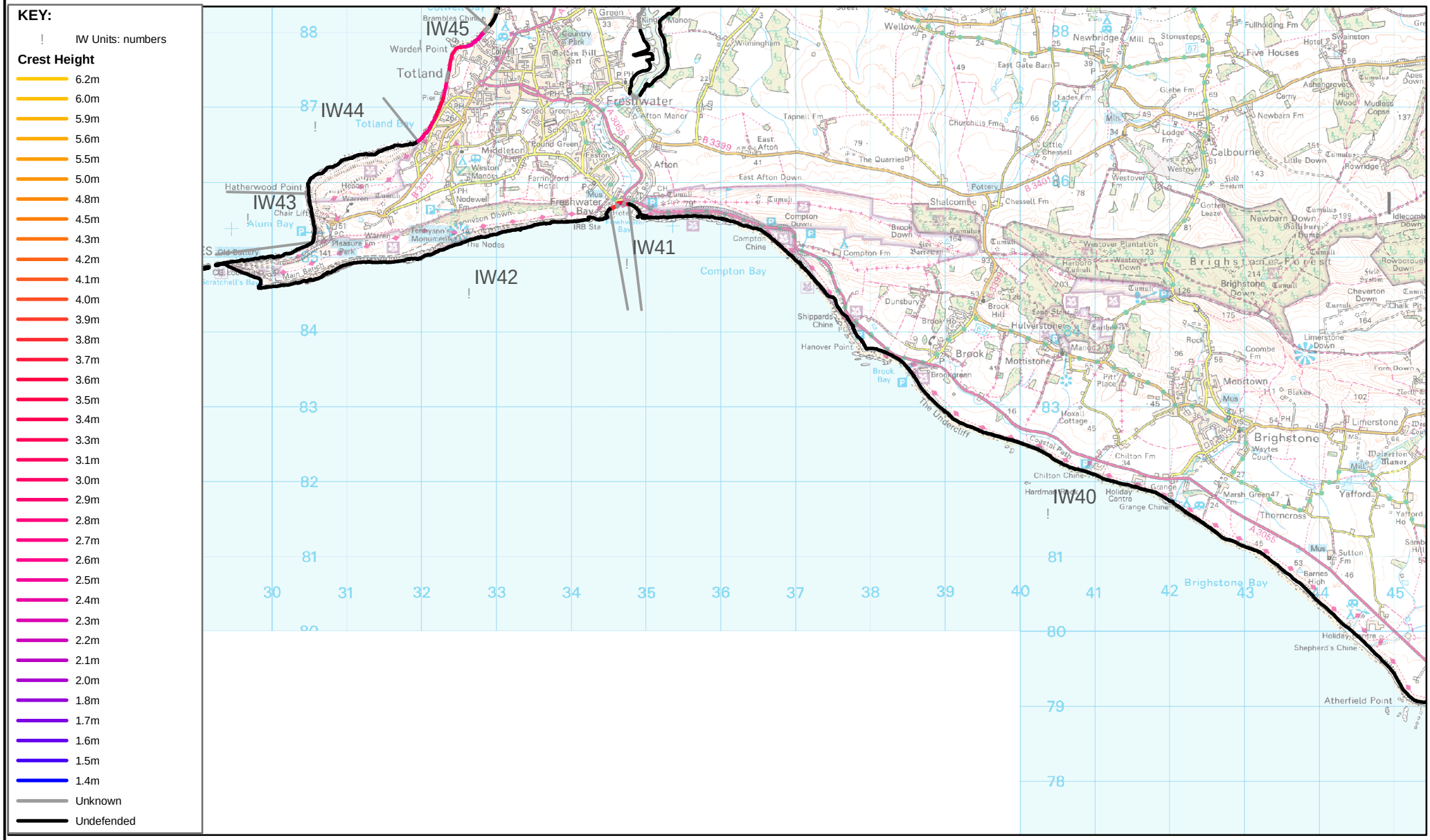
Ordnance Survey

Isle of Wight Shoreline Management Plan 2

ISLE of WIGHT COUNCIL

1:70,000

0 0.5 1 Miles



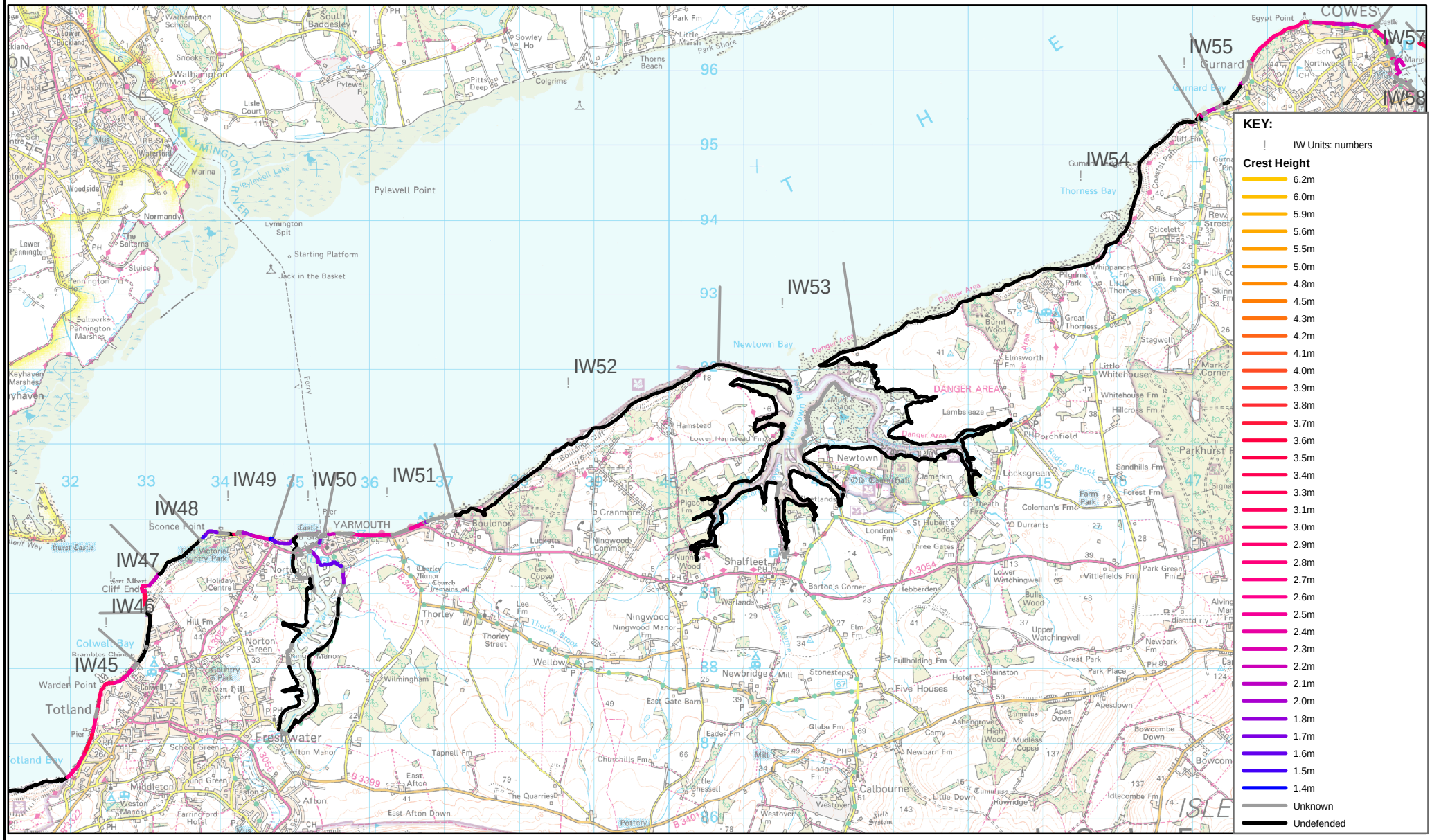
Coastal Defences: Crest Height

Ordnance Survey

Isle of Wight Shoreline Management Plan 2

1:70,000 Miles

0 0.5 1



Coastal Defences: Crest Height