



New Forest Rapid Coastal Zone Assessment

Phase I: Desk-based Assessment

Appendix B Coastal Stretch B



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COASTAL STRETCH B

MILFORD-ON-SEA TO ELMER'S COURT

Report ref.: 72200.02B

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COASTAL STRETCH B

MILFORD-ON-SEA TO ELMER'S COURT

Report ref.: 72200.03

1. INTRODUCTION

1.1. DOCUMENT PARAMETERS

- 1.1.1. This document provides an assessment of Coastal Stretch B, one of five divisions of the New Forest coastline used by Wessex Archaeology (WA) as part of Phase 1 of the New Forest Rapid Coastal Zone Assessment (NFRCZA).
- 1.1.2. This assessment will discuss the known archaeology of this coastal stretch, informed by the enhanced dataset produced as part of this project. It will focus on records within the dataset, which will be discussed in terms of chronological and functional themes, and the threats to the coastline and vulnerability of archaeological sites.
- 1.1.3. The overall character of the New Forest historic environment, and the context of this coastal stretch with regard to further sources, is discussed in the Main Report as is the archaeological potential of the marine environment seaward of the low water mark.

1.2. COASTAL STRETCH B

- 1.2.1. Coastal Stretch B runs from the edge of Milford-on-Sea in the west to Elmer's Court in the east (**Figure B.1**). It extends seaward to the low water mark and landward to a distance of 1.5 kilometres from the high water mark.
- 1.2.2. The division of coastal stretches has been based on the lines produced in the second phase of Shoreline Management Plans (SMP2) to indicate Policy Units specifically for the North Solent area. These lines were provided to WA by the Channel Coastal Observatory.

2. ASSESSMENT OF ENHANCED RECORD

2.1. CHRONOLOGICAL OVERVIEW

- 2.1.1. The database was queried with regard to chronological periods, as defined in the HBSMR, to provide an overview based on the known archaeological sites. Some overlap will be noted between chronological periods: for example, queries have been run using the terms '19th century', '20th century' and 'Modern'. It was considered necessary to run separate queries to distinguish specific sites which could be confidently dated to specific centuries.
- 2.1.2. The table below gives an indication of the number of records corresponding to the specific chronological periods. It should be noted that in some cases, a single record in the coastal stretch may be linked to more than one chronological period.

Chronological period	Records
Early Prehistoric (-500,000 to -4,000)	3
Late Prehistoric (-4,000 to 42)	1
Mesolithic (-10,000 to -4,000)	1
Neolithic (-4,000 to -2,351)	8
Bronze Age (-2,350 to -701)	9
Early Iron Age (-800 to -401)	0
Iron Age (-800 to 42)	2
Romano-British (43 to 409)	7
Early Medieval (410 to 1065)	4
Medieval (1066 to 1539)	55
Post-medieval (1540 to 1900)	438
17 th century (1601 to 1700)	14
18 th century (1701 to 1800)	55
Modern (1901 to 2050)	6
19 th century (1801 to 1900)	88
20 th century (1901 to 2000)	39
Unknown	85
Total	815
Total number of records in coastal stretch	729

2.1.3. The results of the chronological queries for this coastal stretch are depicted in **Figure B.2**.

Prehistoric to Romano-British period

- 2.1.4. The chronological queries of the enhanced dataset reveal that the database entries ascribed to the various prehistoric periods are dominated by isolated findspots, rather than coherent sites or monuments. In some cases, these findspots are described in terms of broader chronological periods such as 'Prehistoric' as there was not enough information in the record to classify them in more detail.
- 2.1.5. Records occurring along this coastal stretch which are ascribed to the broader chronological periods include a findspot of at least 12 'Early Prehistoric' handaxes and several worked flakes (**MWX60573**). These are described as being found in the parish of Lymington and Pennington, but the record contains no further information on their form or provenance.
- 2.1.6. There are two further records of Palaeolithic findspots along this coastal stretch, both of which are ascribed to the Lower Palaeolithic period. These are the findspots of an Acheulian ovate handaxe (**MWX20615**) found in Rookes Lane, Lymington in 1937 and a Lower Palaeolithic handaxe (**MWX60499**), found in a garden in Lymington Meadows, Marsh Lane.
- 2.1.7. There are no records within the dataset attributed to the Middle or Upper Palaeolithic. However, there is one record of Early Mesolithic date, a findspot of an unspecified number of flint tools of unspecified type (**MWX20789**) near the beach at Sturt Pond, close to the western edge of the coastal stretch boundary.
- 2.1.8. Two records have been attributed to the broader 'Late Prehistoric' period within this coastal stretch. This is the earliest period in which features other than isolated findspots occur in the enhanced dataset. An excavation at Lower Farm in Pennington (**MWX57321**) revealed a low level of late prehistoric activity, including a burnt mound, at a site which was otherwise of predominantly medieval date. In

addition to this, a polished stone axe (**MWX41996**) attributed to the 'Late Prehistoric' period is recorded as having been found near Keyhaven.

- 2.1.9. The Early Neolithic period is the earliest period for which there is positive evidence for human settlement in this coastal stretch. A hearth (**MWX21789**) dating to this period was found during excavation of the ramparts of the Scheduled Ancient Monument at Buckland Rings. There are two further enclosures of possible Neolithic date within this coastal stretch. Both records describe single ditch rectilinear enclosures, one situated north-east of Milford-on-Sea (**MWX59206**) and the other located at Lower Pennington (**MWX59209**).
- 2.1.10. A single Bronze Age ring ditch (**MWX61697**), with a possible entrance represented by largely ploughed out cropmarks, is located at Lower Pennington.
- 2.1.11. Records of isolated findspots from the Bronze Age also exist along this coastal stretch. A hoard of Bronze Age axes (**MWX39881**) is described as having been found at Walhampton in 1779. In addition to this, a bowl of Late Bronze Age date (**MWX42538**) was recovered from Lymington Marshes in 1977.
- 2.1.12. Two records of uncertain date may possibly date to the Bronze Age. These comprise a small mound of raised land on the coast at Hurst Spit (**MWX61696**) and a group of sinuous ditches thought to be the remains of waterways at Keyhaven Marshes (**MWX61675**). Neither of these features has been positively dated, although the Bronze Age is thought to be the earliest period from which they could potentially date. These features were identified from aerial photographs and very little information is included in the records. In fact, there is some uncertainty as to whether these are man-made or natural features.
- 2.1.13. Settlement and defensive activity are evident in this coastal stretch during the Iron Age. The hillfort at Buckland Rings (**MWX61628**) is probably the most well known Iron Age site along this stretch of coast. It is one of the two Scheduled Ancient Monuments within Coastal Stretch B. Further evidence for defended settlement exists at Ampress Camp (**MWX21841**) and in the form of a single bank curvilinear enclosure at Warborne (**MWX61660**).
- 2.1.14. Additional evidence of late prehistoric settlement during this period is recorded from excavations at Efford Landfill site (**MWX58160**). These excavations revealed eleven roundhouses and a number of circular pits of contemporary date. Based on pottery analysis, this site was dated to the Late Iron Age or Early Romano-British period. Interestingly, evidence of seasonal salt production was found at this site, which may be the earliest evidence for what was later to become an important industry along this stretch of coast in the medieval and post-medieval periods.
- 2.1.15. Whilst the settlement described above may date to the Romano-British period, the remaining records ascribed to this period within this coastal stretch are limited to isolated findspots. These comprise sherds of Romano-British pottery (**MWX21834**) found during the late 19th century and a coin of Antoninus Pius (**MWX21884**), both found in Lymington town centre, the findspot of a necklace (**MWX21882**) of possible Romano-British date recovered from Lymington River and two carved stone heads (**MWX41994**), thought to have been retrieved from Lower Farm, Pennington.

Early Medieval to Post-medieval

- 2.1.16. The only evidence for the Early Medieval period in this coastal stretch recorded within the dataset consists of a pottery findspot (**MWX21835**) during building works in Captain's Row in Lymington, and two gully-like features (**MWX34526**) excavated

on Lymington High Street which were thought to pre-date the medieval material on the site.

- 2.1.17. Medieval records in the dataset reflect the development of settlements and associated infrastructure in this coastal stretch. In addition, several records of placenames occur in the dataset. Although placenames are not necessarily connected with any specific extant archaeological remains, they serve to emphasise the medieval origins of current settlements such as Keyhaven (**MWX41081**), Lymington (**MWX28445**), Pennington (**MWX60479**), Walhampton (**MWX28443**) and Warborne (**MWX60484**).
- 2.1.18. Archaeological remains for medieval settlement come from excavations (**MWX41967**) at Manor Farm in Lower Pennington, where a number of domestic features including hearths were found in association with ditches, gullies, post holes and medieval artefactual material. In addition to this, pits associated with medieval material have been identified during watching briefs at Cannon Court, Lymington (**MWX57046**) and during watching briefs and excavations at Lymington High Street (**MWX34542** and **MWX55470**).
- 2.1.19. Further settlement activity of possible medieval date comprises ditches identified from aerial photographs. Ditches visible as cropmarks have been identified at Portmore (**MWX61662**) and Keyhaven (**MWX59919**). They are thought to be of medieval or later date.
- 2.1.20. The growth of settlement activity in this coastal stretch during the medieval period is further reflected by additional sites which would have formed part of the infrastructure that supported such settlements and communities, including sites related to food production, defence, transport and religion. The enhanced dataset records a number of sites of medieval churches, including one extant church which retains elements of its medieval origins. This is the Church of St. Thomas in Lymington (**MWX1027**). This church dates from the 13th century, although it was largely rebuilt in the 18th century and restored several times in the 19th and 20th centuries. It is a Grade II* listed building.
- 2.1.21. Ditches and boundary walls of medieval date are recorded in the dataset. These would have served to delineate property ownership in growing settlements or, particularly in the case of stone built boundary walls, formed part of the defences of a settlement or individual property. Evidence for medieval boundary ditches (**MWX57309** and **MWX57310**) was found during a watching brief at Efford Landfill and archaeological remains (**MWX56846**) thought to be part of the medieval borough wall of Lymington were excavated by the Avon Valley Archaeological Society in 1996 at Grove Gardens, Lymington.
- 2.1.22. Division of the landscape also occurred on a smaller scale, associated with food production and the growth of settlements. There is evidence for the establishment of burgage plots on Lymington High Street in the 12th and 13th centuries. The orientation of medieval ditches (**MWX58144** and **MWX42540**) found during excavations here were observed to respect the layout of the High Street and are thought to have delineated these plots, and were found in association with a quantity of medieval pottery.
- 2.1.23. There is also evidence for larger scale food production and agriculture in the coastal stretch during the medieval period. Widespread evidence for land enclosures including fields and droeways were uncovered during excavations at Lower Farm in Pennington (**MWX57321**). In addition to this there are a number of records of

possible medieval date related to agricultural practices. These comprise evidence of ridge and furrow cultivation at Normandy (**MWX61687**), field systems at Woodside (**MWX61692** and **MWX61693**) and drainage systems at Pennington Marshes (**MWX61674**) and Iley Lane (**MWX61694**). These are described as being of medieval or later date.

- 2.1.24. In addition to agriculture, industrial exploitation of the coastal landscape becomes more apparent during the medieval period. The most obvious reflection of this is in the large numbers of salterns and sites associated with the salt industry in this coastal stretch. The production of salt along this coastline is documented from the Romano-British period but may have earlier origins and it became a major industry in this area during the medieval and post-medieval periods. The sites associated with this industry will be discussed in more detail in the thematic assessment related to coastal trade and industry in **Section 2.2** below.
- 2.1.25. The majority of medieval records for this coastal stretch describe a large number structures which are still occupied, such as houses or cottages, which are of medieval origin or contain known medieval elements.
- 2.1.26. Surviving occupied structures also account for the majority of post-medieval records in this area. These are predominantly houses and other dwellings, but also include a church, hotels and public houses which are too numerous to mention in detail.
- 2.1.27. In addition to this there are a large number of records reflecting increased maritime activity along this coastal stretch during the post-medieval period. The majority of these records are connected with the continued exploitation of the coastal zone for the production of salt. They include maritime structures such as hardes, docks and harbours which formed part of the infrastructure supporting this industry. They will be discussed in further detail with reference to the salt industry in **Section 2.2** below.
- 2.1.28. An increased level of maritime activity would have led to an increased density of marine traffic in the area and may have influenced the number of wrecks in the area. Wrecks existing in the marine zone below the low water mark have been discussed along with maritime archaeology in the Main Report. There is one record of a post-medieval wreck along the shoreline during the post-medieval period.
- 2.1.29. This record originated from the Hampshire County Council dataset, and is almost certainly the record of a documented loss related to a named location rather than the actual position of a known wreck. As discussed in the Main Report, where records were specifically stated as being documented losses from named locations, they were not included in the enhanced dataset. However this information, although included in the records obtained from the NMR and Isle of Wight HER, was not included in the Hampshire County Council Records. It was therefore not possible to separate documented losses from known wrecks within that dataset. The record concerned (**MWX27758**) describes the loss of the *Hind*, a 6th rate warship lost in 1709 near Hurst Castle.
- 2.1.30. Hurst Castle, an artillery castle built by Henry VIII, is the most prominent post-medieval structure in this coastal stretch (**MWX22376**). The castle has a long history, having played a part in some of the most significant conflicts of the post-medieval period. The castle was initially built as part of Henry VIII's network of coastal defences to protect the Solent against French and Spanish invasion. During the English Civil War it was occupied by parliamentary forces and Charles I was held prisoner there. The castle was refortified during the Napoleonic wars and

during further hostilities between Britain and France in the later 19th century. This is one of two Scheduled Ancient Monuments in this coastal stretch.

Modern

- 2.1.31. The majority of 19th and 20th century records within the dataset are connected with warfare and defence. These include pillboxes, air raid shelters, anti-aircraft batteries and other defensive features and will be discussed in more detail in the section on functional themes (**Section 2.2**) below.
- 2.1.32. A number of modern wrecks are recorded in the dataset within this coastal stretch. These are records of wrecks which were stranded on the shoreline; however in the majority of cases there was insufficient information in the datasets from which they originated to determine whether the remains of these vessels are still extant.
- 2.1.33. Eleven of these wrecks are recorded in the same location, and described as having been stranded or lost at or near Hurst Castle. These records originated from the Hampshire County Council dataset, and given the fact that they are all located at the same position, it is likely that they represent records of documented losses from named locations rather than actual positions of known wrecks.
- 2.1.34. In addition, there is some likelihood that duplication exists within these records because of the manner in which these losses were originally recorded. Two records describe a vessel named *Ann and Eliza*, lost in 1859. One is described as a British vessel stranded on Hurst Castle beach (**MWX27750**) and the other is described as an English merchantman lost near Hurst Castle (**MWX27756**). Given the similarity in name and date of loss, these two records almost certainly refer to the same vessel and represent two separate accounts of the same loss, albeit with slightly different details.
- 2.1.35. The same may be true of the loss of the *Good Intent*, recorded as a British merchantman, stranded near Hurst Castle in 1814 (**MWX27747**) and another record of a *Good Intent* lost in the same location in 1826 (**MWX27748**). These could represent separate instances of loss, but the similarity in the name and location of the loss may indicate that this was recorded twice, with different or erroneous dates of loss. This uncertainty regarding duplication of records highlights the difficulty in using documented losses to indicate the potential presence of archaeological sites.
- 2.1.36. The remaining seven records of modern wrecks in the Hampshire County Council dataset are: the British merchantman *Friends* (**MWX27749**), lost in 1853; the British schooner *Archibald* (**MWX27753**), lost in 1880; the vessel *Hope* (**MWX27754**), lost in 1865; the schooner *Jessie* (**MWX27755**), lost in 1867; the English merchantman *Comet* (**MWX27757**), lost in 1888 and the fishing smacks *Jemima* (**MWX27751**) and *Three Brothers* (**MWX27752**), both lost in 1876.
- 2.1.37. One additional modern wreck (**MWX55608**) is recorded along this coastal stretch, which was identified from aerial photography. This record can be considered to represent a known wreck; however there is insufficient information to determine whether any remains are still extant. It is described simply as a wreck of 19th or 20th century date.
- 2.1.38. Wrecks are discussed in further detail in **Section 6.3** of the Main Report.

2.2. THEMATIC OVERVIEW

2.2.1. The assessment of the dataset with reference to functional themes drew on the higher groupings in the monument thesauri to create queries based on:

- Transport and communications;
- Coastal trade and industry;
- Warfare, defences and military installations.

2.2.2. In some cases the use of these broader groupings in the monument thesauri was found to result in records being attributed to a particular theme that was not necessarily reflective of the true function of the monument described. In addition to this, as the queries drew on the higher groupings in the monument thesauri, this limited the scope for monuments to be included in a given theme.

2.2.3. The table below gives an indication of the number of records that were found to correspond to the functional themes specified. It should be noted that in some cases, a single record in the coastal stretch may be linked to more than one functional theme.

Theme	Records
Coastal trade and industry	205
Transport and communications	44
Warfare, defence and military installations	17
Total number of records in coastal stretch	729

2.2.4. The results of the thematic queries for this coastal stretch are illustrated in **Figure B.3**.

Coastal trade and industry

2.2.5. Coastal trade and industry was found to be the dominant theme in terms of the number of corresponding records, when querying the dataset for this coastal stretch.

2.2.6. Records identified within this theme are mainly concentrated on the town of Lymington and there is a further concentration along the coastal zone, running from Keyhaven in the west to Pennington Marshes in the east.

2.2.7. The dense concentration of records in Lymington town reflects the continued use of post-medieval buildings in the area. As the broad term 'Commercial' is linked to the theme of Coastal trade and industry, this query on this functional theme identified six public houses, four restaurants and 102 shops, all of which are located within Lymington.

2.2.8. Apart from the modern commercial activity identified in the query, the principal industry in this area was found to be salt production. The concentration of records between Keyhaven and Pennington Marshes reflects the exploitation of the coastal zone for this purpose from at least the Romano-British period and possibly earlier.

2.2.9. Evidence for medieval salt-workings exists at Iley Dock (**MWX57395**), and a saltern (**MWX57663**) which exists buried under the sand at Hurst Spit is described as having last been exposed in 1989. Single ditch rectilinear enclosures identified at Keyhaven (**MWX59200** and **MWX59202**) are thought to represent the remains of salterns which may date to the medieval period or later.

- 2.2.10. A number of records exist in the dataset for post-medieval salterns identified from a study of first edition Ordnance Survey mapping. These include saltern sites at Lymington (**MWX61420**), Kings Saltern near Lymington River (**MWX61436**), and Little Normandy Saltern (**MWX61437**). In addition to this a number of buildings were identified from these maps associated with The Salterns, near Oxey Marsh (**MWX61546 to MWX 61560 and MWX61562**).
- 2.2.11. The above records are described as being identified from Ordnance Survey mapping, however there is insufficient information within those records to determine, at this stage, whether they represent features which are still extant. The following post-medieval salterns are also described as identified from first edition Ordnance Survey mapping but have been seen on aerial photography, and therefore some or all of these sites may still be extant. These comprise salterns at Pennington Marshes (**MWX61430, MWX61433 and MWX61565**), Oxey Marsh (**MWX61435**), Woodside (**MWX61431**), Sadler's Farm (**MWX61568**) and Normandy (**MWX61561**).
- 2.2.12. As can be expected, there are a number of maritime features in the dataset which have been included in this query. These records relate to the infrastructure which may have serviced the salt-working industry. These records include the site of Inman's boat yard and shipbuilders (**MWX42323**) on the south-east of Lymington and its associated ropewalk (**MWX42143**), the site of Oxey Dock (**MWX55131**), now buried beneath the sea wall, and the site of the post-medieval harbour at Keyhaven (**MWX42082**).
- 2.2.13. Additional sites of coastal trade and industry include a brewery (**MWX30397**) and a pumphouse and horsewheel at Pennington (**MWX30132**).
- 2.2.14. There is a concentration of records related to coastal trade and industry at Hurst Spit. These sites are those of the post-medieval and modern wrecks described in **Section 2.1** above. Due to their classification within the monument thesauri, wrecks can be seen to be representative of the functional themes related to both Coastal trade and industry and Transport and communications. As such these will be discussed further with reference to transport and communications below.

Warfare, Defence and Military Installations

- 2.2.15. Records associated with warfare, defence and military installations are heavily concentrated at Hurst Castle and Hurst Spit, and are associated with the continuing fortification of the castle and surrounding area from the post-medieval period to the present.
- 2.2.16. Military sites associated with the castle include the site of the Henrician castle itself (**MWX22376**), a battery built on the west of the castle in 1852 (**MWX42227**), two large batteries added to the east of the castle in the 1860s (**MWX42224**), a late 19th century gun emplacement added in 1893 (**MWX42217**) and a 20th century anti-aircraft battery (**MWX37841**). There is also a 20th century tank trap (**MWX62512**) and two pillboxes at Hurst Spit, to the north and west of the castle (**MWX60507 and MWX 61695**).
- 2.2.17. There is a slight concentration of military sites around Lymington. This includes the earliest site to be considered under this theme which is the Iron Age multivallate hillfort at Ampress Camp (**MWX21841**). The other military sites at Lymington comprise an air raid shelter (**MWX 61658**), a military building (**MWX 61659**) and a pillbox (**MWX26550**).

- 2.2.18. In addition to this there is a further anti-aircraft battery at Keyhaven (**MWX37537**), bombing decoys comprising imitations of street lighting near Pennington Marshes (**MWX38286** and **MWX61698**) and a firing range on the foreshore off Keyhaven (**MWX42142**).

Transport and Communications

- 2.2.19. Records identified within this theme are, for the most part, distributed evenly along this coastal stretch with concentrations at Lymington and at Hurst Spit. Unsurprisingly, records are dominated by maritime features, including wrecks, boat yards, docks and harbours.
- 2.2.20. The concentration at Hurst Spit is mainly due to the presence of 11 wrecks at this location. As previously noted wrecks and some of the other monuments described within the broad term of 'Maritime' will overlap between the thematic discussion on coastal trade and industry, and transport and communications. However in this case the wrecks recorded at Hurst Spit are thought to represent records of documented losses rather than the actual positions of known wreck sites. The other records within this thematic query which are located at Hurst Spit can be seen to be more representative of this functional theme. These comprise records of sites of existing and previous lighthouses (**MWX11882**, **MWX55147** and **MWX55148**) and records of a dock (**MWX42222**) and a railway (**MWX42226**).
- 2.2.21. In addition to the wrecks which are thought to reflect documented losses, there are nine additional records of wrecks along this coastal stretch. Of these, one wreck has been identified from aerial photography (**MWX55608**) and the other eight have been sourced from the UKHO through SeaZone. These records can therefore be considered to represent known wrecks which may still be extant.
- 2.2.22. Five of these wrecks are clustered around a bend in the Lymington River, incorporating one wreck at Lymington Bridge (**MWX60680**) and four wrecks in the river by Lymington train station (**MWX60787**, **MWX61143**, **MWX61144** and **MWX61184**). The remaining wrecks are located at the marina by Lymington Yacht Haven (**MWX61188**), on the mudbanks on the east side of the Lymington River (**MWX61349**) and at the inlet near Moses Dock near The Salterns at Oxey Marsh (**MWX61305**).
- 2.2.23. There was a minimal amount of information regarding these wrecks within the records incorporated into the enhanced dataset. The wreck at Lymington Yacht Haven (**MWX61188**) is assumed to have been salvaged or demolished since its last recorded survey in 1953. The wreck on the mudflats on the east side of the Lymington River (**MWX61349**) was also last surveyed in 1953 and there is no further information as to its current status. The remaining wrecks were last recorded in the early 1980s and may still be extant.
- 2.2.24. The remaining maritime features associated with transport and communications are those also associated with the salt-working industry, as described in the section on coastal trade and industry. These include a boat yard and shipbuilders (**MWX42323**), a dock (**MWX55131**), and the site of the post-medieval harbour (**MWX42082**).
- 2.2.25. Other records associated with this theme are of varied type and are not associated with a single activity or period. These include garages (**MWX12066** and **MWX1436**), railway stations (**MWX60543**, **MWX60553** and **MWX60539**), a stable (**MWX11904**), a trackway (**MWX61661**), a toll house (**MWX1757**) and a toll gate (**MWX59086**).

2.3. ARCHAEOLOGICAL POTENTIAL

- 2.3.1. Archaeological potential has been assessed through queries of the existing archaeology of the coastal stretches as recorded in the enhanced dataset. Existing archaeology has been examined in the context of current research frameworks and the historical character of the New Forest to assess the importance of known sites.
- 2.3.2. Existing designations, both statutory and non-statutory, were examined in order to inform the assessment of the archaeological potential of this coastal stretch. There are two Scheduled Ancient Monuments in this coastal stretch; the Iron Age hillfort at Buckland Rings (**MWX61628**) and the Henrician castle at Hurst Spit (**MWX22376**).
- 2.3.3. In addition to these sites, there are 259 listed buildings in this area, mainly concentrated in Lymington. These comprise 12 buildings listed as Grade II* and 247 Grade II listed buildings. Although these designations can be considered to enhance the archaeological potential of the area and add to the historic urban character of Lymington, the majority of these are currently occupied structures and are situated some distance from the current shoreline.
- 2.3.4. The archaeological potential of this coastal stretch can be considered to be high. The dataset was found to contain a relatively high number of records for this coastal stretch when viewed in comparison with the other four stretches being assessed.
- 2.3.5. The high number of records encountered along this stretch of coastline is interesting, particularly as this area is not particularly densely populated, with Lymington being the only large town. Higher levels of modern settlement density and human activity generally will result in an increased number of records of archaeological monuments and finds, as the landscape is more heavily utilised and archaeological finds are therefore more likely to be discovered.
- 2.3.6. However, it should be noted that current settlement and land use patterns do not necessarily correspond to similar trends in the past. This can be seen along this coastal stretch, particularly with regard to the medieval and post-medieval salt-working industry. Whilst much of the coastline between Keyhaven and Lymington is currently given over to agriculture and intertidal conservation areas, the coastal fringe was the site of a reasonably large scale industry in the past.
- 2.3.7. The principal factor contributing to the high archaeological potential of this coastal stretch is the general time-depth of the archaeological record in this area. Archaeological sites have been recorded, *in situ*, in this area from every chronological period from the Neolithic onwards. The archaeological assets in this area can therefore be considered to form a linear record which adds considerably to our understanding of the heritage of the New Forest coast.
- 2.3.8. The salt-working industry is one aspect of the heritage of this coastal stretch that contributes to its high level of archaeological potential. In this area there are many archaeological features, still extant, which are associated with a local industry which would have shaped the land-use and subsistence patterns of past communities in a significant way. This industry is of particular interest due to its time-depth, as this landscape has been exploited for this resource since at least the Romano-British period.
- 2.3.9. The archaeological records which pre-date the Neolithic period are limited to isolated findspots of artefacts rather than archaeological features, structures of monuments. Isolated findspots do not necessarily imply the existence of a further

site or settlement for a given period, and if these are derived rather than *in situ* finds, then they do not necessarily indicate the presence of humans at a particular location at a particular time.

- 2.3.10. Although the archaeological potential of findspots of derived or uncertain provenance can generally be considered to be low, artefacts of a certain type or chronological period can enhance the archaeological potential of an area. Such artefacts can be of archaeological importance, even if they are not found in context, if their rarity can be considered to be regionally or nationally significant.
- 2.3.11. In this respect, the occurrence of findspots of Palaeolithic and Mesolithic date along this coastal stretch can be considered to further enhance the archaeological potential of the area

3. ASSESSMENT OF THREAT

- 3.1.1. This coastal stretch has been assessed with regard to threat from development pressures and coastal processes. Datasets relating to coastal erosion and potential flood events were used to assess the level of threat from coastal processes and were considered in conjunction with current and previous management strategies for the areas concerned.
- 3.1.2. The presence or lack of substantial development also informed the assessment of potential threat. In cases where large scale development is present, areas can be viewed as being under threat from development pressure. However, in some cases the presence of large economic or industrial assets can result in increased investment in coastal management and sea defences, thus providing some mitigation against the threat from natural processes. Similarly, some under-developed stretches of coastline can be considered to be under increased threat from coastal processes as their economic value may not justify extensive investment in shoreline defences.

3.2. DEVELOPMENT PRESSURE

- 3.2.1. The threat to this stretch of coastline from development pressures can be considered to be low. Whilst there are residential developments at Keyhaven and a large town at Lymington, the relative level of development in this area is not considered to be a considerable threat. However, it may be worth considering the potential impact of the Marine and Coastal Access Bill. Increasing visitor numbers along the coast, encouraged by the coastal access bill, may increase the vulnerability of certain areas while the creation of new access routes may directly impact the coastal resource.

3.3. NATURAL PROCESSES

- 3.3.1. Areas along this stretch of coastline are vulnerable to coastal erosion, however the hydrodynamic processes affecting coastal erosion are somewhat limited by the barrier formed by Hurst Spit at the approaches to the Western Solent.
- 3.3.2. A series of coastal erosion lines were produced by the Channel Coastal Observatory as part of the SMP2 for the North Solent area. These show the recession of the coastline, with reference to current management strategies, over a number of phases, namely 0 to 20 years, 20 to 50 years and 50 to 100 years. These projected erosion lines are depicted in **Figure B.4**.

- 3.3.3. Sea defences along this coastal stretch extend from Keyhaven to Lymington and vary in structure from the natural barrier of Hurst Spit, its beach and the rock built defences surrounding them, to sea walls at Keyhaven and Lymington and raised embankments along the less populated stretches of coastline.
- 3.3.4. According to the draft SMP2 for the North Solent, sea defences along this coastal stretch are in good condition, with the defences at Hurst Spit being described as 'very good or new'. The defences at Hurst Spit are described as having a residual life of up to ten years, whilst the defences running from Keyhaven to Lymington are described as having a residual life of 31 to 40 years. The NFDC Local Plan confirms that works to maintain the stability of Hurst Spit are ongoing.
- 3.3.5. The draft SMP2 for the North Solent area indicates that almost the entire stretch of coastline is potentially vulnerable to flooding events, depicted in **Figure B.4**. The flood zones depicted in this figure were taken from the Channel Coast Observatory's Solent Dynamic Coast Project, which also predicts a significant loss of intertidal mudflats and saltmarsh in this area over the next 100 years, which would result in more serious wave climate conditions and increased potential for storm surges.
- 3.3.6. Current short-term recommendations are to hold the line along this entire coastal stretch, for the phases 0 to 20 years, 20 to 50 years and 50 to 100 years. The maintenance of Hurst Spit in particular is deemed necessary, to reduce the risk of further impacts of coastal processes on Keyhaven and Lymington.

4. VULNERABILITY

- 4.1.1. Existing sites have been assessed in terms of their vulnerability by viewing the enhanced dataset overlaid on GIS layers depicting potential threats as described above. Discussion of the vulnerability of sites is limited to existing sites, rather than records of findspots found within the dataset.
- 4.1.2. The following sites are potentially vulnerable as they are either wholly or partly situated seaward of the low water mark, or in areas at risk from coastal erosion.

Site ID	Description
MWX12085	A late 19th or early 20th century cast iron lamp standard in Lymington.
MWX20582	An area of post-medieval salterns identified on aerial photographs and through fieldwork at Pennington.
MWX27698	Unidentified maritime feature in the intertidal zone off Keyhaven Marshes.
MWX27699	Unidentified maritime feature in the intertidal zone off Keyhaven Marshes.
MWX37841	A 20th century anti-aircraft battery at Hurst Castle.
MWX41139	The remains of three water tanks relating to different building phases at Hurst Castle.
MWX41140	The remains of walls relating to several building phases during the 19th century at Hurst Castle.
MWX42139	Oyster bed marked along the edge of a fishpond at The Salterns near Lower Woodside.
MWX42319	An oval shaped double bank with a ditch at The Salterns near Lower Woodside.

Site ID	Description
MWX55608	Unidentified shipwreck, thought to be 19th or 20th century in date, identified from aerial photograph in the intertidal zone near Oxey Marsh.
MWX57209	Remains of a warping pile in the intertidal zone off Lymington Yacht Haven.
MWX57424	Hordle Parish Saltern, exposed on west side of Hurst Spit in 1989, now reburied.
MWX57669	A 4.5km stretch of damaged post-medieval salterns at Keyhaven Marshes. NMR records indicate that salterns were in use until 1885 and were then replaced by oyster beds.
MWX59200	Two single ditch rectilinear enclosures and the remains of a possible third are visible on aerial photographs at Keyhaven. They are thought to possibly be the remains of salt pans of post-medieval or earlier origin.
MWX61188	Unnamed wreck at Lymington Yacht Haven. Likely to have been salvaged or cleared.
MWX61349	Unnamed wreck on the mudbanks on the east side of Lymington River.
MWX61430	Saltern site at Lower Pennington. This area lies to the north of previously mapped salterns. It is shown on aerial photographs as an area of cropmarks that extend north-east along the coast from the excavated medieval saltern at Efford Landfill .
MWX61435	Oxey Saltern. Extensive earthworks and cropmarks are visible on aerial photographs.
MWX61561	Normandy Saltern. Extensive earthworks and cropmarks are visible on aerial photographs.
MWX61634	A post-medieval water meadow or drainage system is visible as earthworks on aerial photographs at Lymington Bridge.
MWX61656	A post medieval drainage system is visible as earthworks on aerial photographs at Walhampton.
MWX61665	Fragments of linear banks and small circular mounds are visible as earthworks on aerial photographs at Pennington Marsh. They are considered likely to be the remains of post-medieval salt pans and spoil from salt extraction.
MWX61667	A group of eight rectilinear salt pans and six small curvilinear ponds or pits, considered likely to be of post-medieval date, is visible on aerial photographs at Oxey Marsh.
MWX61668	Earthwork banks are visible on aerial photographs, enclosing a large, shallow rectilinear pond. This is the site of oyster beds of post-medieval date at Moses Dock.

Site ID	Description
MWX61670	A drainage system of post-medieval or modern date comprising areas of regular, closely spaced parallel ditches is visible as earthworks on aerial photographs at Normandy.
MWX61674	A drainage system of medieval or later date comprising areas of regular, closely spaced parallel ditches is visible as earthworks on aerial photographs at Pennington Marshes.
MWX61684	Earthwork banks are visible on aerial photographs, enclosing a large, shallow rectilinear pond. This is the site of a fish pond of post-medieval date at Lower Woodside.
MWX61695	A structure likely to be a Second World War pillbox is visible on aerial photographs at Hurst Beach.
MWX61696	A small mound of raised land on the coast at Hurst Spit is visible on aerial photographs. Upon this mound the remains of a structure are visible, of unknown date or function.
MWX62512	Tank traps. Fourteen small square block-like structures are visible on aerial photographs at Milford-on-Sea.
MWX62513	Sea defences, considered likely to be of modern date, and to have a military function, are visible on aerial photographs at Milford-on-Sea.

- 4.1.3. As described in **Section 3.3** above, the risk from coastal erosion along this stretch is relatively low, due to the ameliorating affect of Hurst Spit on hydrodynamic processes in the Western Solent. In addition, the existing shoreline is deemed to be relatively secure as recommendations based on present management strategies are to hold the line along this entire coastal stretch.
- 4.1.4. However, continued sea-level rise is expected to significantly erode saltmarsh and mudflats in this area and reduce the extent of the intertidal zone. Moreover, the loss of marsh vegetation, such as *Spartina*, itself leads to increased levels of coastal erosion. The most vulnerable sites therefore, are those with a high archaeological potential which are situated in the intertidal zone. These include wrecks, features associated with the saltworking industry, and sites of unknown type and period as well as valuable peat layers and other significant deposits.

5. PHASE 2 SCOPING

5.1. PROPOSED FIELDWORK

- 5.1.1. Initial survey within this coastal stretch should take the form of a walkover survey to confirm the existence of known sites and to identify new ones. This is particularly relevant for the vulnerable intertidal areas off Keyhaven and Pennington. This area is predicted to be subject to significant erosion and loss of intertidal habitats over the next 100 years, and archaeological features may be lost to encroaching sea-levels. Ground truthing known sites, to confirm and clarify the extent of remains, will provide valuable information to feed back into the HBSMR and will help to identify sites and areas that may warrant further survey and recording in later phases of the RCZA.

- 5.1.2. Additional tasks may include the survey of vulnerable sites for which little information has so far been recorded. Whilst investigation of these sites may reveal that they have little or no archaeological significance, there is also the possibility that as yet unidentified sites could contribute valuable information to the archaeological record. There are three sites of uncertain identification in the intertidal zone near Keyhaven. These are a raised mound with a possible structure off Hurst Beach (**MWX61695**) and two unidentified sites off Keyhaven (**MWX27698** and **MWX27699**).
- 5.1.3. The unidentified sites near Keyhaven are near the edge of the intertidal area and may prove difficult to access. Other areas which may be considered for survey are at Moses Dock near The Salterns at Oxey Marsh, where an unidentified wreck (**MWX61305**) is recorded by the UKHO near several features associated with the salt-working industry (**MWX61546**, **MWX61547**, **MWX61548**, **MWX61560**, and **MWX61572**). There is little information regarding this wreck; it was last surveyed by the UKHO in the early 1980s and there is the possibility that it is no longer extant.
- 5.1.4. An alternative fieldwork task could be the investigation of records of wrecks at Lymington. Five wrecks are recorded on the foreshore here, clustered around a bend in the Lymington River. These comprise one wreck at Lymington Bridge (**MWX60680**) and four wrecks on the foreshore near Lymington train station (**MWX60787**, **MWX61143**, **MWX61144** and **MWX61184**). These sites were recorded by the UKHO in the 1980s and their current status is unknown. It is possible that these wrecks may have been surveyed as part of a walkover survey carried out by WA at Lymington in 2008 (Wessex Archaeology 2008a) These have not yet been assessed to verify whether or not they correspond to UKHO records.
- 5.1.5. Further discussion of fieldwork options and future research priorities can be found in **section 8** of the main report.

5.2. CONSTRAINTS ON FIELDWORK

Land Ownership

- 5.2.1. Wessex Archaeology has submitted enquiries to various landowners identified during the course of this project in order to obtain information on landownership along this coastal stretch. At the time of submission of this appendix, no positive replies had been received from those landowners.
- 5.2.2. Information from the draft SMP2 for the North Solent area indicates that the majority of the coastline from Keyhaven to Lymington is public land, owned and maintained by Hampshire County Council and the Environment Agency. This situation will be reviewed once the relevant information becomes available.

Access to Sites

- 5.2.3. Hurst Spit can be accessed by foot from Milford-on-Sea and there are car parks on the seafront near Sturt Pond. Access to the sites at the edge of the intertidal zone may not prove possible. This is an extensive area of saltmarsh divided by watercourses such as Hawker's Lake. Local advice should be taken before planning Phase 2 fieldwork in this area.
- 5.2.4. Access to the sites at Moses Dock, near The Salterns at Oxey Marsh, should not be difficult. However, it should be noted that these sites are not located close to any substantial towns or facilities. The closest villages are at Woodside Farm and Lower Pennington.

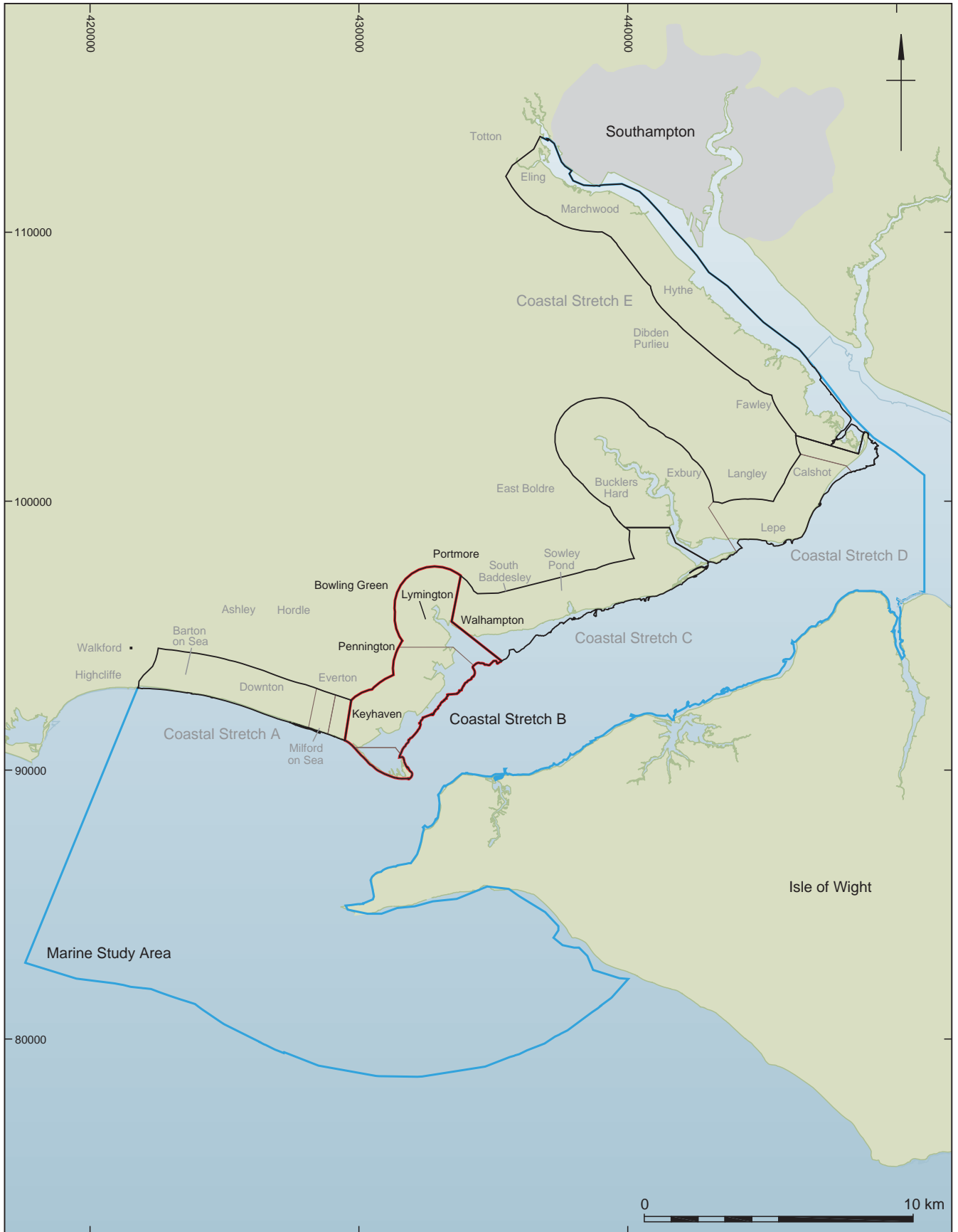
- 5.2.5. Due to its location, close to a railway station and road bridge, access to the foreshore at Lymington may need to be negotiated with the relevant local authority. In addition, the area of the foreshore in this location is limited and this may place constraints upon effective fieldwork.

Tidal information

- 5.2.6. The following are the dates for projected neap tides between April and September 2010. They show projected high water and low water periods for Lymington in British Summer Time (GMT +1).

Neap tides	High water	Low water
Thursday, 8 th April 2010	07:09	00:20
	20:13	12:56
Friday, 23 rd April 2010	05:56	11:36
	18:46	
Friday, 7 th May 2010	06:04	11:54
	19:16	
Saturday, 22 nd May 2010	06:31	12:03
	19:24	
Sunday, 6 th June 2010	06:17	11:50
	19:13	
Monday, 21 st June 2010	07:14	00:07
	19:48	12:35
Monday, 5 th July 2010	05:11	10:40
	17:59	23:17
Tuesday, 20 th July 2010	06:40	12:00
	19:20	
Wednesday, 4 th August 2010	05:23	10:49
	18:07	23:35
Thursday, 19 th August 2010	07:36	00:20
	20:03	12:55
Friday, 3 rd September 2010	06:21	11:45
	19:02	
Friday, 17 th September 2010	07:20	12:34
	19:44	

- 5.2.7. These projections were taken from Admiralty TotalTide software and should be considered as projected tidal information for the western Solent. If possible, additional local advice on tides



- ▭ Marine Study Area
- ▭ Coastal Stretch
- Policy Unit from Shoreline Management Plan

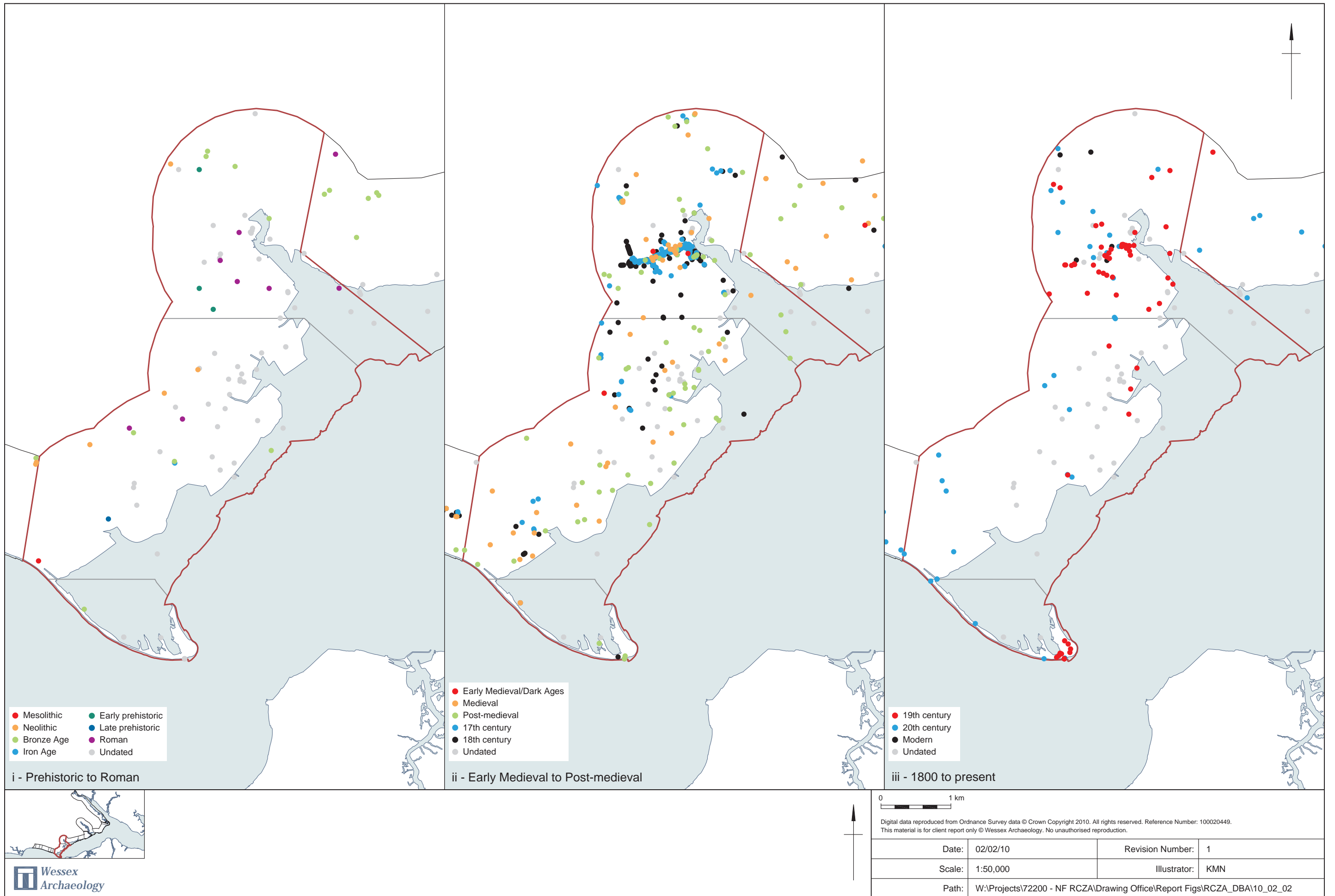


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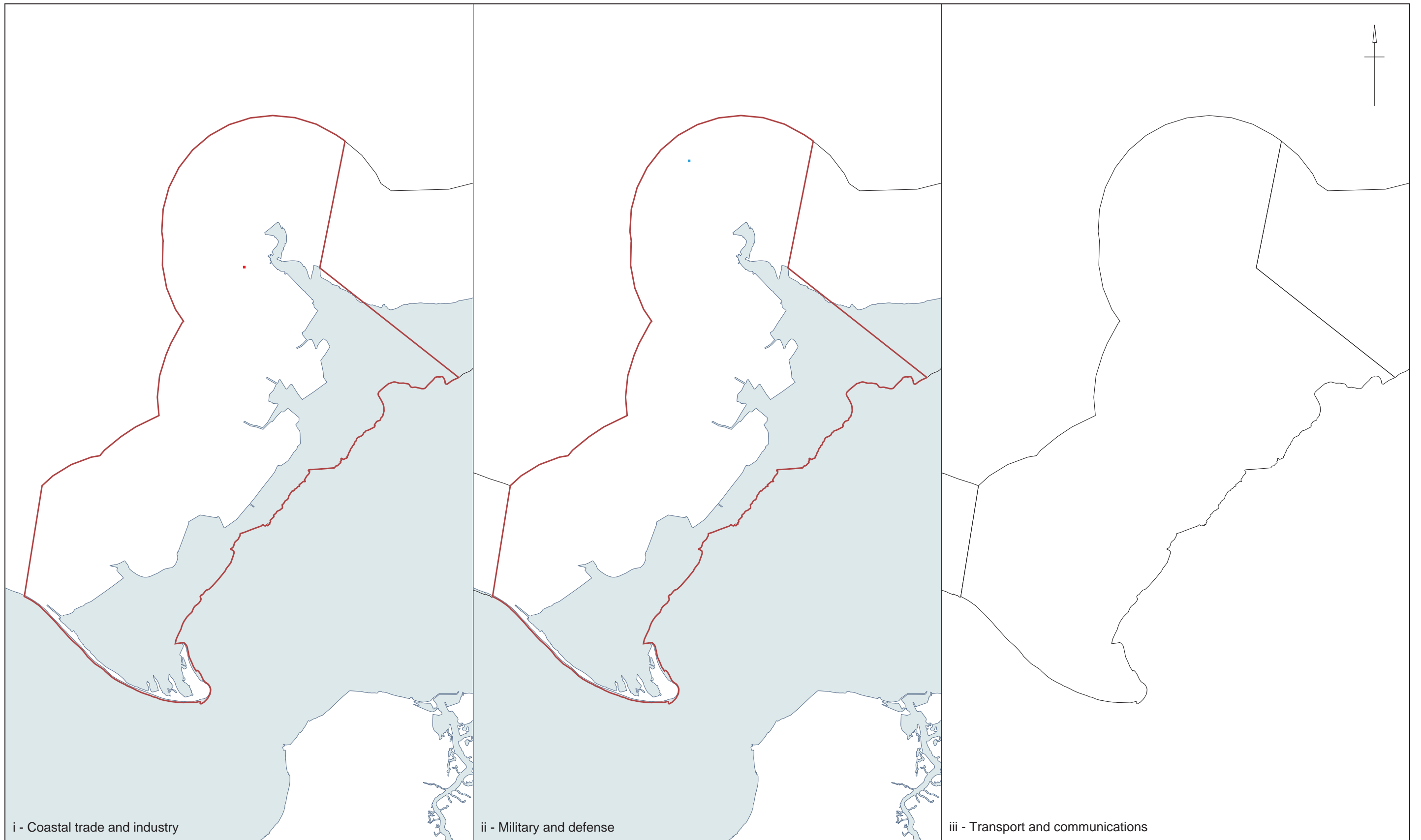
Location of Coastal Stretch B

Figure B.1



Chronological phases

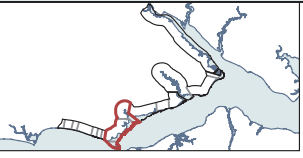
Figure B.2



i - Coastal trade and industry

ii - Military and defense

iii - Transport and communications

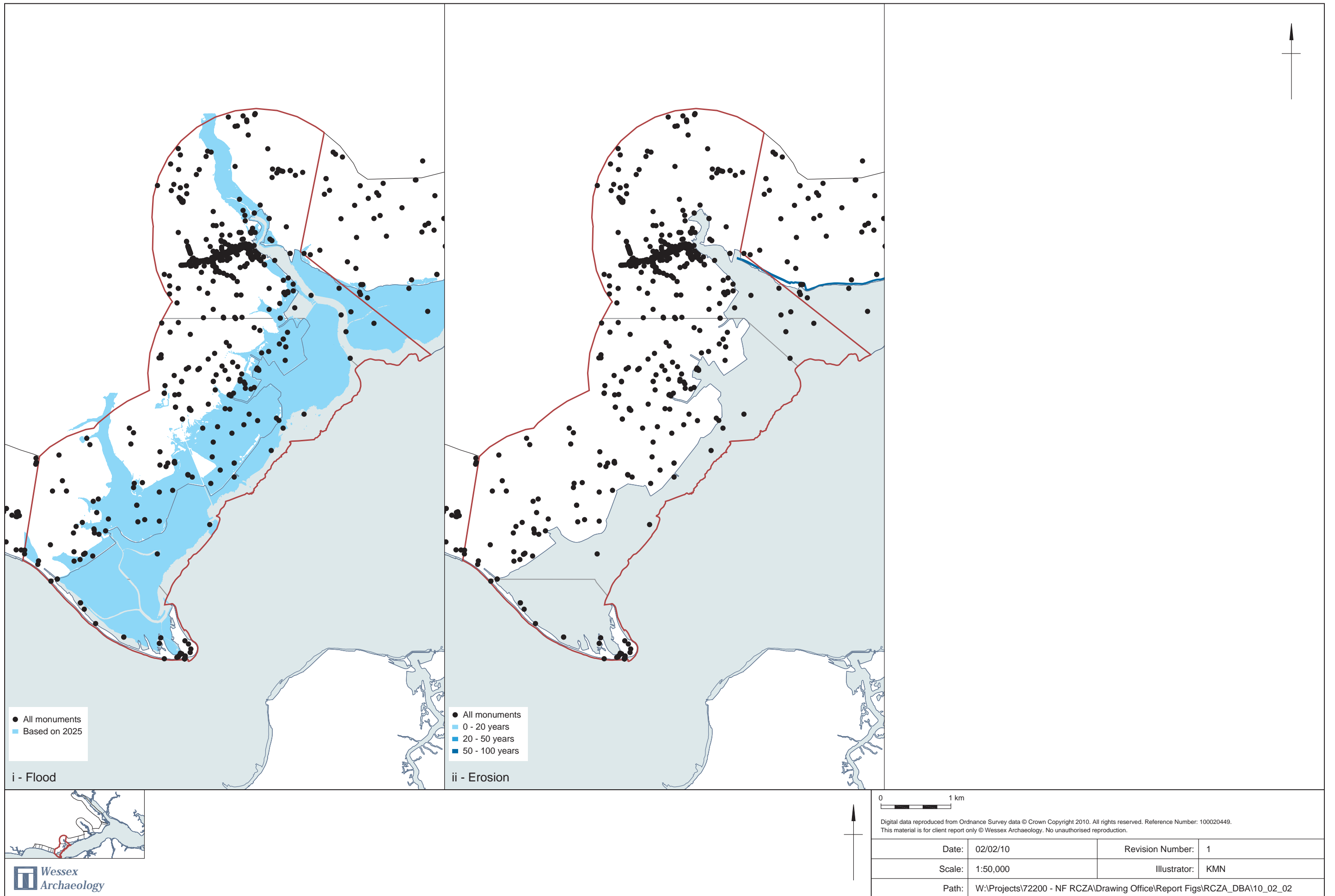


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Functional themes

Figure B.3



Environmental threats to the coastline

Figure B.4





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