Case Name: Folkestone Harbour Viaduct, including Jetty Access Ramp and Swing Bridge

Case Number: 467272

Background

We have received a number of listing applications for various structures within, or closely associated with, Folkestone Harbour. This assessment covers applications for: Folkestone Harbour viaduct, the viaduct jetty access ramp, and the swing bridge.

Asset(s) under Assessment

Facts about the asset(s) can be found in the Annex(es) to this report.

Annex	List Entry Number	Name	Heritage Category	EH Recommendation
1	1404114	Folkestone Harbour Viaduct and Swing Bridge	Listing	Add to List
2	N/A	Folkestone Harbour Jetty Access Ramp	Listing	Do not add to List

Visits

Date	Visit Type
29 June 2011	Full inspection

Context

In September 2010, English Heritage received a number of listing applications for various structures within, or closely associated with, Folkestone Harbour. A number of these structures were assessed for listing in 2007 in light of a proposed large-scale redevelopment of the area; the east pier, and the lighthouse at the end of the outer pier, were listed as a result of these assessments (both at Grade II). This development was never undertaken however, and a new redevelopment scheme is now proposed. This second scheme prompted the new listing applications, which include a number of structures which were not assessed in 2007. The applicant submitted a large quantity of thorough material to support the applications, and made new or strengthened claims to historic interest for the structures previously assessed. English Heritage reviewed this material, and on their advice, the Department for Culture Media and Sport recently turned down a number of these structures for listing (see cases: 466737, 462694, 462698, and 465584).

This assessment covers applications for Folkestone Harbour viaduct, the viaduct jetty access ramp, and the viaduct swing bridge. Although they were submitted as separate applications, the physical and historic links between the structures make it appropriate for them to be assessed as one case. The viaduct was first assessed for listing in 1999 as part of a thematic project looking at railway structures. In this assessment the viaduct was dated as being built in 1848, but this date was not supported with documentary evidence; it was turned down for listing as being of standard design for its date and lacking in 'unusual design qualities'. The viaduct was assessed again in 2007, however it was incorrectly dated in this assessment as being c1893, due to the misinterpretation of some historic images. Both the 1999 and 2007 advice did not take into consideration the significance of Folkestone Harbour as an early rail/sea transport interchange, or its important role during the First World War. As the current listing applicant has provided significant new evidence to demonstrate that the viaduct is much earlier and dates from 1843, and has also provided significant new information on the historic significance of the harbour, it is appropriate that the viaduct and swing bridge is reassessed.

Assessment

CONSULTATION

The owners of the site, the applicant, and the local planning authority (Shepway District Council) were provided with copies of our Consultation Report for their consideration. The applicant did not respond to the consultation, but did provide a general response to our notification that a number of other structures within the harbour, which we had assessed for listing at his request, had not been listed. This response highlighted the importance of the relationships between the various structures, but did not provide any new information relating to the structures being assessed here. A consultation response was received from Stephen Levrant Heritage Architecture Ltd on behalf of the site owners.

Stephen Levrant Heritage Architecture Ltd provided a detailed consultation response, providing a useful chronology of the development of Folkestone Harbour, and an illustrated chronology of the viaduct. The representation also puts forward a case as to why the structures under assessment do not meet the criteria for listing. The Department for Culture Media and Sport's Principles of Selection for Listing (March 2010) and English Heritage's listing selection guide: Transport Buildings (April 2011) are referenced extensively. The principal points relevant to our assessment are detailed below.

The response argues that the design of the viaduct is utilitarian and does not display a particularly high level of craftsmanship, technical innovation or virtuosity and therefore is not of architectural interest. A similar argument is advanced for the swing bridge.

The response recognises the historic interest of the development of the harbour and its facilities, and the connection of the structures with an important architect: Cubitt, and to a lesser extent, Ellson. However, the response quotes Principles of Selection for Listing that 'there should normally be some quality of interest in the physical fabric of the building itself to justify the statutory protection afforded by listing', and argues that as this is not the case here, and that the viaduct and swing bridge do not meet the criteria for listing.

The response argues that while the viaduct is comparatively early for a railway structure, there are many other examples which are superior in their engineering and architectural significance. The response comments on the late date of the swing bridge and the fact that it is not innovative as a structure.

As English Heritage has formulated its assessment of the structures based on the same documents used by Stephen Levrant Heritage Architecture Ltd (Principles of Selection for Listing (March 2010) and English Heritage's Listing selection guide: Transport Buildings (April 2011), our response to the points raised above is not detailed here, but is contained within our discussion below.

DISCUSSION

Viaduct

As set out in English Heritage's Listing Selection Guide on Transport Buildings (April 2011), railway buildings and structures that pre-date 1840 will often be of international significance as being amongst the earliest in the world, and will be serious contenders for designation. It also states that the decade between 1840 and 1850 remains of interest as this was a period of frantic railway building, which saw much commercial speculation and competition for routes. The main criteria selection for railway structures are historical and technological significance, architectural interest, intactness, rarity and group value.

Folkestone Harbour and its associated railway structures have three main claims to historic interest: the first its interest as an early to mid-C19 harbour, built with the involvement of a number of prominent engineers, including Jessop and Telford. The second claim is as an early railway transport site which, the applicant asserts, established the first rail/sea/rail cross-Channel passenger service. The third claim is the harbour's considerable involvement with the transportation of troops to and from the battlefields of Europe during the First World War. The latter two claims are those most relevant to the structures being considered here.

Although falling just outside the earliest period of railway construction (up to 1841), the viaduct forms part of a forward-thinking enterprise which was part of a new step in the evolution of international travel. The viaduct is illustrative of the bringing together of traditional and modern modes of transportation; a marriage which not only brought economic success to Folkestone's harbour, but which also saw Folkestone become the hub of one of the earliest international rail/sea/rail passenger interchanges. While it has not been possible to ascertain whether the Folkestone to Boulogne route was truly the first of such interchanges, it was without doubt one of the earliest and, more importantly, by far the most successful cross-Channel service of the mid-C19. Although subsequently overtaken by Dover in the late 1860s as the most popular route to the Continent, the Folkestone Harbour interchange did regain great importance during the First World War, becoming the principal route for the transportation of troops and supplies to France.

The railway viaduct across Folkestone Harbour is not one of the most technically complex railway viaducts nationally and the brickwork is plain and unembellished. Its arches are lower and its span not as great as the Foord Valley Viaduct (listed Grade II), also built by William Cubitt further up on the main line. Nevertheless, the Folkestone structure is a robust and largely intact piece of engineering; is unusual as a viaduct which traverses a harbour; and offers a clear and evocative expression of this early coming together of rail and sea transportation. It is also a visually striking and characterful element of the harbour, which includes the east pier, and the lighthouse at the end of the outer pier (both listed Grade II). The interest of the viaduct lies principally in the stretch which spans the harbour, as it is here that the historic interest is most strongly manifest in the physical form of the structure.

Both of English Heritage's previous assessments of the viaduct concluded that it was not of listable quality because of its standard design and, in the case of the 2007 assessment, its late date. At that time, we understood the viaduct to date from the 1890s, and the re-dating is therefore a significant factor in our re-appraisal of this railway structure; the clear evidence of its 1840s construction greatly strengthens its claim to special interest. Furthermore, neither of the earlier assessments took into consideration the significance of Folkestone Harbour as an early rail/sea transport interchange, or its important role during the First World War. The consultation response from Stephen Levrant advances the argument that the historic interest of the viaduct is not sufficient to overcome its lack of design interest. However, while it is accepted that the design and fabric of the structure is standard for its type, this does not mean that the structure is without architectural merit. Taking into consideration what is now known to be the relatively early date of the viaduct, its rarity as a harbour viaduct, its relationship to an early and important rail/sea passenger interchange which played a key role during the First World War, its group value with the other listed structures in the harbour and its strong visual representation of the coming together of these two modes of transport, we assess the viaduct to have national special interest both architecturally and historically, and recommend it for listing.

Swing bridge
Although dating from the 1930s (and its base dating from 1893), the present swing bridge continues to serve the function of its predecessors: carrying the railway line which connects the viaduct and the south side of the harbour. In this way, the bridge contributes to our understanding of the viaduct, and the wider significance of the site, as well as providing an important visual link between the viaduct and the south side of the harbour. The fact that the new swing bridge featured in 'The Engineer' at the time of its installation suggests that it was considered of some technological interest when constructed. It is accepted that because of its relatively late date, when taken in isolation, the swing bridge has limited historic interest; however, the bridge has a strong industrial aesthetic and an important relationship with the viaduct, which imbues it with sufficient group value as to make it appropriate to include the swing bridge in the recommendation to list the viaduct.

Jetty access ramp
The principal function of the viaduct and swing bridge was to link the north and south sides of the harbour. However, contemporary with the viaduct, and pre-dating the first swing bridge, were the timber jetties constructed to either side of the viaduct. The role of the jetties was to allow boats to moor up alongside the viaduct, and to carry sidings from which freight could be loaded. Had the jetties survived they would have been of interest as part of this early transport interchange; however, the nature of their construction was such that their survival to the present day would have been unlikely, and the fact that they have been lost does not undermine the interest of the viaduct. The surviving jetty access ramp which led onto the west jetty, although closely connected (physically and historically) with the viaduct, is a fragmentary part of this structure and as a simple brick protrusion it does not have architectural interest or a readily legible historic interest in its built fabric. The jetty access ramp is therefore not recommended for listing.

CONCLUSION
After examining all the records and other relevant information and having carefully considered the architectural and historic interest of this case, the criteria for listing are partially fulfilled. For this reason, the viaduct and swing bridge spanning Folkestone Harbour are recommended for listing at Grade II; the western jetty access ramp adjacent to the viaduct is not recommended for listing.

The harbour viaduct (1843) and swing bridge (1930), spanning Folkestone Harbour, are recommended for listing at Grade II for the following principal reasons:
* Architectural interest: the viaduct is a bold piece of railway engineering infrastructure which forms an integral, and primary, element of an important early rail/sea passenger interchange
* Rarity: though many viaducts survive and are listed, this viaduct is a particularly unusual example of a harbour viaduct.
* Engineering ensemble: the swing bridge contributes to the understanding of the viaduct, as well as providing the important visual link between the viaduct and the south side of the harbour; it is therefore included in the listing for group value.

* Group value: the viaduct and bridge have group value with the nearby east pier of 1829 and lighthouse, both listed Grade II.
* Historic interest: the harbour, and the viaduct, played a key role in the transportation of troops to Flanders during the First World War.

The Folkestone Harbour viaduct jetty access ramp (1843) is not recommended for listing at Grade II for the following principal reasons:
* Fragmentary survival: although closely connected (physically and historically) with the viaduct, the access ramp is a fragmentary part of the original structure and does not retain sufficient architectural interest or a readily legible historic interest in its built fabric.

Countersigning comments:

Agreed. We have assessed this viaduct on two previous occasions and did not recommend listing, however, it was the clear evidence of a much earlier date than we previously thought which led to the reassessment, and now a recommendation to list. The viaduct over Folkestone Harbour is known to date from 1843 and to be a work of the noted engineer Cubitt, which alters our understanding of its significance. It is a modest structure yet striking for its audacity in straddling the harbour and linking the railway to the pier. It also has group value with the Grade II listed outer east pier of a decade before and Grade II late C19 lighthouse, as well as historic interest for shouldering the last leg of the journey for troops leaving for France during World War One. Given the new evidence, and the claims to special interest, we are recommending listing at Grade II.
Emily Gee
25 November 2011

Annex 1

List Entry

List Entry Summary

This building is listed under the Planning (Listed Buildings and Conservation Areas) Act 1990 as amended for its special architectural or historic interest.

Name: Folkestone Harbour Viaduct and Swing Bridge

List Entry Number: 1404114

Location
Folkestone Harbour, Folkestone,

The building may lie within the boundary of more than one authority.

County	District	District Type	Parish
Kent	Shepway	District Authority	Folkestone

National Park: Not applicable to this List entry.

Grade: II

Date first listed:
Date of most recent amendment:

Legacy System Information

The contents of this record have been generated from a legacy data system.

Legacy System: Not applicable to this List entry.
Legacy Number: Not applicable to this List entry.

Asset Groupings

This List entry does not comprise part of an Asset Grouping. Asset Groupings are not part of the official record but are added later for information.

List Entry Description

Summary of Building
Folkestone Harbour viaduct was built in 1843 by the South Eastern Railway Company, and was designed by William Cubitt, Chief Engineer of the line. The structure crosses the harbour with 12 arches to the west (one is hidden by the adjacent jetty access ramp) and 13 arches to the east. The swing bridge, which is included for group value, was designed in 1930 by George Ellson, Chief Engineer for Southern Railway. The Second World War gun emplacements beneath the viaduct are not included in the listing.

Reasons for Designation

* Architectural interest: the viaduct is a bold piece of railway engineering infrastructure which forms an integral, and primary, element of an important early rail/sea passenger interchange
* Rarity: though many viaducts survive and are listed, this viaduct is a particularly unusual example of a harbour viaduct.
* Engineering ensemble: the swing bridge contributes to the understanding of the viaduct, as well as providing the important visual link between the viaduct and the south side of the harbour; it is therefore included in the listing for group value.
* Group value: the viaduct and bridge have group value with the nearby east pier of 1829 and lighthouse, both listed Grade II.
* Historic interest: the harbour, and the viaduct, played a key role in the transportation of troops to Flanders during the First World War.

History

In 1843, Folkestone Harbour was sold to Joseph Baxendale, William Parry Richards and Lewis Cubitt, of the South Eastern Railway Company. The plan was for Folkestone to rival Dover as a harbour for steam packets to France. To this end Folkestone's new railway line was extended to the harbour and the harbour became host to much railway infrastructure. By January 1844 the railway viaduct had been built, carrying the railway at the lower end of the branch line into the harbour; a swing bridge was added by 1847, allowing trains to cross onto the southern harbour arm. The viaduct was designed by Chief Engineer of the line, William Cubitt (Lewis Cubitt's brother), who was also responsible for the Foord Valley Viaduct on the main line (listed Grade II). To either side of the viaduct were timber freight jetties. The railway line was used for coal traffic until the French line to Boulogne Maritime was complete and both sides had passenger stations. By 1849 the harbour branch was open for passenger traffic and was part of one of the first fully scheduled (though still tidal) rail/sea/rail international services. It was by far the most popular cross-Channel route in these early years, although superseded by the Dover to Calais route in the late 1860s. Removal of tidal restrictions in 1886 (the Dover to Calais service having achieved this in 1882), allowed a fixed timetable to be operated.

The railway brought success and financial viability to the harbour, which continued to develop as the demand for facilities grew. The original swing bridge was replaced in 1893 to allow heavier trains to cross the harbour, and again in 1930. This last bridge was designed by the chief engineer of Southern Railway, George Ellson OBE MICE. Photographs of the installation of the new bridge identify the eminent engineer Conrad Gribble MICE as being present. At this date Gribble was Assistant Engineer, New Works and Bridges, for the railway company, suggesting that he was responsible for over-seeing the works at Folkestone.

Folkestone Harbour played a significant role during the First World War, being the major embarkation point for Europe. Approximately 10 million army officers, service men and other personnel, and over one million tonnes of freight, travelled to or from the battlefields through the harbour.

Details

The viaduct consists of segmentally-headed red brick arches (13 to the east, 12 to the west) which cross approximately two thirds of the harbour; the swing bridge spanning the remaining distance to the south.

The swing bridge is of steel construction, composed of three main longitudinal girders. It sits on a brick base with stone quoins which is original to the 1893 bridge. The new bridge was swung by means of an electric capstan on the wharf and a rope, and the lifting and locking mechanisms were hand operated.

Selected Sources

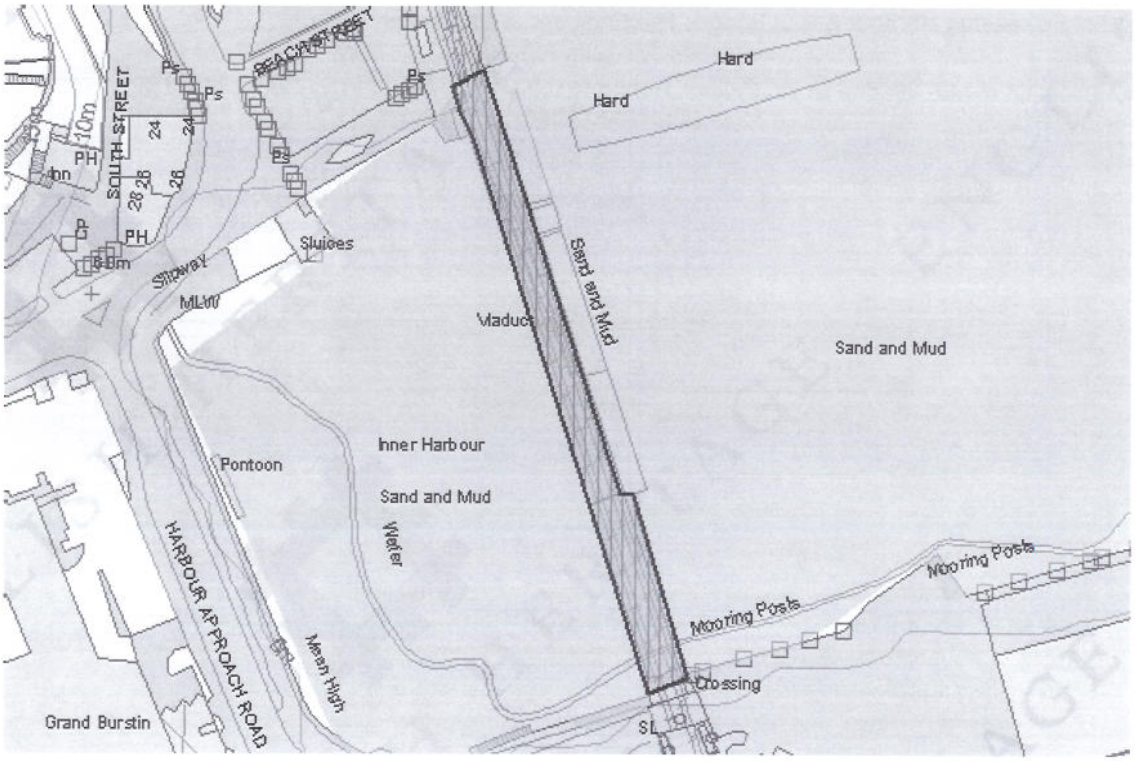
Obituary of Conrad Gribble, ICE Proceedings, 22 July 1962

Renewal of Folkestone Harbour Swing Bridge, The Engineer, 5 December 1930

Railway Inspector Major General C. W. Pasley, Report to the Committee of Privy Council for Trade, 1844 (published 1846)

Map

National Grid Reference: TR2331435934



The above map is for quick reference purposes only and may not be to scale. For a copy of the full scale map, please see the attached PDF - 1404114_1.pdf

Annex 2

Factual Details

Name: Folkestone Harbour Jetty Access Ramp

Location: Jetty Access Ramp, Folkestone Harbour,

County	District	District Type	Parish
Kent	Shepway	District Authority	Folkestone

History
In 1843, Folkestone Harbour was sold to Joseph Baxendale, William Parry Richards and Lewis Cubitt, of the South Eastern Railway Company. The plan was for Folkestone to rival Dover as a harbour for steam packets to France. To this end Folkestone's new railway line was extended to the harbour and the harbour became host to much railway infrastructure. By January 1844, the railway viaduct had been built, carrying the railway at the lower end of the branch line into the harbour; a swing bridge was added by 1847, allowing trains to cross onto the southern harbour arm. The viaduct was designed by the Chief Engineer of the line, William

Cubitt (Lewis Cubitt's brother), who was also responsible for the Foord Valley Viaduct on the main line (listed Grade II). To either side of the viaduct were timber freight jetties. The railway line was used for coal traffic until the French line to Boulogne Maritime was complete and both sides had passenger stations. By 1849 the harbour branch was open for passenger traffic and was part of one of the first fully scheduled (though still tidal) rail/sea/rail international services. It was by far the most popular cross-Channel route in these early years, superseded by the Dover to Calais route in the late 1860s. Removal of tidal restrictions in 1886 (the Dover to Calais service having achieved this in 1882), allowed a fixed timetable to be operated.

The railway brought success and financial viability to the harbour, which continued to develop as the demand for facilities grew. The original swing bridge was replaced in 1893 to allow heavier trains to cross the harbour, and again in 1930. This bridge was designed by the chief engineer of Southern Railway, George Ellson OBE MICE. Photographs of the installation of the new bridge identify the eminent engineer Conrad Gribble MICE as being present. At this date Gribble was Assistant Engineer, New Works and Bridges for the railway company, suggesting that he was responsible for over-seeing the works at Folkestone.

Folkestone Harbour played a significant role during the First World War, being the major embarkation point for Europe. Approximately 10 million army officers and service men, and over one million tonnes of freight, travelled to or from the battlefields through the harbour. The vast numbers that passed through the harbour during this time included politicians and royalty as well as allied troops and the Red Cross.

Details

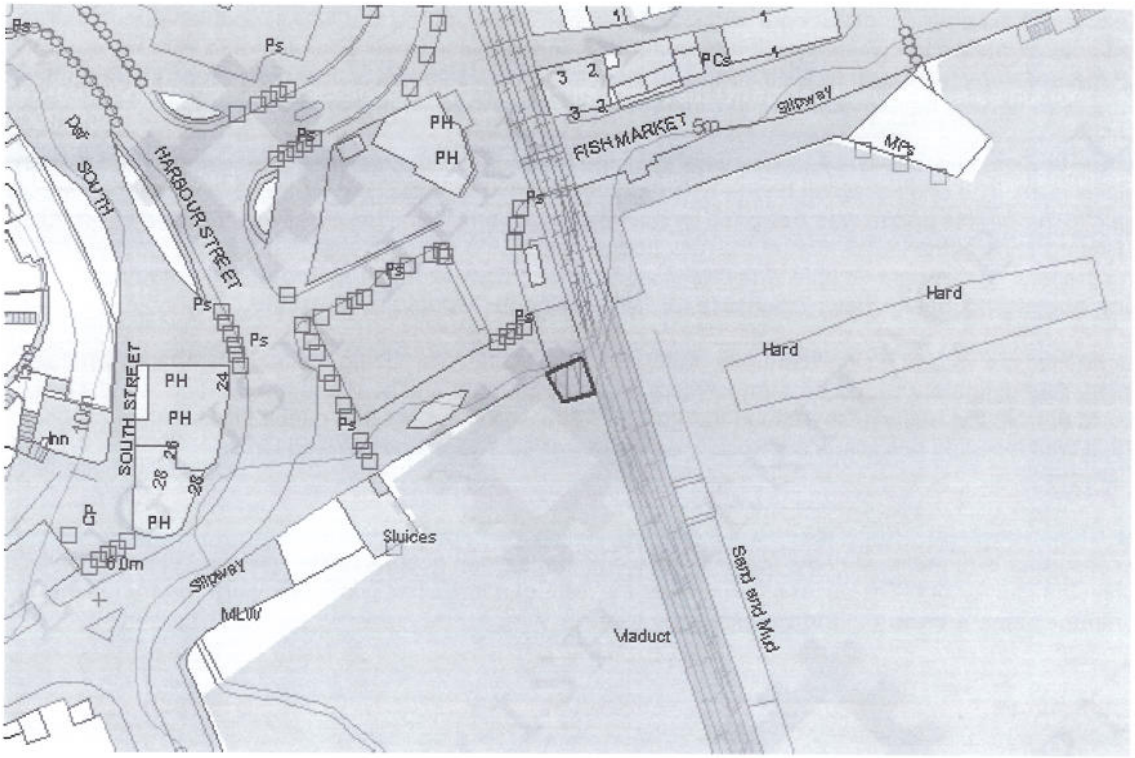
The access ramp is to the west of the viaduct and would have given access to the western freight jetty which ran along side the viaduct. The access ramp takes the form of a large brickwork pier which protrudes into the harbour immediately adjacent to the viaduct.

Selected Sources

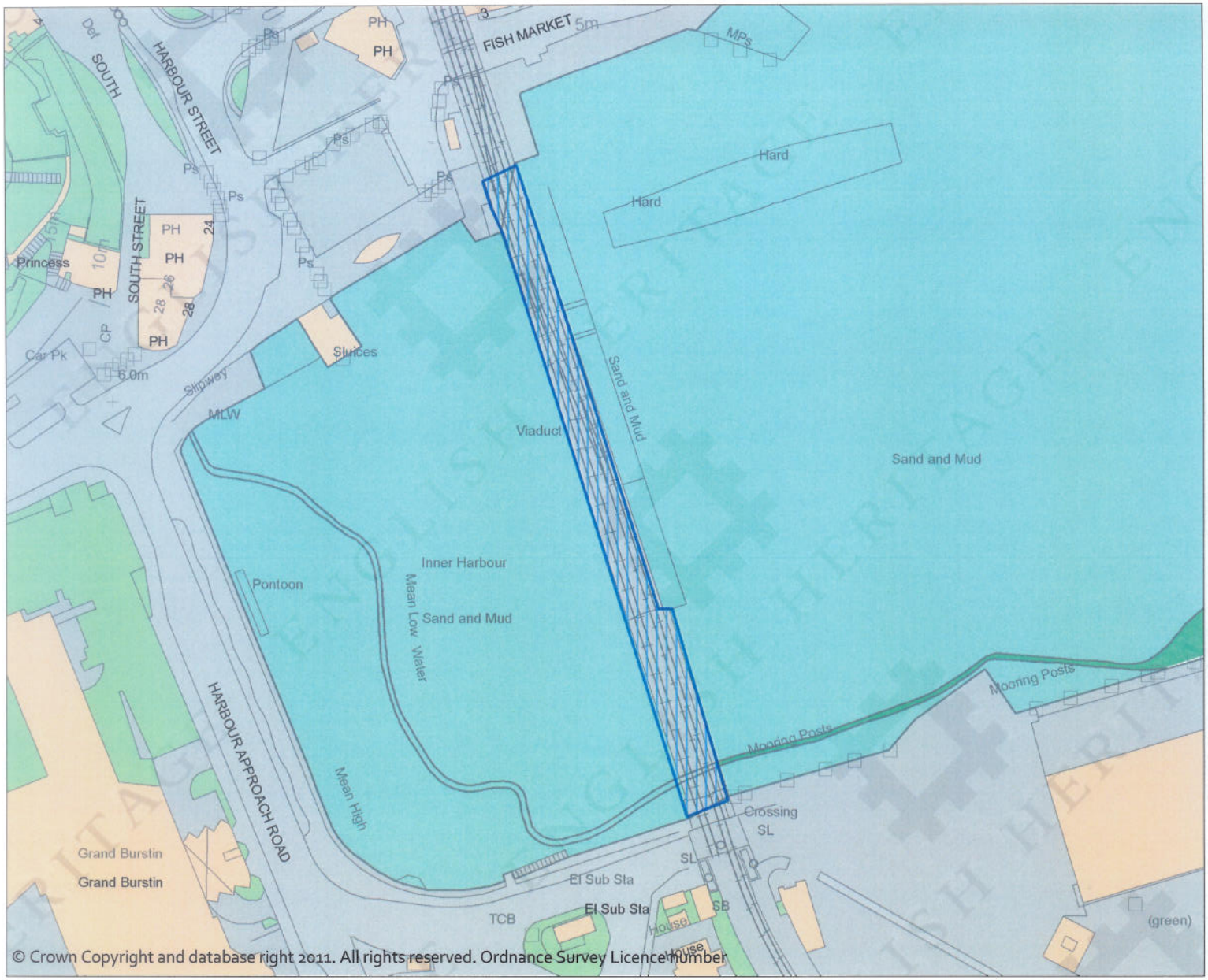
None.

Map

National Grid Reference: TR2328635995



The above map is for quick reference purposes only and may not be to scale. For a copy of the full scale map, please see the attached PDF - 1405785_1_634598998353358476.pdf



Heritage Category:
Listing

County: Kent

District: Shepway

Parish: Folkestone

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Grid Reference:	TR2331435934
Map Scale:	1:1250
Print Date:	19 December 2011

Number: 1404114 _1

Name: Folkestone Harbour Viaduct and Swing Bridge

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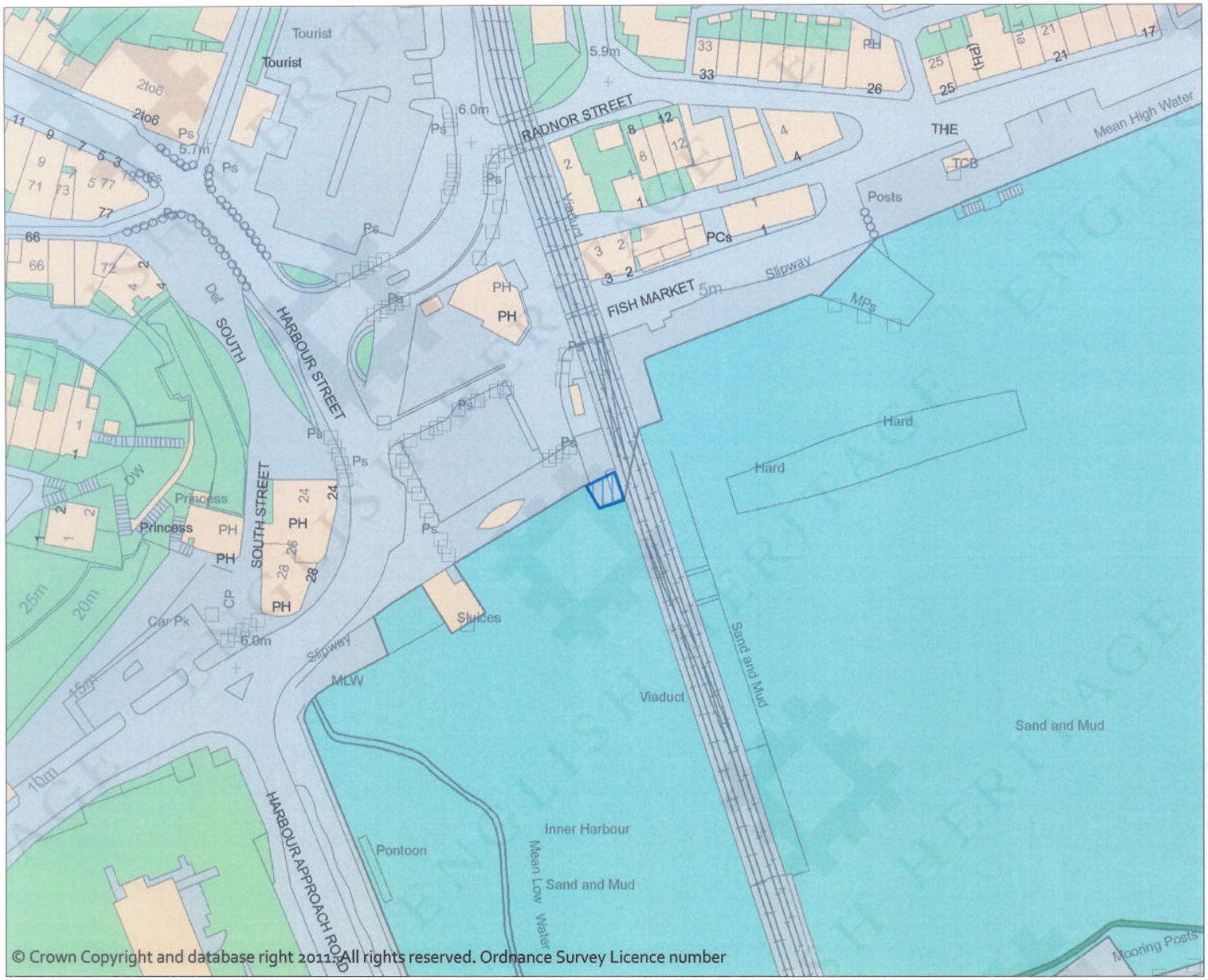

Number: 1405785 _1

Name: Folkestone Harbour Jetty Access Ramp

Heritage Category:
Listing

County: Kent

District: Shepway

Parish: Folkestone

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Grid Reference:	TR2328635995
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