

Royal Southern Yacht Club

Hamble-le-Rice, Southampton,
SO31 4HB

Environmental information to inform any required Habitats
Regulations Assessment by the Competent Authority
(Shadow HRA)

Compiled by Dr P Tosswell, Lymington Technical Services Ltd

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1. Introduction

The Royal Southern Yacht Club was established in 1837 and is located on the west bank of the River Hamble. The current berthing layout was constructed in 2015.

The works involve the relocation of an existing length of main walkway and installation of two new finger pontoons. One pile will be removed completely and one relocated.

The existing walkway is used to moor vessels, but when relocated it will provide access only. The two new finger pontoons will provide the lost moorings. There is therefore no increase in berth numbers.

The works are within an existing mooring area used by the club and the works can have no impact on main river navigation. There will be a localised alteration to navigation within the existing area, this is considered an improvement.

Drawing 10907/1A shows the proposed works.

As the works are not directly connected with, or necessary for, the conservation management of a habitat site, consideration is required as to whether the works are likely to have a significant effect on the habitat site. This is known as 'LSE' and is determined under a Habitats Regulations Assessment (HRA).

The HRA process can be divided into 3 main stages –

Stage 1 – Screening for likely significant effects (LSEs) – whether the works will have a significant effect on a European Site

Stage 2 – Appropriate Assessment (AA). This applies if a LSE is identified in Stage 1

Stage 3 – Mitigation and alternative solutions. If adverse effects are identified during the AA then alterations and mitigation must be provided to fully cancel any adverse effects.

The well documented Court of Justice of the European Union (CJEU) decision in the People Over Wind (Sweetman vs Coillte Teoranta) case (C323/17) determined that inclusion of any mitigation measures for the works (at the application stage) presupposed that there would have been a LSE. As such, a full HRA would have been required.

A 'shadow' HRA is a common approach.

Stage 1 Screening is undertaken by the applicant and this information is presented in this document.

Stage 2 Appropriate Assessment by a 'Competent Authority'.

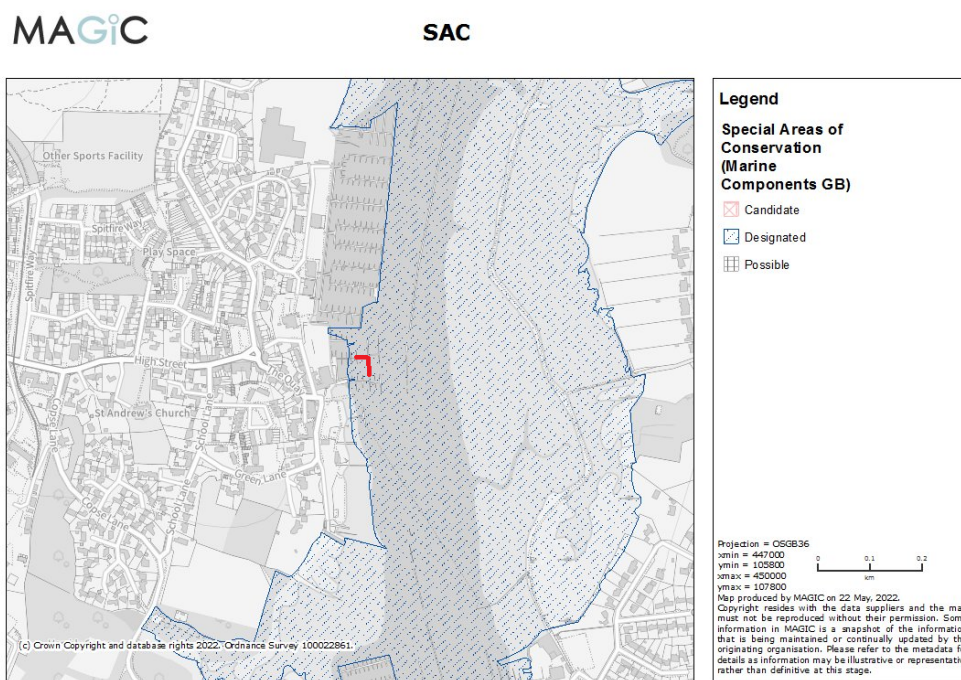
For marine works (such as this application) The Conservation of Habitats and Species Regulations 2017, Provision 103 Marine Works, states:

(1) The assessment provisions apply in relation to the granting of a licence, consent or other approval for marine works.

(2) Where the assessment provisions apply, the competent authority may, if it considers that any adverse effects of the plan or project on the integrity of a European site or a European offshore marine site would be avoided if the licence, consent or other approval were subject to conditions or requirements, grant the licence, consent or other approval subject to those conditions or requirements.

2. Internationally Protected (European) Sites & Other Relevant Areas

Solent Maritime Special Area of Conservation (SAC) – Solent Maritime (UK0030059) (Internationally protected site).



SAC Extents – red lines show works area

Solent & Dorset Coast Special Protection Area (SPA) – UK9020330 (Internationally protected site). Red lines show works area

MAGiC

SPA



Legend

Special Protection Areas (Marine Components GB)

- Classified
- Potential

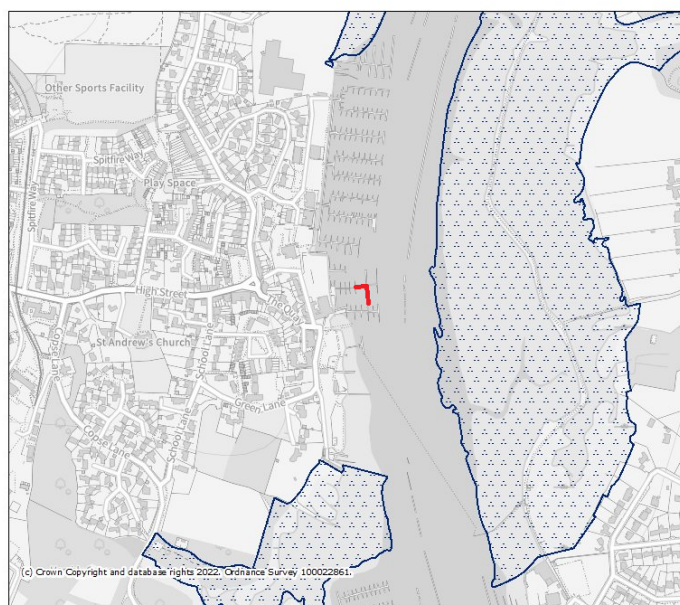
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Solent & Southampton Water Special Protection Area (SPA) – UK9011061 (Internationally protected site). Red lines show works area

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SPA 2



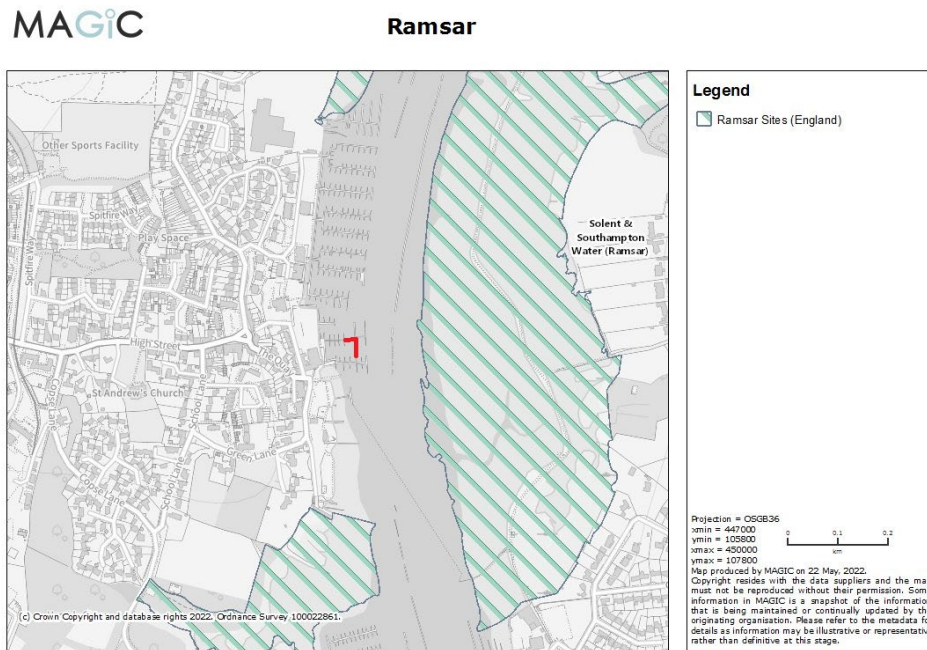
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- Special Protection Areas (England)

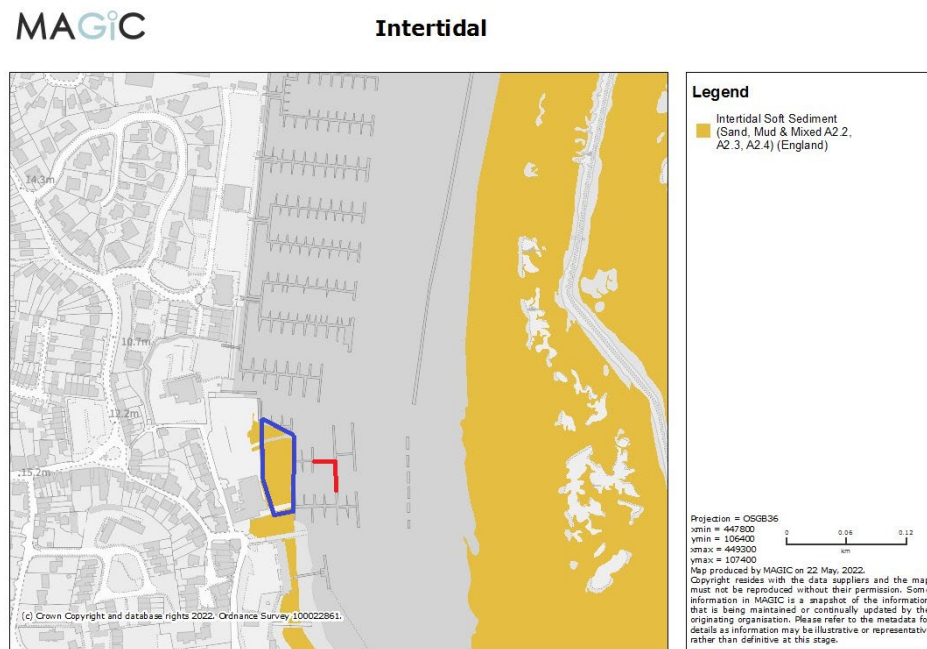
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Ramsar – Solent and Southampton Water (UK11063). (Internationally protected site). Red lines show works area



SAC/SPA supporting habitats – Mudflats – red lines show works area

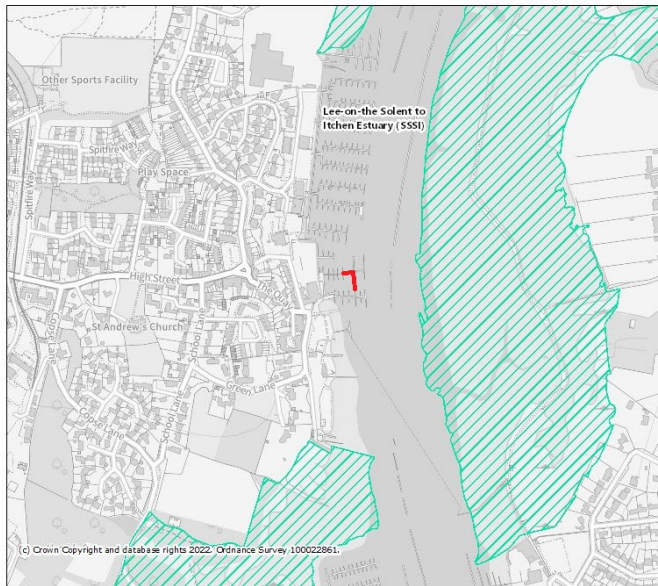


Note that this data is not up to date, the area in blue does not dry out and is fully subtidal.

SSSI – Lee on Solent to Itchen Estuary (Nationally protected site) – red lines show works area

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SSSI



Legend

- ▣ Sites of Special Scientific Interest (England)

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Local Nature Reserve – Hook with Warsash (Locally protected site). Red lines show works area

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LNR



Legend

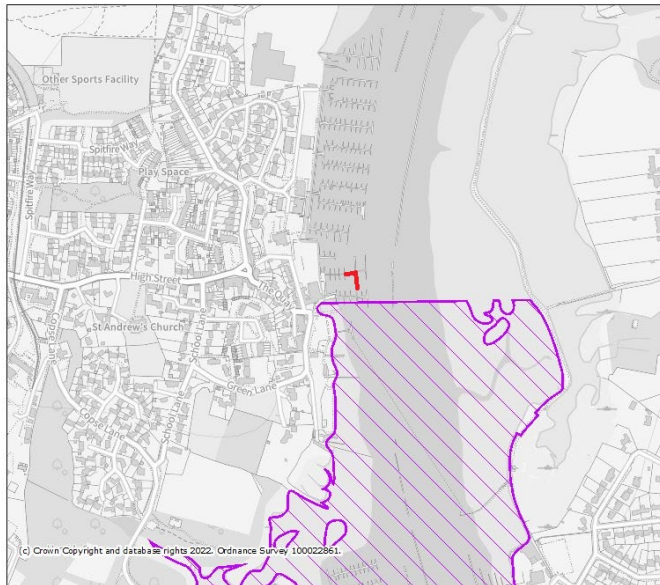
- ▣ Local Nature Reserves (England)

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Shellfish Waters, Approaches to Southampton Water – 36. Red lines show works area.

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Shellfish Waters



Legend

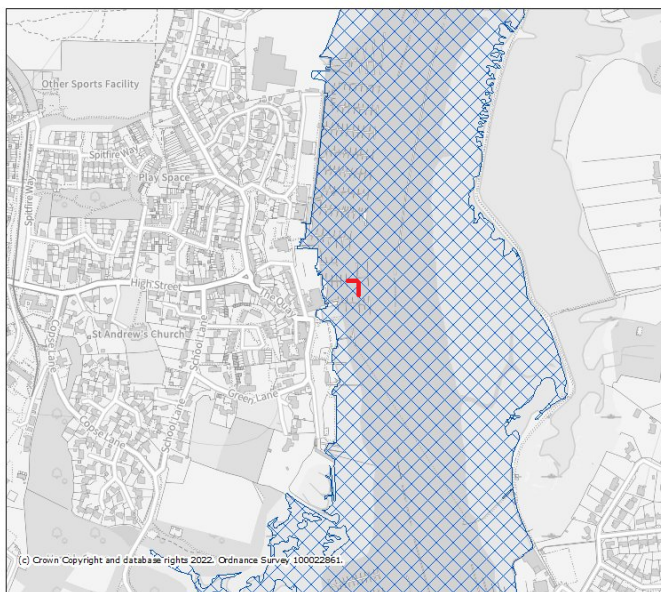
- Shellfish Waters 2014 (England)

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Coastal Sensitive Areas - Eutrophic.

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Coastal Sensitive Areas - Eutrophic



Legend

- Coastal Sensitive Areas - Eutrophic (England)

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3. Assessment of Potential Impacts on Designated Sites.

This section includes the SAC, SPA and Ramsar sites.

3.1 SAC

Solent Maritime Special Area of Conservation SAC – (UK0030059)	
Proximity of works	Very small area within SAC, note how adjacent marinas are excluded.
Conservation advice package used	NE Conservation Advice Package Solent Maritime SAC
Qualifying features and relevance	<p>Annual vegetation of drift lines - occurs on shingle beaches and is not applicable here.</p> <p>Atlantic salt meadows (Glauco-Puccinellietalia maritime) – this is related to saltmarsh, which is not present in the area.</p> <p>Coastal lagoons – does not apply</p> <p>Desmoulin's whorl snail (Vertigo moulinsiana) – no suitable habitat</p> <p>Estuaries - applies</p> <p>Mudflats and sandflats not covered by seawater at low tide – foreshore to the south west of the Club pontoons, no possible impact.</p> <p>Perennial vegetation of stony banks – not present</p> <p>Salicornia and other annuals colonising mud and sand – not present</p> <p>Sandbanks which are slightly covered by sea water all the time – not present</p> <p>Shifting dunes along the shoreline with Ammophila arenaria (“White dunes”) – not present</p> <p>Spartina swards (Spartinion maritimae) – not present</p>
Qualifying features to be assessed	Estuaries
Conservation objectives	<p>The objectives are to ensure that, subject to natural change, the integrity of the site is maintained or restored as appropriate, and that the site contributes to achieving the Favourable Conservation Status of its qualifying features, by maintaining or restoring:</p> <ul style="list-style-type: none"> • the extent and distribution of qualifying natural habitats and habitats of the qualifying species • the structure and function (including typical species) of qualifying natural habitats • the structure and function of the habitats of the qualifying species • the supporting processes on which qualifying natural habitats and the habitats of qualifying species rely • the populations of each of the qualifying species • the distribution of qualifying species within the site

Assessment categories –

SAC

The works consist of some pontoon rearrangement and installation, along with one pile removal and one pile relocation.

Ports & Harbours (construction) – Construction of port and harbour structures

Ports & Harbours (construction) – Piling

Advice on operations from Natural England’s Designated Sites View. Construction of port and harbour structures

Pressure Name	Risk Profile of pressure	Estuaries – subtidal mixed sediments
Abrasion/disturbance of the substrate on the surface of the seabed	Med/High	Sensitive
Barrier to species movement	Med/High	Not sensitive
Changes in suspended solids (water clarity)	Med/High	Sensitive
Emergence regime changes, including tidal level change consideration	Med/High	Sensitive
Habitat structure changes – removal of substratum (extraction)	Med/High	Sensitive
Introduction of light	Med/High	----
Penetration and/or disturbance to the substratum below the surface of the seabed including abrasion	Med/High	Sensitive
Physical change to another seabed type	Med/High	----
Physical change to another sediment type	Med/High	Sensitive
Physical loss (to land or freshwater)	Med/High	Sensitive
Removal of non-target species	Med/High	Sensitive
Smothering and siltation rate changes (Heavy)	Med/High	Sensitive
Smothering and siltation rate changes (Light)	Med/High	Sensitive
Underwater light changes	Med/High	Not sensitive
Vibration	Med/High	----
Visual disturbance	Med/High	Not sensitive
Water flow (tidal current) changes, including sediment transport	Med/High	Not sensitive

Wave exposure changes	Med/High	Not sensitive
Deoxydenation	Low	Sensitive
Hydrocarbon and PAH contamination	Low	n/a
Introduction of other substances (solid, liquid or gas)	Low	n/a
Introduction or spread of invasive non-indigenous species (INIS)	Low	Sensitive
Nutrient enrichment		Not sensitive
Synthetic compound contamination	Low	n/a
Transition elements and organo-metal contamination	Low	n/a

Ports & Harbours (construction) – Construction of port and harbour structures. Assessment of pressures (from Natural England’s Designated Sites View)

Abrasion/disturbance of the substrate on the surface of the seabed

Risk is medium-high and refers to structures, anchors, mooring chains, and piles. The works include small scale tubular steel piling. **Potential impact**

Changes in suspended solids (water clarity)

Risk is medium-high and can only occur during piling. **Potential impact**

Emergence regime changes, including tidal level change consideration

Risk is medium-high. The nature of the works (two additional pontoons, no increase in berthing and 1 pile removal) can have no possible impact.

Habitat structure changes – removal of substratum (extraction)

Risk is medium-high. No substratum extraction is proposed, no impact.

Penetration and/or disturbance to the substratum below the surface of the seabed including abrasion

Risk is medium-high and refers to anchor moorings. None of which are proposed. No impact.

Physical change to another sediment type

Risk is medium-high. No change in sediment type is possible, no impact.

Physical loss (to land or freshwater)

Risk is medium-high. No physical loss is possible, no impact.

Removal of non-target species

Risk is medium-high. No removal is possible, no impact.

Smothering and siltation rate changes (Heavy)

Risk is medium-high. No smothering nor changes in sedimentation possible, no impact.

Smothering and siltation rate changes (Light)

Risk is medium-high. No smothering nor changes in sedimentation possible, no impact.

Deoxygenation

Risk is low. No possibility of deoxygenation from the proposed works. No impact

Invasive non-indigenous species

The works are small scale, and the proposed plant works locally. No possible impact.

Advice on operations from Natural England's Designated Sites View. Construction of port and harbour structures - piling

Pressure Name	Risk Profile of pressure	Estuaries – subtidal mixed sediments
Abrasion/disturbance of the substrate on the surface of the seabed	Med/High	Sensitive
Barrier to species movement	Med/High	Not sensitive
Changes in suspended solids (water clarity)	Med/High	Sensitive
Penetration and/or disturbance to the substratum below the surface of the seabed including abrasion	Med/High	Sensitive
Physical loss (to land or freshwater)	Med/High	Sensitive
Smothering and siltation rate changes (Light)	Med/High	Sensitive
Underwater noise changes	Med/High	Not sensitive
Vibration	Med/High	----
Visual disturbance	Med/High	Not sensitive
Hydrocarbon and PAH contamination	Low	n/a
Introduction of light	Low	Insufficient evidence
Introduction of other substances (solid, liquid or gas)	Low	n/a
Introduction or spread of invasive non-indigenous species (INIS)	Low	Sensitive
Physical change to another seabed type	Low	----

Physical change to another sediment type	Low	Sensitive
Synthetic compound contamination	Low	n/a
Transition elements and organo-metal contamination	Low	n/a
Water flow (tidal current) changes, including sediment transport	Low	Not sensitive
Wave exposure changes	Low	Not sensitive

Ports & Harbours (construction) – Piling. Assessment of pressures (from Natural England’s Designated Sites View)

Abrasion/disturbance of the substrate on the surface of the seabed

Risk is medium-high and refers to structures, anchors, mooring chains, and piles. The works include small scale tubular steel piling. **Potential impact**

Changes in suspended solids (water clarity)

Risk is medium-high and can only occur during piling. **Potential impact**

Penetration and/or disturbance to the substratum below the surface of the seabed including abrasion

Risk is medium-high and refers to anchor moorings. The works include piling. **Potential impact.**

Physical loss (to land or freshwater)

Risk is medium-high. No physical loss is possible, no impact.

Smothering and siltation rate changes (Light)

Risk is medium-high. No smothering nor changes in sedimentation possible, no impact.

Invasive non-indigenous species

Risk is low. The works are small scale, and the proposed plant works locally. No possible impact.

Physical change to another sediment type

Risk is medium-high. No change in sediment type is possible, no impact.

Summary for SAC Potential Impacts

The only part of the works that can have any possible impact is the piling. In terms of piling the following impacts have been identified:

- i. Abrasion/disturbance of the substrate on the surface of the seabed
- ii. Changes in suspended solids (water clarity)
- iii. Penetration and/or disturbance to the substratum below the surface of the seabed including abrasion

The piling works consist of the removal of one tubular steel pile (Ø473mm) and the relocation of one tubular steel pile (Ø473mm). The relocation (driving) of one pile will effectively cover

(penetrate/disturb) 0.176m² of seabed. The removal of one pile and the area from the relocated pile will expose 0.352m² of seabed. This is a relatively significant net gain.

The piling operation will be undertaken using vibro-piling methods and is estimated to take 10-15 minutes for each pile. This has the potential to resuspend sediment locally at the base of the pile. However, this is very short-lived and of low concentrations. Tidal currents will disperse any material as it becomes suspended. There will be no measurable impact.

It is therefore concluded that the proposed works will have no impact on the SAC.

3.2 SPA & Ramsar

Solent & Southampton Water Special Protection Area (UK9011061) and Solent & Southampton Water Ramsar (UK11063).	
Proximity of works	>100m distance from opposite bank for S&SW SPA & Ramsar
Conservation advice package used	NE Conservation Advice Package Solent & Southampton Water SPA. Ramsar covered by same features.
Qualifying features and relevance screening	Black-tailed godwit (<i>Limosa limosa islandica</i>), Non-breeding Common tern (<i>Sterna hirundo</i>), Breeding Dark-bellied brent goose (<i>Branta bernicla bernicla</i>), Non-breeding Little tern (<i>Sternula albifrons</i>), Breeding Mediterranean gull (<i>Ichthyaetus melanocephalus</i>), Breeding Ringed plover (<i>Charadrius hiaticula</i>), Non-breeding Roseate tern (<i>Sterna dougallii</i>), Breeding Sandwich tern (<i>Thalasseus sandvicensis</i>), Breeding Teal (<i>Anas crecca</i>), Non-breeding Waterbird assemblage, Non-breeding
Qualifying features to be assessed	All birds
Conservation objectives	The objectives are to ensure that, subject to natural change, the integrity of the site is maintained or restored as appropriate, and that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring <ul style="list-style-type: none"> • the extent and distribution of the habitats of the qualifying features • the structure and function of the habitats of the qualifying features • the supporting processes on which the habitats of the qualifying features rely • the populations of each of the qualifying features • the distribution of qualifying features within the site

Solent & Dorset Coast Special Protection Area SPA – UK9020330	
This is primarily a designation for Terns (Sandwich, Common & Little) and extends the existing SPA up to the high-water mark. As such, it includes many areas of existing marine development.	
Proximity of works	Within the site boundary
Conservation advice package used	NE Conservation Advice Package Solent & Dorset Coast SPA.
Qualifying features and relevance screening	Common tern (<i>Sterna hirundo</i>), Breeding Little tern (<i>Sternula albifrons</i>), Breeding Sandwich tern (<i>Thalasseus sandvicensis</i>), Breeding
Qualifying features to be assessed	All Terns
Conservation objectives	The objectives are to ensure that, subject to natural change, the integrity of the site is maintained or restored as appropriate, and that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring <ul style="list-style-type: none"> • the extent and distribution of the habitats of the qualifying features • the structure and function of the habitats of the qualifying features • the supporting processes on which the habitats of the qualifying features rely • the populations of each of the qualifying features • the distribution of qualifying features within the site

The SPA qualifies for breeding and overwintering bird species. Breeding species include Common tern (*Sterna hirundo*), Little tern (*Sternula albifrons*), Mediterranean gull (*Ichthyaetus melanocephalus*), Roseate tern (*Sterna dougallii*), and Sandwich tern (*Thalasseus sandvicensis*). Overwintering birds include Black-tailed godwit (*Limosa limosa islandica*), Dark-bellied brent goose (*Branta bernicla bernicla*), Ringed plover (*Charadrius hiaticula*), Teal (*Anas crecca*).

Under the Ramsar designation the criteria are:

Supporting wetland habitats such as saline lagoons, saltmarshes, estuaries, intertidal flats, shallow coastal waters, grazing marshes, reedbeds, coastal woodland and rocky boulder reefs.
Supporting an important assemblage of rare plants and invertebrates.
Supporting avian assemblages of international importance
Regularly supporting 1% of the individuals in a waterbird assemblage (dark-bellied Brent goose).

Conservation Objectives

Reduce the frequency, duration and / or intensity of disturbance affecting roosting, foraging, feeding, moulting and/or loafing birds so that they are not significantly disturbed.

Birds and human activity –

Human activities can result in bird disturbance. Disturbance is defined as any human-induced activity sufficient to disrupt normal behaviours at a level that may substantially affect their behaviour. This can have an important affect if suitable habitat is impacted. Disturbance is significant if a population of species is impacted by a change in local distribution or abundance.

The works are a minor rearrangement of an existing facility within an area of existing high marine activity. The duration of the construction is short, with marine plant being on site for less than 1 week.

4. Summary

Examination of the existing data and site activities along with Natural England's online guidance has not identified any Likely Significant Effects (LSEs).