

Habitat Regulations Assessment (HRA)
Screening Matrix and Appropriate Assessment Statement

PLEASE NOTE: Undertaking the HRA process is the responsibility of the decision maker as the Competent Authority for the purpose of the Habitats Regulations. However, it is the responsibility of the applicant to provide the Competent Authority with the information that they require for this purpose.

HRA drafting date:	30 January 2024
HRA completion date:	11 April 2024
Application reference:	F/23/96527
Application address:	Land between Allington Manor Farm, Roddington Forge & Chalcroft Farm, Allington Lane, West End, SO30 2HU
Application description:	Development of Solar Farm and Battery Storage with combined maximum grid export capacity of 27 MW, including solar panels, containerised battery storage, security fencing, CCTV cameras, internal access tracks, underground cabling, inverters, substations, grid connection, environmental enhancement measures and other ancillary development.
Lead Planning Officer:	Nick Parker
Case Officer:	Dawn Errington
Please note that all references in this assessment to the 'Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019'.	

Stage 1 - details of the plan or project	
European site potentially impacted by planning application, plan, or project:	Solent and Southampton Water Special Protection Area (SPA) and Ramsar site; River Itchen Special Area of Conservation (SAC); New Forest Special Protection Area (SPA), Special Area of Conservation (SAC) and Ramsar; and Solent Maritime Special Area of Conservation (SAC). Although the above Ramsar sites are not subject to the Wild Birds Directive, the Habitats Directive, or the Habitats Regulations, they are given the same protection as SPAs and SACs (NPPF paragraph 176(b)). The assessment, therefore, also addresses the relevant Ramsar criteria for which this site is designated.
Is the planning application directly connected with or necessary to the management of the site (if yes, Applicant should have provided details)?	No.
Are there any other projects or plans that together with the planning application being assessed could affect the site (Applicant to	No

provide details to allow an 'in combination' effect to be assessed)?

Stage 2 - HRA screening assessment

Screening under Regulation 63(1)(a) of the Habitats Regulations – The Applicant to provide evidence so that a judgement can be made as to whether there could be any potential significant impacts of the development on the integrity of the SPA/SAC/Ramsar.

The River Itchen SAC/SSSI is located less than 0.5 km to the west of the application site boundary and is hydrologically linked to the site

River Itchen SAC

The River Itchen qualifies as a SAC for its supporting of the Annex I habitat *Water courses of plain to montane levels with the Ranunculon fluitantis and Callitricho Batrachion vegetation* (rivers with floating vegetation often dominated by watercrowfoot).

It also qualifies for its designation by supporting the following species listed in Annex II of the Directive:

- Southern Damselfly *Coenagrion mercuriale*;
- Bullhead *Cottus gobio*;
- White-clawed (or Atlantic stream) Crayfish *Austropotamobius pallipes*;
- Brook Lamprey *Lampetra planeri*;
- Atlantic Salmon *Salmo salar*; and
- Otter *Lutra lutra*.

Conservation objectives

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring:

- The extent and distribution of qualifying natural habitats and habitats of qualifying species;
- The structure and function (including typical species) of qualifying natural habitats;
- The structure and function of the habitats of qualifying species;
- The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely;
- The populations of qualifying species; and
- The distribution of qualifying species within the site.

The SAC also contains one component of the River Itchen SSSI. The SSSI has broadly the same qualifying features as the SAC and additionally breeding water bird populations, freshwater invertebrate species and assemblages, water voles and other wetland habitats.

Potential Impacts	Comments
Impacts from construction activities	The majority of the site is modified grassland containing high proportions of silt and clay which when disturbed (e.g. during the cultivation of arable land, cattle poaching of stream banks or during construction operations) can give rise to fine particle sediment in surface water run-off into the watercourses to which the site drains. Development would be likely to have the most immediate effects on mobilising and conveying fine particle sediments.

	There is also the potential for spillages/other pollution events to occur during the construction period which if allowed to enter the water courses on site could be conveyed into the River Itchen SAC. It is necessary to incorporate appropriate measures and control the types of construction methods used and nature of operation of the construction process via a CEMP. <u>It is necessary therefore to screen in impacts from construction activities on the River Itchen SAC into the Appropriate Assessment.</u>
Increased recreational disturbance	Construction of the solar farm will not result in any increase in residential development or associated recreational pressures. In addition, recreational disturbance is not identified in the Standard Data Form or Site Improvement Plan as a threat or pressure to the conservation objectives of the River Itchen SAC. <u>It is therefore acceptable to screen out impacts from recreational disturbance on the River Itchen SAC from the Appropriate Assessment.</u>
Impacts on water quality and pollution	The project will not result in any net increase in accommodation, and therefore does not need to demonstrate nutrient neutrality. The River Itchen is designated because of its riverine habitat, its Southern damselfly and its bullhead fish; but it also has as qualifying features the white-clawed crayfish, brook lamprey, Atlantic salmon and otter. The Itchen SAC is at risk from increased sediments ("fines") with salmon in particular being very sensitive. Impacts identified from sediments include: • Excessive fine sediments are lethal to spawning fish species such as salmon; and exposure to fine sediment during incubation lowers the fitness of those salmon alevins that survive hatching; • Chalk streams are very sensitive to even minor increases in fine sediment concentrations because their riverbeds are unable to flush fines from gravels – hence the long tradition of cleaning gravel beds in these rivers; • The rate and amount of fine sediments that accumulate in spawning fish nests in riverbed gravels are directly related to the concentration and total load of fine sediment in the river; • Fine organic matter is more lethal than inorganic fine sediment for incubating salmonid embryos, and the finest sediments (clays) are much more lethal than larger particles To ensure that there is no increase in sediment load arising during operation, the associated SuDS features must function efficiently to minimise the likelihood of sediment transport through carriers into the Itchen SAC. Efficient function requires an appropriate management regime for the SuDS to be produced, agreed and implemented.

	<u>It is necessary therefore to screen in impacts on water quality and pollution on the River Itchen SAC into the Appropriate Assessment.</u>
Impacts resulting from water abstraction	The project will not impact the River Itchen SAC through water abstraction. Impacts relating to surface water flow and wastewater flow from the construction and operation of the road are addressed in the section on water quality. <u>It is therefore acceptable to screen out impacts from water abstraction on the River Itchen SAC from the Appropriate Assessment.</u>
Impacts from atmospheric pollution	Construction solar farm will generate minimal new operational vehicular traffic, and construction traffic would result in negligible emissions. <u>It is therefore acceptable to screen out impacts on the River Itchen SAC from atmospheric pollution from the Appropriate Assessment.</u>
Introduction of non-native/invasive plant species	Ecological survey work identified Japanese knotweed in one discrete locations. The main risk is from the spread of Japanese Knotweed as a result of disturbance of plants causing seed to be released into the Fair Oak/Quobleigh Stream and carried downstream via the Allington Stream to the River Itchen SAC. <u>It is necessary therefore to screen in impacts from non-native/invasive plant species on the River Itchen SAC into the Appropriate Assessment.</u>
Impacts on land used by species outside the European site boundaries for which the species are a qualifying interest feature	Otters are a qualifying feature of the River Itchen SAC. While there is no recent evidence of otter activity within the application site, there is historic evidence of such use and it is considered that the application site is functionally linked to the River Itchen SAC for this reason. Therefore, the application site can be said to be functionally linked to the River Itchen SAC for the purposes of assessing the potential effects of the proposed development on otter. Noise and vibration from construction activities may have the effect of disturbing otters if they entered certain areas of the application site during the construction of the solar farm. Whilst otters are largely nocturnal, they do regularly feed and move during the daytime and will sometimes rest up in a 'couch' in a secluded location which could include for example the banks of the watercourses/ditches on the application site. <u>It is necessary therefore to screen in impacts on otters as a qualifying interest feature of the River Itchen SAC into the Appropriate Assessment.</u>

Solent and Southampton Water SPA/Ramsar

Solent and Southampton Water qualifies as a SPA for its breeding and wintering bird species. As breeding species, the site contains Common Tern, Little Tern, Mediterranean Gull, Roseate Tern and Sandwich Tern. Over wintering birds include Black-tailed Godwit, Dark-bellied Brent Goose, Ringed Plover and Teal.

Solent and Southampton Water also qualifies as a Ramsar site under four criteria, including:

- Supporting many 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 population of one species or subspecies of water bird (in this case, dark-bellied Brent goose).

Conservation objectives

Subject to natural change, ensure that the integrity of the SPA site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring the extent and distribution, the structure and function of the habitats of the qualifying features and the population of each of the qualifying features.

SPAs classified under the EU Birds Directive and SACs designated under the EU Habitats Directive together form the Natura 2000 network. The Habitats Directive establishes the need to properly protect these sites and identifies that this should be carried out having regard to defined 'conservation objectives'. Ramsar sites were established as part of a global convention on important wetland areas; as such, on their own, they are not part of the EU protected sites. Therefore, Ramsar sites do not have agreed conservation objectives as a requirement of EU legislation. However, Ramsar sites are generally contiguous with a number of wetland SPAs and their underlying SSSIs.

While Ramsar sites do not have defined (per EU Habitats Directive) conservation objectives, it is a requirement that any protection and management measures in place for SSSIs, SPAs, and SACs that are contiguous with Ramsar sites adequately cover Ramsar interests where those interests are wider than other underlying UK / EU designation or classification. (<https://publications.parliament.uk/pa/cm199900/cmhansrd/vo001113/text/01113w12.htm> para 12)

The key way in which this is secured through UK planning policy is through NPPF 2019 paragraph 176 which explicitly states that Ramsar sites must be considered in the same way as EU sites.

Potential Impacts	Comments
Impacts from construction activities	Solent and Southampton Water SPA/Ramsar are located approximately 4km from the site, downstream of the River Itchen SAC. The majority of the site is modified grassland containing high proportions of silt and clay which when disturbed (e.g. during the cultivation of arable land, cattle poaching of stream banks or during

	construction operations) can give rise to fine particle sediment in surface water run-off into the watercourses to which the site drains. The majority of the site is modified grassland containing high proportions of silt and clay which when disturbed (e.g. during the cultivation of arable land, cattle poaching of stream banks or during construction operations) can give rise to fine particle sediment in surface water run-off into the watercourses to which the site drains. Development would be likely to have the most immediate effects on mobilising and conveying fine particle sediments. There is also the potential for spillages/other pollution events to occur during the construction period which if allowed to enter the water courses on site could be conveyed into the Solent and Southampton Water SPA. It is necessary to incorporate appropriate measures and control the types of construction methods used and nature of operation of the construction process via a CEMP <u>It is necessary therefore to screen in impacts from construction activities on the Solent and Southampton Water SPA into the Appropriate Assessment.</u>
Increased recreational disturbance	Construction and operation of the solar farm will not result in any increase in residential development or associated recreational pressures. <u>It is therefore acceptable to screen out impacts from recreational disturbance on the Solent and Southampton Water SPA from the Appropriate Assessment.</u>
Impacts on water quality and pollution	There are no implications for Solent and Southampton Water SPA/Ramsar sites resulting from water quality or pollution issues as a result of the project. <u>It is therefore acceptable to screen out impacts on water quality and pollution on the Solent and Southampton Water SPA into the Appropriate Assessment.</u>
Impacts resulting from water abstraction	There are no implications for Solent and Southampton Water SPA/Ramsar sites resulting from water abstraction as a result of the project. <u>It is therefore acceptable to screen out impacts resulting from water abstraction on the Solent and Southampton Water SPA from the Appropriate Assessment.</u>
Impacts from atmospheric pollution	Solent and Southampton Water SPA/Ramsar are located approximately 4km from the site and will not be impacted by any atmospheric pollution generated during construction of the solar farm.

	<u>It is therefore acceptable to screen out impacts from atmospheric pollution on the Solent and Southampton Water SPA from the Appropriate Assessment.</u>
Introduction of non-native/invasive plant species	There are no implications for Solent and Southampton Water SPA/Ramsar sites from non-native/invasive plants as a result of this application. <u>It is therefore acceptable to screen out impacts from non-native/invasive plants on the Solent and Southampton Water SPA/Ramsar from the Appropriate Assessment.</u>
Impacts on land used by species outside the European site boundaries for which the species are a qualifying interest feature	No qualifying species for Solent and Southampton Water SPA/Ramsar sites will be impacted through construction of the solar farm <u>It is therefore acceptable to screen out impacts on qualifying features of Solent and Southampton Water SPA/Ramsar from the Appropriate Assessment.</u>

Solent Maritime SAC

The Solent Maritime SAC qualifies for its designation by supporting the following habitats that are listed in Annex 1 of the Directive and are the primary reason for the selection of the site.

- Estuaries;
- Spartina swards (*Spartinion maritimae*); and
- Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*)

It also qualifies for its designation by supporting the following Annex 1 Habitats

- Sandbanks which are slightly covered by sea water all the time;
- Mudflats and sandflats not covered by seawater at low tide;
- Coastal lagoons (a priority feature);
- Annual vegetation of drift lines;
- Perennial vegetation of stony banks;
- Salicornia and other annuals colonizing mud and sand; and
- Shifting dunes along the shoreline with *Ammophila arenaria* ("white dunes").

The site also qualifies for its designation by supporting Desmoulin's Whorl Snail *Vertigo moulinsiana* which is listed in Annex 2 of the Directive.

Conservation objectives

The conservation objectives for Solent Maritime SAC are listed as follows:

- The extent and distribution of qualifying natural habitats and habitats of qualifying species;
- The structure and function (including typical species) of qualifying natural habitats;
- The structure and function of the habitats of qualifying species;
- The supporting processes on which qualifying natural habitats and the habitats of

qualifying species rely;

- The populations of qualifying species; and
- The distribution of qualifying species within the site.

Sixteen component SSSI occur within the area designated as a SPA: Bouldnor and Hamstead Cliffs SSSI, Chichester Harbour SSSI, Eling and Bury Marshes SSSI, Hurst Castle and Lymington River Estuary SSSI, Hythe to Calshot Marshes SSSI, King's Quay Shore SSSI, Langstone Harbour SSSI, Lee-on-the Solent to Itchen Estuary SSSI, Lincegrove and Hackett's Marshes SSSI, Lower Test Valley SSSI, Medina Estuary SSSI, Newtown Harbour SSSI, North Solent SSSI, Thorness Bay SSSI, Upper Hamble Estuary and Woods SSSI and Yar Estuary SSSI. Of these component SSSIs only Lower Test Valley SSSI, Eling and Bury Marshes SSSI and Upper Hamble and Woods SSSI are considered to be within the potential Zone of Influence.

Potential Impacts	Comments
Impacts from construction activities	The Solent Maritime SAC is sufficiently distant from the site at its nearest point and is separated by a large expanse of urban development. Hydrologically, the site and SAC are separated by the large, tidal expanse of Southampton Water. Therefore, any unmitigated effects arising from construction activities on site will have negligible impact on the SAC. <u>It is therefore acceptable to screen out impacts from construction activities on the Solent Maritime SAC from the Appropriate Assessment.</u>
Recreational impacts	Construction of the project will not result in any increase in residential development or associated recreational pressures. <u>It is therefore acceptable to screen out impacts from recreational disturbance on the Solent Maritime SAC from the Appropriate Assessment.</u>
Impacts on water quality and pollution	There are no implications for Solent Maritime SAC resulting from water quality or pollution issues as a result of the project. <u>It is therefore acceptable to screen out impacts on water quality and pollution on the Solent Maritime SAC from the Appropriate Assessment.</u>
Impacts resulting from water abstraction	There are no implications for Solent Maritime SAC resulting from water abstraction as a result of the project. <u>It is therefore acceptable to screen out impacts on the Solent Maritime SAC from water abstraction from the Appropriate Assessment.</u>
Impacts from atmospheric pollution	Solent Maritime SAC is located approximately 4.3km from the site at its nearest point and will not be impacted by any atmospheric pollution generated during construction of the project.

	<u>It is therefore acceptable to screen out impacts from atmospheric pollution on the Solent Maritime SAC from the Appropriate Assessment.</u>
Introduction of non-native/invasive plant species	There are no implications for the Solent Maritime SAC from non-native/invasive plants as a result of this application. <u>It is therefore acceptable to screen out impacts from non-native/invasive plants on the Solent Maritime SAC from the Appropriate Assessment.</u>
Impacts on land used by species outside the European site boundaries for which the species are a qualifying interest feature	No qualifying species for the Solent Maritime SAC site will be impacted through construction of the solar farm. <u>It is therefore acceptable to screen out impacts on qualifying features of the Solent Maritime SAC from the Appropriate Assessment.</u>

New Forest SAC

The New Forest SAC qualifies for its designation by supporting the following Annex 1 habitats which are the primary reason for the selection of the site:

- Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae)
- Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoëto-Nanojuncetea
- Northern Atlantic wet heaths with Erica tetralix
- European dry heaths
- Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae)
- Depressions on peat substrates of the Rhynchosporion
- Atlantic acidophilous beech forests with Ilex and sometimes also Taxus in the shrublayer (Quercion robori-petraeae or Ilici-Fagenion)
- Asperulo-Fagetum beech forests
- Old acidophilous oak woods with Quercus robur on sandy plains
- Bog woodland (Priority feature)
- Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) (Priority feature)

It also qualifies for its designation by supporting the following Annex 1 Habitats (not a primary reason for selection):

- Transition mires and quaking bogs
- Alkaline fens

Annex II species present as qualifying species a primary reason for selection:

Southern damselfly Coenagrion mercurial (a primary reason)
 Stag beetle Lucanus cervus (a primary reason)
 Great crested newt Triturus cristatus (not a primary reason)

Conservation objectives

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To ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;

- The extent and distribution of qualifying natural habitats and habitats of qualifying species
- The structure and function (including typical species) of qualifying natural habitats
- The structure and function of the habitats of qualifying species
- The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely
- The populations of qualifying species, and,
- The distribution of qualifying species within the site.

New Forest SPA

The New Forest SPA qualifies under Article 4.1 of the Birds Directive by supporting breeding populations of European importance of the following species listed in Annex I of the Directive:

- Nightjar *Caprimulgus europaeus*, 300 pairs representing at least 8.8% of the breeding population in Great Britain (count as at 1991)
- Woodlark *Lullula arborea*, 177 pairs representing at least 29.5% of the breeding population in Great Britain (no count period specified)
- Honey buzzard *Pernis apivorus*, 2 pairs representing at least 12.5% of the breeding population in Great Britain (no count period specified)
- Dartford warbler *Sylvia undata*, 538 pairs representing at least 33.6% of the breeding population in Great Britain (no count period specified)

It also qualifies under Article 4.1 by supporting the following overwintering Annex 1 species:

- Hen harrier *Circus cyaneus*, 15 individuals representing at least 2.0% of the wintering population in Great Britain (no count period specified)

The site qualifies under Article 4.2 of the Birds Directive by supporting breeding populations of European importance of the following regularly occurring migratory species:

- Hobby *Falco subbuteo*, 25 pairs representing at least 5.0% of the population in Great Britain (no count period specified)
- Wood warbler *Phylloscopus sibilatrix*, unspecified pairs representing at least 2.0% of the population in Great Britain (no count period specified).

Conservation objectives

To ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring:

- 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 population of each of the qualifying features; and
- The distribution of the qualifying features within the site.

New Forest Ramsar

The New Forest Ramsar site qualifies under the following Ramsar Convention criteria:

- Criterion 1: Valley mires and wet heaths are found throughout the site and are of outstanding scientific interest. The mires and heaths are within catchments whose uncultivated and undeveloped state buffer the mires against adverse ecological change. This is the largest concentration of intact valley mires of their type in Britain.

- Criterion 2: The site supports a diverse assemblage of wetland plants and animals including several nationally rare species. Seven species of nationally rare plant are found on the site, as are at least 65 British Red Data Book species of invertebrate.
- Criterion 3: The mire habitats are of high ecological quality and diversity and have undisturbed transition zones. The invertebrate fauna of the site is important due to the concentration of rare and scarce wetland species. The whole site complex, with its examples of semi-natural habitats is essential to the genetic and ecological diversity of southern England.

Potential Impacts	Comments
Impacts from construction activities	The New Forest SAC/ SPA/ Ramsar is located approximately 11km from the site at its nearest point and is separated by a large expanse of urban development. Hydrologically, the site and SAC are separated by the large, tidal expanse of Southampton Water. Therefore, any unmitigated effects arising from construction activities on site will have a negligible impact on the SAC. <u>It is therefore acceptable to screen out impacts from construction activities on the New Forest SAC/ SPA/ Ramsar from the Appropriate Assessment.</u>
Increased recreational disturbance	Construction and operation of the solar farm will not result in any increase in residential development or associated recreational pressures. <u>It is therefore acceptable to screen out impacts from recreational disturbance on the New Forest SAC/ SPA/ Ramsar from the Appropriate Assessment.</u>
Impacts on water quality and pollution	There are no implications for the New Forest as a result of potential impacts from water quality and pollution for the project. <u>It is therefore acceptable to screen out impacts on water quality and pollution on the New Forest SAC/ SPA/ Ramsar from the Appropriate Assessment.</u>
Impacts resulting from water abstraction	There are no implications for the New Forest as a result of potential impacts from water abstraction for the project. <u>It is therefore acceptable to screen out impacts from water abstraction on the New Forest SAC/ SPA/ Ramsar from the Appropriate Assessment.</u>
Impacts from atmospheric pollution	There are no implications for the New Forest as a result of impacts from atmospheric pollution for the project. <u>It is therefore acceptable to screen out impacts from atmospheric pollution on the New Forest SAC/ SPA/ Ramsar from the Appropriate Assessment.</u>
Introduction of non-native/invasive plant species	There are no implications for the New Forest as a result of non-native/invasive plant species for the project.

	<u>It is therefore acceptable to screen out impacts from non-native/invasive plants on the New Forest SAC/ SPA/ Ramsar from the Appropriate Assessment.</u>
Impacts on land used by species outside the European site boundaries for which the species are a qualifying interest feature	There are no implications for qualifying species of the New Forest SPA/SAC/Ramsar for the project. <u>It is therefore acceptable to screen out impacts on qualifying species from the New Forest SPA/SAC/Ramsar from the Appropriate Assessment.</u>

Other Natura 2000 Sites

Other Natura 2000 Sites have been considered and screened out due to their distance from the development site and them being outside the zones of influence.

Would the proposal lead to a likely significant effect on European sites integrity?

YES – Stage 2 screening of the HRA of the planning application has concluded that the development would have a likely significant effect on River Itchen SAC and Solent and Southampton Water SPA and Ramsar site through construction activities.

Stage 2 of the HRA of the planning application has also concluded that the development would have a likely significant effect on River Itchen SAC from impacts to water quality and pollution.

Additionally, the Stage 2 screening concluded a likely significant effect from non-native/invasive plants on the River Itchen SAC.

Furthermore, the Stage 2 screening has concluded that the development would have a likely significant effect on otters as a qualifying species for the River Itchen SAC, Solent and Southampton Water SPA and Ramsar site and Solent and Dorset Coast SPA through disturbance during construction.

(If yes, continue to Stage 3).

Stage 3 - Appropriate Assessment

Appropriate Assessment under Regulation 63(1) - if there are any potential significant impacts, the applicant must provide evidence showing avoidance and/or mitigation measures to allow an Assessment to be made. The Applicant must also provide details which demonstrate any long term management, maintenance and funding of any solution.

River Itchen SAC

Potential Impacts	Comments
Impacts from construction activities	Excavation and disturbance of the ground during construction and decommissioning present risks of fine particle sediment mobilisation and run off, and other construction related activities such as the temporary stockpiling of topsoil and subsoil could also wash away if unconsolidated and unprotected and wheel washing facilities for plant and vehicles leaving the construction site.

As such, sediment mobilisation during construction is proposed to be controlled and mitigated through the installation of temporary SuDS features and/or early installation of permanent SuDS features and through implementation of a best practice Construction and Environmental Management Plan (CEMP). A Draft CEMP(Locogen) has been submitted as Appendix J of the Design and Access Statement.

Best practice associated with the operation of SuDS in line with Chapter 31 of the CIRIA SuDS Manual will be followed at all times, together with a robust programme of monitoring and intervention (CIRIA, 2015. The SuDS Manual. C753F)

A Construction Environmental Management Plan addressing these issues is required by condition. The early installation of the permanent SuDs features will be implemented to prevent silt contamination of high-risk watercourses including the River Itchen SAC.

The CEMP will include the following principles:

- Storage of construction materials/chemicals and equipment;
- Dust suppression
- Chemical and/or fuel run-off from construction into nearby watercourse(s)
- Waste disposal
- Noise/visual/vibrational impacts
- Mammal ramps for open excavations
- Lighting measures to ensure boundary habitats are not luminated

Sediment control:

- Control of sediment and runoff will be managed in accordance with the principles set out in the CIRIA SuDs Manual.
- The use of methods including, retaining grass and vegetation for as long as possible, in disturbed areas, controlling erosion via the use of straw bale barriers, geotextile silt fences and sediment basins (with regular clearing out of excess sediment off-site) and ensuring that the runoff from the disturbed area passes through sediment control systems before discharge will be required.
- Worked areas should be finished and vegetation established as soon as works are complete, and the area/time ground is left bare and disturbed should be minimised.
- All discharge of water into local watercourses will be in line with relevant Environment agency licenses and permits.

- All sediment controls will be set out in the Contractors Construction phase plan and will be subject to weekly checks (or more frequently if required).

Dealing with silty or contaminated water:

- Silt, including fine silt or other contaminated water must not be allowed to enter watercourses and ditches. The water courses in this area feed into the River Itchen, a European Special Area of Conservation for wildlife. Pollution of the watercourses could have significant environmental and ecological impact.
- There is a potential for significant silt and run-off from the construction works and storage areas, (which slope down towards the drainage ditches) to enter watercourses and ditches.
- The Principal Contractors plan their work to contain any contamination, for example, bunding, the use silt barriers/geotextile fencing or alternative effective measures to prevent this occurring.
- Contaminated water can arise from excavations, exposed ground, stockpiles, plant and wheel washing, concrete mixing, or other construction activities.
- Catch-pits or silt traps on drains will be used to remove suspended solids such as mud and silt to prevent contaminated water entering surface water drains, surface waters or ground waters, or draining onto the land.
- Wheel washing locations will be positioned away from watercourses and ditches. Before wheel washing takes place, checks will be carried out to ensure that sediment traps and measures to prevent run-off and the transmission of hydrocarbons/salt/invasive plant seeds are in place during cleaning. These will be checked and emptied and at regular intervals.
- Adequate provision for dealing with silty water will be agreed in advance. Any planned discharges off the site will require prior approval with the appropriate authorities.
- All washings from cement and other cleaning processes will be contained within the site and removed via tanker or other appropriate means to prevent discharge into the local environment.
- All contaminated water will be removed from site and adequately treated prior to discharge under the appropriate permits and licenses.

The relevant drainage and SuDS plans and the CEMP (including any further specifications required) can be secured through appropriately worded planning conditions and provided these are then implemented as agreed there is unlikely to be any adverse impacts

	on the River Itchen through sediment mobilisation or pollution events during construction. An appropriate long-term maintenance, management, adoption and monitoring plan for the SuDS system will be essential to ensuring that there will be no impact on the integrity of the River Itchen during both construction and during the operational lifetime of the development. <u>This information will need to be secured as a pre-commencement condition</u> to ensure that the River Itchen SAC and its interest features are protected throughout construction and operation of the development. <u>It can therefore be concluded that with these mitigating measures in place, there will be no adverse effect on the integrity of the River Itchen SAC from construction activities.</u>
Impacts on water quality and pollution	The post- construction sediment shed would be lower than the existing baseline as the majority of the site is in agricultural use. To ensure that this remains the case, SuDS features need to be managed and maintained appropriately. All watercourses will be protected by a 10m vegetated ecological buffer (excluding SUDS connections and ecological improvements) Details of the proposed approach to surface water management for can be found in the DAS Appendix 4 Flood Risk and Drainage Impact Assessment. The location of the soakaways have been chosen on the downward slope, before the surface water reaches the Hatch Green Brook or the Moorgreen brook. The intent is to capture any overland flow in the SuDS device, prior to releasing into the watercourses outlined above at greenfield run off rates The approach taken to surface water management includes a SuDS management train approach and at least three forms of filtration which meets EBC Policy DM6 and also accords with NE guidance. A long term adaptive management and monitoring regime for SuDS will also be in place and enforced through planning condition and/or legal agreements. The Strategic SuDS Features will incorporate the following treatment processes: - • Retention of grass under panels to maximise bio-retention; • Multiple filter drains/soakaways filled with crushed rock; • Vegetated swales to prevent erosion The proposed surface water management strategy can be secured through an appropriately worded planning condition and provided this is implemented in full it is concluded that it is concluded that the project will not have a significant effect on the sediment loading of the River Itchen SAC. An appropriate long-term maintenance, management, adoption and monitoring plan for the SuDS system will be essential to ensuring that

	there will be no impact on the integrity of the River Itchen during both construction and during the operational lifetime of the development. <u>This information will need to be secured as a pre-commencement condition</u> to ensure that the River Itchen SAC and its interest features are protected throughout construction and operation of the development. <u>Eastleigh Borough Council will be responsible for the long term management of the SuDS, including its funding.</u> <u>It can therefore be concluded that adequate levels of sediment control during operation of the solar farm can be secured such that there will be no adverse effect on the integrity of the River Itchen SAC.</u>
Introduction of non-native/invasive plant species	The main risk identified from non-native/invasive plants to the integrity of the River Itchen SAC is from the spread of Japanese Knotweed as a result of disturbance of plants causing seed to be released into watercourses/ditches and carried downstream via the to the River Itchen SAC. The submitted Contaminated Land Assessment identifies that the site currently consists of two bunds of mixed materials and stones which are heavily vegetated. These have been assessed as hosting Japanese Knotweed which has likely been transferred from recent works on the railway, by which the bunds were formed. It is intended that a suitably qualified contractor will to remove the bunds pre-construction and dispose of the Japanese Knotweed entirely, removing any risk of this being a contamination source. This proposed mitigation can be secured through appropriate planning condition requiring a Construction Environmental Management Plans (CEMP) to include this eradication programme. Based on these considerations, it is considered that the risk of INNS getting into the River Itchen SAC as a result of construction of the solar farm or during operation are negligible (either in isolation or in-combination) and do not represent a threat to the integrity of the SAC. It is concluded construction of the solar farm will <u>not result in likely significant effects on the integrity of the River Itchen SAC</u> from impacts by non-native/invasive plants.
Impacts on land used by species outside the European site boundaries for which the species are a qualifying interest feature	Otter, white clawed crayfish and fish (particularly salmon) have been identified as sensitive receptors for the SAC which could be affected by construction activities through increased sedimentation or pollution/spillage events. The proposals have the potential to impact otter, a designated feature of the River Itchen SAC. The Ecological Assessment (Neo Environmental, December 2023) outlines otter presence on the site cannot be ruled out due to the presence of nearby watercourses with suitability for holt construction. Figure 6.10 of Eastleigh Borough

Councils Local Plan 2016-2036 HRA outlines a potential otter dispersal corridor adjacent to the site, albeit that it does not hold water year-round. This tributary links the River Itchen SAC with adjacent river catchments. In line with Paragraph 8.5.1 of the Local Plan HRA, mitigation is required to prevent impacts on otters using dispersal corridors outside of the SAC boundaries.

The risk to otters is during construction of the solar farm on disturbance and potential disruption of otter movement through the landscape. General construction mitigation measures have been included within the submitted Draft CEMP. This includes:

- sensitive timing and duration of works (especially to avoid disturbance to species such as otter which are mainly active between dusk and dawn)
- pollution avoidance measures and specific measures to protect legally protected species such as European otter including detailed method statements

Additional measures are proposed for construction works near watercourses including:

- a general 10 metre exclusion buffer to development activities within all stream corridors
- dust control measures
- lighting control measures
- habitat enhancement measures

It can therefore be concluded that there will be **no adverse effect on otters as a qualifying feature of the River Itchen SAC** as a result of the project.

Solent and Southampton Water SPA/Ramsar

Potential Impacts	Comments
Impacts from construction activities	The pathway for impacts to the Solent and Southampton Water SPA/Ramsar is through transport of pollution/sediments downstream in the River Itchen. The mitigation provided for impacts from construction on the River Itchen SAC (see relevant section above) will also be effective for preventing any adverse impacts downstream on the Solent and Southampton Water SPA/Ramsar sites. <u>It can therefore be concluded that with these mitigating measures in place, there will be no adverse effect on the integrity of the Solent and Southampton Water SPA arising from construction of the solar farm.</u>

Stage 4 – Summary of the Appropriate Assessment (To be carried out by the Competent Authority (the local planning authority) in liaison with Natural England

In conclusion, there will be no adverse effect on the integrity of the River Itchen SAC and Solent and Southampton Water SPA and Ramsar from construction impacts provided that a final CEMP and adopted approach to surface water management (see references below) are adhered to and secured through a Planning Condition.

There will be no adverse effect on the integrity of the River Itchen SAC through water quality and pollution from the project provided the approach taken to surface water management is secured through an appropriately worded planning condition and implemented as agreed thereafter. Long term management and maintenance would be provided (and funded) by the landowner, Eastleigh Borough Council.

In addition, an appropriate long-term maintenance, management, adoption and monitoring plan for the SuDS system will be required to ensure that there will be no impact on the integrity of the River Itchen during both construction and during the operational lifetime of the development. **This information will need to be secured as a pre-commencement condition** to ensure that the River Itchen SAC and its interest features are protected throughout construction and operation of the development.

The authority has also concluded that there will be no adverse effect on the integrity of the River Itchen SAC by non-native/invasive species provided the suggested mitigation is secured through appropriate planning conditions requiring the provision of an Ecological Mitigation and Management Plan (EMMP) or Biodiversity Management Plan. and Construction Environmental Management Plans (CEMP).

There will also be no adverse effect on otters as a qualifying species of the River Itchen SAC from construction of the scheme provided mitigation is secured through an appropriate planning condition.

This represents the authority's Appropriate Assessment as Competent Authority in accordance with requirements under Regulation 63 of the Conservation of Habitats and Species Regulations 2017, Article 6 (3) of the Habitats Directive and having due regard to its duties under Section 40(1) of the Natural Environment and Rural Communities Act 2006 to the purpose of conserving biodiversity. Consideration of the Ramsar site/s and potential Special Protection Areas is a matter of government policy set out in the National Planning Policy Framework 2019.

Natural England Officer:

Louise Wyatt