



PLANNING APPLICATIONS WEEKLY LIST NO.1490
Week Ending 6th September 2019

NOTE:

- (i). Decision Notices will be issued in accordance with the following recommendations unless **ANY MEMBER** wishes to refer any application to the Development Committee on the 19.09.2019

- (ii). Notification of any application that is to be referred must be received no later than 1:00pm on Wednesday **11th September 2019** this needs to include the application number, address and the planning reasons for the referral via email to Leadership Support Team leadershipsupportteam@rochford.gov.uk . If an application is referred close to the 1.00pm deadline it may be prudent for a Member to telephone the Leadership Support Team to ensure that the referral has been received prior to the deadline

- (iii) Any request for further information regarding applications must be sent to the Leadership Support Team via email.

Note

Do ensure that, if you request a proposal to go before Committee rather than be determined through officer delegation following a Weekly List report, you discuss your planning reasons with Marcus Hotten, Assistant Director of Place & Environment. A planning officer will then set out these planning reasons in the report to the Committee.

Application No : 17/00636/FUL Zoning :Metropolitan Green Belt/SSSI/SAC

Case Officer Mr Arwel Evans

Parish : Canewdon Parish Council

Ward : Roche North And Rural

Location : Wallasea Island Wild Coast Project Creeksea Ferry Road Wallasea Island

Proposal : Installation of floating pontoon and jetty at grassland point and provision of footpath on crest of seawall for passenger ferry

Environmental Appraisal including map Extracts from the submitted Environmental Assessment Figure D1 Location Plan (Ref: 4479 R2813_Fig_MCZ.mxd), Ref 4479 R2724_Fig1_Location .mxd: Location Plan, Location Map showing presence of native Oysters within the IFCA survey area , excluding private grounds, Map showing location of new ferry jetty at Grassland Point within the Crouch transitional water body (Ref 4479 R2813_Fig_WFD-Zones.mxd), Map showing close up of new ferry jetty and surrounding European/Ramsar Sites (Ref: 4479 R2813_Fig_Des_Zoom.mxd, Map showing location of the proposed new ferry jetty and surrounding European/Ramsar sites (Ref 4479 R2813_Fig_Designations.mxd, Location of Monument No 1526648 (Hull Assemblage), Location of Monument No 801275 (Large Barge), Location of Monument No 832148 (Large Barge), Map showing Location of designated shellfish waters in the vicinity of the proposed new ferry jetty at Grassland Point Ref 4479 R2813_Fig_Shellfish_Waters.mxd, Map indicating National Nature Conservation Designated Sites in the vicinity of the proposed new ferry jetty Ref 4479 R2813_Fig_SSSI_MCZ.mxd, Map showing European/International Nature Conservation designated sites in the vicinity of the proposed new ferry jetty, Ref 4479 R2813_Fig_Designations.mxd, Map showing red line boundary close up (1:500 scale) Jetty and footpath Ref 4479 Jetty_Redline_cu3.mxd, map showing Red line boundary close up (1:2,500 scale) tie in of southern section of proposed new footpath, Ref 4479 Jetty_RedLine-cu.mxd, Map showing Red line close up (1:2,500 scale) Jetty and northern section of proposed new footpath Ref 4479 Jetty_RedLine_cu1_v2.mxd, Map showing Red line boundary overview figure (1:10,000 Scale Ref 4479 Jetty_RedLine.mxd, Ref 4479 Jetty_Redline_cu2.mxd, Ref 4479 Jetty_RedLine_cu3.mxd, Ref 4479 Fig_Design_Wjetty, (Wallasea Wild Coast Project (Revised February 2017) including location of proposed new water ferry jetty at Grassland Point,

Addendum to Environmental Appraisal (October 2017)

SITE AND PROPOSALS

The Site (Development Overview)

In July 2009, the RSPB received planning consent from Essex County Council (ECC) for their national 'flagship' coastal habitat creation project on Wallasea Island, situated at the junction of the Crouch and Roach Estuaries in Essex. The Wallasea Island Wild Coast Project is now underway, and the first phase/cell of this project (Cell 1/Jubilee Marsh) was breached in July 2015 (Figure 2). Substantial work has also been undertaken in Cells 3 and 5. In February 2017, the RSPB applied for an application to modify the design of the consented scheme for the remaining Cells 2 and 4 (under Section 73 (s73); a decision from ECC on the latter is anticipated in early summer.

The Wallasea Island Wild Coast Project compliments an existing managed realignment scheme on the north shore of Wallasea Island, known as Allfleet's Marsh, which was implemented in 2006. The Allfleet's Marsh project was led by the Biodiversity Division of the Department for Environment, Food and Rural Affairs (Defra). It was undertaken to create 118 hectares (ha) of new intertidal habitat in compensation for the loss of such habitats as a result of port developments that were carried out during the late 1980s and early 1990s.

The RSPB now manage both the Allfleet's Marsh and the Wallasea Island Wild Coast Project areas together.

The Proposals

This application now submitted to the local planning authority is in connection with the improvement of public access to the Wallasea Island nature reserve by enabling a ferry service from 'The Quay' in Burnham-on-Crouch to land closer to the reserve, through the installation of a new floating pontoon ferry jetty (comprising a surface area of 50m²) at Grassland Point which is located to the northern side of the island together with the provision of a permissive access footpath along the crest of the old sea wall.

The application correspondence indicates that as the RSPB will own the pontoon, they will only license a ferry operator to go from Burnham straight to Grassland point (and back) not stopping at Essex Marina (during the over wintering season). In its wider context Grassland Point lies between the westerly and middle compartments of the Allfleet's Marsh managed realignment site. The jetty is envisaged as a floating walkway/pontoon design which would be very similar in appearance and dimensions to the pontoon currently in place for the Wallasea Island ferry at Burnham-on-Crouch.

The ferry jetty now proposed at Wallasea is to be supported by four steel tube piles which will measure approximately 0.51 m in diameter. The pontoon sections will be of a galvanized steel frame construction with hardwood decking. The bankseat tying the bridge/linkspan to the pontoon into the seawall would consist of a mass concrete block (approximate dimensions: 3 m x 1.5 m x 1 m high), supported by two smaller tubular steel piles which will

likely be 0.34 m in diameter. The depth to which the piles would be driven has yet to be decided. The bridge leading from the seawall mounted bankseat to the piled pontoon will be of galvanized steel construction with a nonslip deck. The overall length of the bridge and walkway would be just over 50 m, and the dimensions of the pontoon itself would be approximately 5 m x 10 m.

Access from the new ferry jetty to Wallasea Island would be along the top of the remnant seawall which runs between compartments A1 and A2 of the Allfleet's Marsh site. A new permissive footpath is to be constructed from the ferry landing point to the existing public footpath (No. 21) which runs along the new seawall between Allfleet's Marsh and the Wallasea Island Wild Coast Project area. The new stretch of permissive path would be around 470 m long and 1.5 m wide, bunded using timber boards and finished with type-I aggregate. Permission will need to be sought from Defra to cross their land (for the footpath).

The deep-water pontoon will be anchored by four steel piles which will be driven via a floating pontoon mounted crane of suitable size for the complete installation using either a hydraulic or pneumatic pile driver (applying a soft start technique). The piles will likely be delivered by road to an off-site yard or wharf location and stored there until required, whereupon they will be picked up by a barge as needed and tides allow. The size and number of piles to be driven will be as per the engineers' design and positioned by way of an engineer viewing and giving instruction from shore via radio.

The two bankseat piles will be driven via the same floating pontoon mounted crane using either a hydraulic or pneumatic pile driver, and also stored off site and delivered by barge when needed. Piles positioned by setting out engineer viewing and giving instruction from shore via radio.

The pontoon sections will be delivered by barge and craned and floated into position.

The bridge will be stored off site and brought to Grassland Point by barge as tides allow, whereupon it will be mounted directly to pre-driven piles on the seawall. The materials for the new footpath and concrete bankseat would be transported via road and delivered to the seawall using suitable vehicles. It is considered that these works will take around two weeks to complete, with the piling likely being undertaken over one or two working days (depending on weather and tide windows). The works will be undertaken outside of the overwintering bird period (October to March).

Operational Implications

A private ferry and water taxi service currently operates from 'The Quay' at Burnham-on-Crouch to the Essex Marina on Wallasea Island, which is some 2.2 km west of Grassland Point (as the crow flies). At the present time, the ferry runs on demand (i.e. customers phone the operator for a lift across the river) six days per week, excluding Wednesdays, from Easter to the end of September. A maximum of 12-foot passengers can be carried. Dogs are allowed on the ferry, provided they are kept on a lead. Ferry services are

available outside these dates subject to weather conditions and skipper availability.

The RSPB is not proposing to immediately change this ferry schedule, but to provide an additional point where people can land on Wallasea Island by constructing a new ferry jetty. This would land essentially in the centre of the RSPB's Wallasea Island Wild Coast reserve, rather than around 2 km from its western edge, as is currently the case with Essex Marina.

It is anticipated that the RSPB would licence the new pontoon to the ferry operator, with frequency of service largely driven by customer demand, though the use of the new pontoon would be restricted by the RSPB through the licence if required. If demand continues to grow, then a larger ferry may operate, which is the ambition of the Coastal Community Fund 'Lower Crossing' stakeholder group.

The ferry operator operates under Crouch Harbour Authority restrictions and currently observes a maximum speed limit (at point of crossing) of 8 knots. When approaching the landing points, the ferry's speed is estimated to be no more than 1 or 2 knots within 30 m of the shore, further decreasing as it docks. The current ferry boat has a flat 'in water' profile and therefore creates negligible wash at low speeds

RELEVANT PLANNING HISTORY

04/00976/FUL: Wallasea Wetlands Creation Project, Construction of Second Sea Wall, Soke Dyke and Recharge Works to Areas A and B and Breaching of Existing Seawall Application Permitted 22.02.2005

06/00178/FUL: Erection of 25m Tower for Video Camera for a Period up Until June 2011 (to be Used in Connection with The Wallasea Wetland Creation Scheme) Application Permitted 10.05.2006

08/00777/PD: Royal Society for The Protection of Birds Wallasea Island Wild Coast Project: Scoping Study Permitted Development 29.12.2008

09/00010/CPO: The Importation by Sea of 7.5 Million Cubic Metres of High Quality Recovered Inert Material to Achieve, by Phased Extraction and Land raising, a Change of Use from Agricultural Land to 677 Hectares of Coastal Nature Reserve Principally Comprising Mudflats, Saltmarsh, Coastal Lagoons, Brackish Marsh, Coastal Grazing Marsh, Drier Grass Capable of Developing New Saltmarsh as Sea Levels Rise Together with the Development of 5 Bird Hides, Car Park and Associated Off Shore Unloading Facility, Conveyor and Pipeline, Material Handling Area, Sea Wall Engineering Works and Modification to Footpath Number 21, to be completed by 2019. PERCPO - No Objection (County Council) 6.02.2009

11/00278/CPO: Non-Material Amendment of Planning Permission Ref ESS/54/08/ROC To Allow A Revised Design and Extent Of The Radial Conveyor/Stacker. PERCPO - No Objection (County Council) 27.05.2011

11/00280/CPO Non-Material Amendment of Planning Permission Ref ESS/54/08/ROC To Allow A Revised Location And Design Of The Footbridge Over The Sea Wall. PERCPO - No Objection (County Council): 27.05.2011

11/00283/CPO: Non-Material Amendment of Planning Permission Ref ESS/54/08/ROC To Allow A Revised Design Of The Jetty Together With Piled Supports And Revised Route For The Internal Conveyor. PERCPO - No Objection (County Council) 27.05.2011

11/00778/FUL Retain on A Permanent Basis 20m High Camera Tower For Use In Connection With The Wallsea Island Wild Coast Project PER - Application Permitted: PER - Application Permitted 16.02.2012

12/00506/CPO: Non-Material Amendment to Permission Ref ESS/54/08/ROC To Allow An Altered Design Of Cell 1 Including A Reduction In Fill Material. PERCPO - No Objection (County Council) 7.09.2012.

13/00284/FUL Construct New Access Road. Realignment to South of Grapnells Farm PER - Application Permitted 11.07.2013

14/00430/CM: ESS/54/08/ROC (replaced by ESS/09/14/ROC) PER - Application Permitted 14.05.2014

14/00431/CM: ESS/54/08/ROC (replaced by ESS/09/14/ROC) - Application Permitted 14.05.2014

14/00814/CM Continuation of the importation of waste to develop a coastal nature reserve without compliance with condition 2 (compliance with submitted details) attached to permission ref ESS/09/14/ROC to allow modifications to the landform design within Cells 1 and 5, including a net reduction of suitable natural waste material in Cell 1 by approximately 450,000m³.

14/00814/CM: Continuation of the importation of waste to develop a coastal nature reserve without compliance with condition 2 (compliance with submitted details) attached to permission ref ESS/09/14/ROC to allow modifications to the landform design within Cells 1 and 5, including a net reduction of suitable natural waste material in Cell 1 by approximately 450,000m³. PER - Application Permitted 31.03.2015.

15/00466/CM Installation of two prefabricated viewing shelters on the seawall within the Wallsea Island Wild Coast Project area, to enhance visitor experience by providing facilities and destinations for pedestrians at locations to view habitats within the adjacent Alfleets March and Jubilee Marsh (Cell 1) management realignments as well as across the outer Roach Estuary: GC - Application Granted 1.09.2015

17/00169/CM: Continuation of the development of a coastal nature reserve without compliance with: Conditions 2 (Submitted details), 26 (Maintenance of

Rights of Way and permissive routes), 38 (Completion by 31 December 2025), 39 (Removal of construction equipment by 31 December 2025) and 40 (Importation of waste via River Crouch only), AND without compliance with Conditions 4, 5, 6, 7, 9, 12, 13, 15, 16, 18, 19, 22, 23, 24, 25, 27, 28, 29, 30, 34, 35, 36 and 41 attached to planning permission ref ESS/44/14/ROC, TO ALLOW modifications to the landform design within Cells 2, 3 and 4 (negating the need to import waste material and no further breaching of sea walls) and to bring forward the proposed date for completion to 2022, TOGETHER WITH the redesign and extension of the parking area, addition of access ramps to the northerly sea wall in Cell 5, the use of the material handling area for storage of dismantled infrastructure and associated works: PERCM - No Objection (County Matter) 14.03.2017

17/00178/CM: The erection of buildings comprising one Reception Hide and one Viewing Hide for use by the general public; the development of a staff compound comprising one Office Building and one Meeting Room Building, Staff Parking Area and the erection of a Communications Aerial; the erection of one Workshop and development of a new Hardstanding; and associated works: Application Permitted 6.10.2017

18/00156/CM: Continuation of the development of a coastal nature reserve without compliance with Conditions 2 (Submitted details), 20 (Revised Aftercare scheme), 21 (Maintenance of Rights of Way and permissive routes), 30 (work in accordance with Flood Risk Assessment), 31 (timeline for project completion) and 32 (Date for removal of plant and machinery) attached to planning permission ref ESS/13/17/ROC, to allow modifications to the landform design within Cells 2 and 4 (adjusting the design detail to facilitate timely completion while also creating a greater range of new coastal habitat types) and to bring forward the proposed completion date to 31 December 2020. PER - Application Permitted 4.07.2018

18/00188/CM: No lighting or security measures shall be installed until details of any proposed external lighting, including that on the unloading facility, and any security measures to reduce the potential for crime have been submitted to and approved in writing by the Waste Planning Authority. The development shall be subsequently implemented in accordance with the approved details. PER - Application Permitted 21.02.2018.

MATERIAL PLANNING CONSIDERATIONS

Section 38(6) of the Planning and Compulsory Purchase Act requires planning authorities to determine all planning applications in accordance with the development plan and guidance set at national level unless material planning considerations indicate otherwise. The overarching policy objectives and guidance are laid out within the relevant sections of the National Planning Policy Framework (February 2019) which includes guidance laid out with regards to relevant material planning considerations which must be considered in this instance which include the provisions laid out by Chapters:

- 2 Achieving Sustainable Development
- 6. Building a strong, competitive economy
- 8 Promoting Healthy Communities (including provision of recreational facilities);
- 9. Promoting sustainable transport
- 10: Meeting the challenge of climate change, flooding and coastal change;
- 12. Achieving well-designed places
- 13. Protecting Green Belt land
- 14. Meeting the challenge of climate change, flooding and coastal change;
- 15. Conserving and enhancing the natural environment
- 16. Conserving and enhancing the historic environment

These considerations on a local level which reflect the national objectives cited by the NPPF (2019) are embodied by a number of the councils' planning policies cited within Rochford District Council's Local Development Framework's Core Strategy (adopted December 2011) and the Local Development Management Plan (adopted 16 December 2014). Of particular relevance although not exclusively limited to such considerations are those relating to the type of development considered to be appropriate within the Metropolitan Green Belt as cited by policies: GB1 (Green Belt Protection), GB2 (Rural Diversification and Recreational Uses), URV2 Wallasea Island, which recognises the significance of the island in delivering the Wallasea Island Wild Coast project which aims at enhancing the biodiversity value of the area the same time as optimising access to the island and recreational uses within the area which should seek to avoid any adverse ecological impacts or provide adequate mitigation where impacts cannot be avoided. Other relevant policies include Core Strategy policies ENV1 Protection and Enhancement of the Natural Landscape and Habitats and the Protection of Historical and Archaeological Sited, ENV2 Coastal Protection Belt, CLT11 Tourism, ED1 Employment Growth.

Relevant Local Development Management Plan policies include policies: DM1 (Design of New Developments), DM14 Green Tourism, DM26 Other Important Landscape Features and, DM27 Species and Habitat Protection.

In addition to the policies cited given the location of the site and its biodiversity interest there are additional considerations in this case which the local planning authority needs to take into account. These are covered and discussed as follows:

EIA Regulations (The Town and Country Planning (Environmental Impact Assessment) Regulations 2017)

Given the location of the site and its ecological significance on a UK wide and European level (which is discussed under officer appraisal) any development at Wallasea is controlled and regulated by a number of authorities which have specific responsibilities to ensure that development does not infringe legislation in this respect or impact on the interests safeguarded by those authorities.

From the Local Planning Authority's perspective, the considerations in terms of the acceptability of the development proposed in particular its impacts upon biodiversity are guided by the policies cited above. In addition the Local Planning Authority has to take into account wider consideration and legislation taking into account the provisions of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 which set out requirements relating to the 'Screening' of development proposals (consideration of whether development falls under Schedule 1 or 2 of the EIA Regulations) to ascertain whether the development constitutes EIA development which would entail that a planning application would need to be accompanied by an Environmental Impact Assessment. In this instance the development proposed does not fall under the definition of Schedule 1 development which describes the type of development and thresholds which apply.

Typically schedule 1 development relate to large extraction and industrial processes such as oil refineries.

The EIA Directive (2011/92/EU) sets out the procedure that must be followed before approval is granted for a range of plans and projects, defined in Annexes I and II of the Directive.

Annex I projects are considered to have significant effects on the environment and an EIA is mandatory. However, the potential for significant effects on the environment as a result of Annex II projects, and thus whether an EIA is required, is at the discretion of the Competent Authority. (in this case RDC and/or the MMO) having regard to criteria set out in Annex III of the Directive. The proposed works are considered an Annex II project (Infrastructure) under the EIA Directive, specifically in relation to Article 10(k) as follows:

"Coastal works to combat erosion and maritime works capable of altering the coast through the construction, for example, of dykes, moles, jetties and other sea defence works, excluding the maintenance and reconstruction of such works".

The local planning authority considers that given the size, nature and location of the proposed works at Grassland Point when combined with its residual environmental effects are not likely to result in a significant impact on the environment and, as a consequence, an EIA is not required. This conclusion has been drawn on the basis also of the selection criteria for screening schedule 2 development as cited by schedule 3 of the Regulations.

The Regulations set out the type of development and thresholds which apply which are most likely to give rise to residual environmental impacts which would trigger the requirement for an Environmental Impacts Assessment.

Habitat Regulations Assessment.

In addition to the EIA Regulations the provision of other regulations needs to be considered including the provisions of the Conservation of Habitats and Species Regulations 2017.

Where a project is located close to, or directly within, an area designated or proposed under the Birds (79/409/EEC) and/or Habitats (92/43/EEC) Directives (known as European sites) and/or the Ramsar Convention on Wetlands (Ramsar sites), the requirements of Regulations 61 to 66 of the Conservation of Habitats and Species Regulations 2010 (SI 2010/490) (the Habitats Regulations) apply. In essence, this requires the lead Competent Authority to determine whether the proposed works are likely to have a significant effect on these sites and, if so, to undertake an AA of the implications of the proposal in the light of the site's conservation objectives.

The proposed new ferry jetty at Grassland Point is located within the boundary of several European/Ramsar designations, specifically the Essex Estuaries Special Area of Conservation (SAC), the Crouch and Roach Estuaries (Mid-Essex Coast Phase 3) Special Protection Area (SPA) and the Crouch and Roach Estuaries (Mid-Essex Coast Phase 3) Ramsar site, as well as the proposed Foulness extension of the Outer Thames Estuary SPA (see Figure 7). Further away, it is also noteworthy that a candidate SAC, the Southern North Sea SAC, is proposed for the protection of harbour porpoise (*Phocoena phocoena*) in the offshore area some 55 km from the proposed jetty.

An HRA is provided to identify potential pathways for the proposed works and consider their likelihood for having an effect on these designated sites and their interest features.

Given the Ecological importance of the site a detailed Environmental Appraisal has been submitted supported by a further addendum which recognises the importance of the site, potential impacts together with mitigation which concludes that the development is acceptable. The Local Planning Authority as the competent authority is duty bound to consider the impacts of the development in the form of a Habitats Regulations Assessment which in this instance it has sought advice from an expert at Essex County Council Place Services to actually undertake such assessment which underpins the finding of acceptability or conversely the finding of the need for a further appropriate assessment under the Habitats Regulations.

The detailed Environmental Appraisal recognises that the development would fall under the control of a number of legislative measures which are not matters for the local planning authority to determine. However, of relevance to the local planning authority to enable it to understand and appraise the full scale and potential impacts of the development proposed the appraisal provides information in relation to the potential effects of the development in the context of the potentially sensitive receptors including : physical processes; Water and sediment quality; Marine ecology and nature conservation: Benthic ecology; Designated sites; Non-native species; Fish and shellfish; Ornithology; Protected species, Coastal protection and flood defence; Historic environment; Commercial and recreational navigation; and Cumulative and in-combination effects.

The information submitted (as appendices) to support the planning and licence applications include:

- Detailed drawings of the proposed new ferry jetty;
- Information to inform an Appropriate Assessment (AA);
- A Water Framework Directive (WFD) compliance assessment; and Marine Conservation Zone (MCZ) screening assessment

The Environmental Appraisal concludes that provided mitigation measures are observed, it is considered that the proposed jetty is unlikely to have significant adverse effects on the assessed environmental receptors including Fish and marine mammals the effects of which will be mitigated by deploying soft start piling methods or Ornithology providing that no construction takes place during overwintering period. The appraisal identifies that disturbance to overwintering birds due to ferry operations (several measures); can be mitigated by observing established Protected Species Plan for breeding birds in addition to the proximity and line of travel of any ferry to the shoreline where over wintering birds are feeding.

Potential impacts of development upon Reptiles: it is concluded can be managed by observing established Protected Species Plan whilst the impacts of the development at construction phase can be mitigated through measures to be developed in dialogue with the harbour master, including 'Notice to Mariners' if necessary.

Appropriate Assessment

Relevant European/Ramsar Sites

Under Article 6(3) of the European Commission (EC) Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (the Habitats Directive, 92/43/EEC), an AA is required where a plan or project is likely to have a significant effect upon a Natura 2000 site (also known as a 'European Site') either individually or in-combination with other plans or projects. The following sites comprise the Natura 2000 network:

Special Areas of Conservation (SACS) designated under the Habitats Directive; and

Special Protection Areas (SPAS) classified under the Directive on the Conservation of Wild Birds (the Birds Directive, 2009/147/EC). In the UK, these requirements also extend to the consideration of effects on the following nature conservation sites: Ramsar sites listed under the 1971 Ramsar Convention on Wetlands of International Importance; and sites that are proposed for designation and inclusion in the Natura 2000 network and sites that are currently in the process of being classified, such as potential/proposed SPAS (pSPAs), candidate and possible/proposed SACS (cSACs and pSACs) and Sites of Community Importance (SCIs).

In addition, it is policy in England that proposed Ramsar sites and sites identified, or required, as compensatory measures for adverse effects on designated or proposed European and/or Ramsar sites be given the same

protection as European sites. All the above designated, proposed and compensation sites are referred to hereafter as European/Ramsar sites.

The proposed works at Grassland Point are located within the following designated sites:

The Essex Estuaries SAC; The Crouch and Roach Estuaries (Mid-Essex Coast Phase 3) SPA; The Crouch and Roach Estuaries (Mid-Essex Coast Phase 3) Ramsar site; and The proposed Foulness extension of the Outer Thames Estuary SPA.

Allfleet's Marsh, the realignment site on the north bank of Wallasea Island, was implemented by Defra to compensate for impacts on SPAS elsewhere (at Fagbury Flats, Suffolk and Lappel Bank, Kent), it should be viewed as if it was already designated (it is also included in the Foulness extension of the Outer Thames Estuary SPA).

The assessment identifies that nearby, mobile features of the following sites could potentially be affected:

Foulness SPA (boundary some 3.1 km distant from the proposed jetty);
Foulness Ramsar site; and
Dengie SPA (boundary some 5.9 km distant from the proposed jetty).

Further away, a candidate SAC, the Southern North Sea SAC, is proposed for the protection of harbour porpoise (*Phocoena phocoena*). This lies in the offshore area some 55 km from the proposed jetty. Impacts on the European/Ramsar sites could be via both direct and indirect pathways on habitats and birds. In particular, the effects on the ecology of the intertidal habitat lost/disturbed by piling activity need to be considered, as well as any consequences for passing mammals and breeding, passage or overwintering birds that use this habitat to feed or which could be potentially disturbed by activities on it.

There are no specific conservation objectives or favourable condition tables provided for the Ramsar sites (Crouch and Roach Estuaries, Foulness) and therefore these have been assumed to be the same as those set out for the related SPAs.

At the time the assessment was undertaken it was indicated that these are sites that have been adopted by the EC, but not yet formally designated by the government of each country.

At that time conservation objectives for the proposed Foulness extension of the Outer Thames Estuary SPA had not been published, but foraging impacts on the tern features of the Foulness SPA are assessed under the Foulness SPA,

Allfleet's Marsh's compensation objectives, which were stipulated prior to implementation required the Allfleet's Marsh wetland to be capable of supporting an assemblage of roosting water birds, comprising, on a five-year

mean peak basis, at least 3,600 water birds in similar proportions to those historically supported by Fagbury Flats, in particular Ringed Plover, Grey Plover, Dunlin and Turnstone; an assemblage of feeding water birds, comprising, on a five-year mean peak basis, at least 2,800 water birds in similar proportions to those historically supported by Lappel Bank and Fagbury Flats, in particular Shelduck, Dunlin and Redshank; and the necessary intertidal habitat composition (mainly mudflat and saltmarsh habitat) and extent that provides the opportunity for the full assemblage of water birds to feed and roost within the site. The specific targets were to deliver '115 hectares of intertidal habitat of which there will be approximately 92 hectares of mudflat and 23 hectares of saltmarsh'

Need for Appropriate Assessment

The proposed works at Grassland Point will take place within and have the potential to directly and/or indirectly affect, the designated sites. Therefore, the Competent Authority, in this case Rochford District Council and/ or the Marine Management Organisation (MMO), needs to take account of the Habitats Regulations while also taking appropriate advice from Natural England. It is considered that an appropriate assessment is required for this project, specifically under Regulation 61(1) of the Habitats Regulations which states:

"A competent authority, before deciding to undertake, or give any consent, permission, or other authorisation for a plan or project which:

(a) is likely to have significant effect on a European site or a European offshore marine site (either alone or in combination with other plans or projects); and

(b) is not directly connected with or necessary to the management of the site

must make an appropriate assessment of the implications for the site in view of that site's conservation objectives".

The decision as to whether a Habitat Regulations Assessment is required or not is the assessment of 'Likely Significant Effect', which is recognised as being a 'coarse filter' or statement that the anticipated effects of the proposal will be more than trivial, i.e. that the anticipated changes resulting from a proposal have the potential to impact on a receptor designated as a feature of a European Site. It does not automatically follow that an impact will occur, or that the impact would be significant, with a decision of Less Significant Effect being purely an indication of the need for an Appropriate Assessment A. The interpretation of the term significant under the Habitats Directive in England and Wales is therefore different to its use under the EIA Directive, with Likely Significant Effects in the Habitats Directive effectively analogous to a Screening Decision under EIA.

Impacts to Relevant Interest Features

The proposed jetty lies within several designated sites, and adjacent several more. The following tables describe the potential effects of installing the jetty,

and the related ferry operation, by cross-referring to the relevant sections of the environmental appraisal report, where applicable:

Table 8.2	The Essex Estuaries SAC;
Table 8.3	The Crouch and Roach Estuaries SPA;
Table B.4	Foulness SPA;
Table B.5	Dengie SPA; and
Table B.6	Southern North Sea cSAC.

The environmental appraisal significance judgement is very different to the Habitats Regulations significance but is considered to be a valuable guide to assessing the effect on the conservation targets/objectives. The targets are intended to define the desired condition of an attribute, taking into account fluctuations due to natural change. Assessing the predicted effects of the scheme in relation to the targets enables the potential effect on favourable condition and hence on the designated status of these sites to be determined. This in turn informs the conclusion of LSE and the decision of whether or not an adverse effect on integrity of the respective site is predicted.

The Environmental Statement indicates mitigation measures that have been incorporated into the design of the scheme or the proposed methodology for the construction phase to minimise potential. The assessment in this regard concludes that in considering the need for an appropriate assessment it is necessary to determine whether the project or plan would adversely affect the integrity of the designated site in the light of the site's conservation objectives.

The local planning authority notes that stated by the Environmental Statement in that the integrity of a site has previously been defined as the coherence of its ecological structure and function, across its whole area that enables it to sustain the habitat, complex of habitats and/or the levels of populations of the species for which it was classified.

The decision on whether integrity is affected is to be made by the Competent Authorities.

The table provided within the Environmental Statement indicates potential effects on the relevant conservation objectives and favourable condition targets. The view expressed by the statement is that in the light of the assessment presented in these tables, all the impacts - whether direct or indirect, permanent or temporary - to interest features are considered to be not significant concluding. that installing the jetty at Grassland point and operating a ferry to and from Burnham-on-Crouch, is not anticipated to affect the integrity of any of the European/Ramsar Sites discussed, as no failure of the conservation objectives is predicted.

Licences

A marine licence is required under the Marine and Coastal Access Act 2009 for works in waters up to the high-water springs mark and is obtained through an application to the MMO. The proposed works to be undertaken within the River Crouch will, therefore, require a marine licence. The licence will cover

those works that impact upon the marine environment (i.e. installation of monopiles and floating pontoon). In considering an application for a marine licence, the MMO will, as part of the process, take into account Government policy statements and guidance including the Marine Policy Statement. The scheme falls within the South East marine plan area; however, a marine plan has not yet been produced for this area. In assessing marine activities, the MMO gives consideration to the principles of sustainable development, namely achieving a sustainable marine economy; Ensuring a strong, healthy and just society; Living within environmental limits; Promoting good governance; and Using sound science responsibly.

This application, and the wider Wallasea Island Wild Coast Project, have striven to adhere to these principles. A works licence will furthermore be required from the Crouch Harbour Authority (CHA).

Water Framework Directive

The WFD (2000/60/EEC) establishes a framework for the management and protection of Europe's water resources. It is implemented in England and Wales through the Water Environment (WFD) (England and Wales) Regulations 2003 (the Water Framework Regulations). The overall objective of the WFD is to achieve good ecological and good chemical status in all inland and coastal waters based on a range of biological, chemical and physical parameters. The proposed works at Grassland Point are within the Crouch transitional (estuarine) water body which is currently classified as being at moderate status (i.e. failing to achieve good status). The chemical status of this water body is good; however, ecological status is reported as moderate due to the physicochemical quality element 'dissolved inorganic nitrogen'.

The potential biological, chemical and physical changes associated with the proposed works are very small in scale and unlikely to cause a deterioration in status at water body level or prevent the water body meeting its WFD objectives in the future. A WFD Assessment has been prepared in accordance with the latest published Environment Agency guidance ("Clearing the Waters for All") in order to comply with the requirements of the WFD and is provided in Appendix C.

Marine Conservation Zones

The Marine and Coastal Access Act 2009 facilitates the establishment of an ecologically coherent network of Marine Protected Areas (MPAs). This Act aims to ensure clean, healthy, safe, productive and biologically diverse oceans and seas, by putting in place better systems for delivering sustainable development of marine and coastal environments. The Act creates a new type of MPA called an MCZ. The development of these MCZs has led to 27 sites being designated in November 2013, followed by a further 23 sites announced in January 2016. A third phase will be consulted on in 2017, to be designated in 2018.

The proposed works at Grassland Point fall within the boundary of the Blackwater, Crouch, Roach and Colne Estuaries MCZ (Figure 8), extending from the mean high-water mark to where the estuary mouths join the North Sea. The site is designated to protect intertidal mixed sediment, native oyster (*Ostrea edulis*) beds, native oyster and Clacton Cliffs and Foreshore. A screening assessment of the potential impacts of the proposed works on these MCZ features is provided in Appendix D.

Marine Strategy Framework Directive

The aim of the Marine Strategy Framework Directive (MSFD) (2008/56/EC) is to secure the effective protection of the marine environment across Europe. The MSFD does not apply to transitional waters which are covered by the WFD. The proposed new ferry jetty at Grassland Point is located within the Crouch transitional water body; therefore, the MSFD does not apply and the proposed works will not have an impact upon the environmental status of the surrounding marine environment at this level.

Impact Appraisal

On the basis of the information submitted including the addendum to the Environmental Appraisal there is considered to be limited potential for environmental effects to arise from the ferry jetty given the scale and nature of the proposed works.

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The proposed new jetty is situated on the southern margin of the River Crouch at Grassland Points on Wallasea Island. Low freshwater flows and tidal dominance are key characteristics of the Crouch, with a tidal range reaching up to 5.7 m at Burnham on a mean Spring tide (Pethick and Stapleton, 1994). The tidal prism (amount of water exchanged on one tide) for the Crouch is 65.3 million m³ on a mean Spring tide, while on a Neap tide the prism is 40 million m³. Spring tidal flow in the Crouch (measured at the confluence with the Roach) typically reaches 1.1 m/s (2.1 knots) on the ebb and 0.85 m/s (1.7 knots) on the flood (ABPmer, 2008). The seabed habitat at the proposed new jetty site is characterised as intertidal soft sediment, including sand, mud and mixed material, adjacent to the established saltmarsh habitat at Grassland Point, and the new intertidal habitats associated with the Allfleet's Marsh managed realignment site.

Overall, the proposed works will directly affect approximately 0.82 m² (0.00008 ha) of intertidal and subtidal habitat through the installation of four monopiles to support the new jetty (i.e. the direct footprint of the works)⁴ It is currently anticipated that one of the piles will be in the intertidal area (0.2 m²), and the remainder in the subtidal (0.61 m²).

With regard to indirect effects, a combination of sandy mud material on the bed and flow rates at this location suggest that scour will occur to some extent around the new piles, particularly those in the subtidal. The maximum area of the bed that could be affected by scour is likely to be in the order of two pile diameters around each pile. On this basis, the additional area of estuary bed habitat that would be changed as a result of scour from the works would be at

most 19.61 m² (0.002 ha) of intertidal and subtidal habitat. This 19.6 m² value represents a precautionary estimate, derived using a formula commonly applied to fully submerged marine structures, which would be subject to more frequent, and stronger, currents than a structure located in the intertidal or shallow subtidal zone.

The bankseat, and its associated smaller piles, would be driven into the seawall at elevations above the saltmarsh level; this would have an approximate footprint of just under 5 m² which is regularly not surrounded by (much) water. In reality, scour would not be expected to affect this whole 19.6 m² area to a noticeable extent. Furthermore, the habitat that is influenced by scour is expected to be only marginally changed (not lost) with some of the area only being lowered slightly (and potentially becoming slightly coarser) in areas where they are subjected to slightly increased flows.

In addition, sections of the jetty will temporarily rest on the seabed at certain states of the tide during operation. Whilst the footprint of the jetty (incl. bridge) is just under 100 m² (0.01 ha), only a small proportion of that would ever rest on the intertidal or very shallow subtidal during low water. This is due to the bridge section not coming into contact with the seabed, and due to floats being positioned intermittently along the length of the jetty. In addition, some sections will always float. Thus, the area in direct contact with the seabed will be much reduced; at most, this is estimated at 15 m² of habitat disturbance during low water on the spring tides.

Overall, the magnitude of the physical effects of the jetty installation and operation on the estuary bed is considered negligible and impacts thus insignificant.

Water and sediment quality

The WFD (2000/60/EC) came into force in 2000 and establishes a framework for the management and protection of Europe's water resources. It is implemented in England and Wales through the Water Environment (WFD) (England and Wales) Regulations 2003 (the Water Framework Regulations). The overall objective of the WFD is to achieve good status (GS) in all inland, transitional, coastal and ground waters by 2015, unless alternative objectives are set or there are appropriate reasons for time limited derogation. The WFD divides rivers, lakes, lagoons, estuaries, coastal waters (out to one nautical mile from the low water mark), man-made docks and canals into a series of discrete surface water bodies. It sets ecological as well as chemical targets (objectives) for each surface water body. For a surface water body to be at overall GS, the water body must be achieving good ecological status (GES) and good chemical status (GCS). Ecological status is measured on a scale of high, good, moderate, poor or bad, while chemical status is measured as good or fail (i.e. failing to achieve good).

The proposed works are located within the Crouch transitional water body (ID: GB520503704100). The current overall status of the Crouch water body is

moderate, and therefore failing its WFD objectives; the chemical status is good, but the ecological status is reported as moderate. Specifically, the Crouch is failing due to levels of the physicochemical quality element 'dissolved inorganic nitrogen'. In addition, it has been noted that there has been a deterioration (albeit the parameter is not currently failing) in the 'dissolved oxygen' quality element between 2009 (high) and 2016 (good), suggesting potential wider water quality issues. A WFD Assessment has been undertaken for the proposed development, this can be found in Appendix C. In summary, the conclusion from the assessment is that the proposed works are unlikely to result in deterioration in water body status.

The revised Bathing Water Directive (rBWD) (2006/7/EC) was adopted in 2006, updating the microbiological and physicochemical standards set by the original Bathing Waters Directive (BWD) (76/160/EEC) and the process used to measure/monitor water quality at identified bathing waters. The rBWD focuses on fewer microbiological indicators, whilst setting higher standards, compared to those of the BWD. Bathing waters under the rBWD are classified as excellent, good, sufficient or poor according to the levels of certain types of bacteria (intestinal enterococci and *Escherichia coli*) in samples obtained during the bathing season (May to September).

The BWD was repealed at the end of 2014 and monitoring of bathing water quality has been reported against rBWD indicators since 2015. The new classification system considers all samples obtained during the previous four years and, therefore, data has been collected for rBWD indicators since 2012. The UK Government's target under the rBWD is to achieve 'sufficient' for all bathing waters by 2015, as described under the Bathing Water Regulations 2013 which transposes the rBWD into UK law. Shoebury East (classified as excellent in 2016) is the closest bathing water to the proposed works at approximately 10 km to the south (as the crow flies). Consequently, the footprint of effect from the proposed works will not overlap with any designated bathing waters and this receptor is screened out of further assessment.

Dissolved oxygen concentrations were greater than 9.8 mg/l in all water samples collected in February 2015 by the Environment Agency and RSPB to support the updated Wallasea Island Wild Coast planning application, including those at Ringwood Bar less than 1 km downstream of the proposed new ferry jetty (ABPmer, 2017a). The UK Technical Advisory Group (UKTAG) on the WFD has prepared a series of environmental standards and conditions. The Phase 1 report (UKTAG, 2008) discusses dissolved oxygen standards for transitional and coastal waters, citing 7 mg/l (5th percentile) as representative of high status. In addition, heavy metal concentrations (arsenic, cadmium, chromium, copper, lead, nickel and zinc) measured in water samples collected from Ringwood Bar were below threshold levels as defined in the Environmental Quality Standards (EQS) Directive, thus indicating good water quality in the vicinity of the proposed works at Grassland Point.

Unlike water quality, there are no formal quantitative EQS for the concentration of contaminants in sediments, although the WFD has

introduced optional standards for a small number of priority and priority hazardous substances. The Centre for Environment, Fisheries and Aquaculture Science (Cefas) has prepared a series of Guideline Action Levels (ALS) to assist in the assessment of dredged material (and its suitability for disposal to sea). In general, contaminant levels in dredged material below Action Level 1 (ALI) are of no concern and are unlikely to influence the licensing decision. However, dredged material with contaminant levels above Action Level 2 (AL2) is generally considered unsuitable for disposal at sea. Dredged material with contaminant levels between AL1 and AL2 requires further consideration before a decision can be made. The Cefas Guideline Action Levels should not be viewed as pass/fail thresholds. Furthermore, it should be noted that proposed works at Wallasea Island do not involve dredging and disposal of material at sea; however, these guidelines provide an appropriate context for consideration of contaminant levels in sediments.

As part of the Allfleet's Marsh managed realignment project, intertidal sediment samples were collected along the northern margin of Wallasea Island in 2004 (BI-B5; ABPmer, 2004). Concentrations of heavy metals were consistently below Cefas AL1, with the exception of cadmium and mercury due to the analytical limit of detection (and thus potentially slightly above AL1). There have been no known contamination events since these samples were collected.

Impact appraisal

The Environmental Assessment recognises that the construction phase of the proposed new ferry jetty, specifically piling activities, is likely to lead to very localised and temporary disturbance, and release, of sediments. During piling, sediment will be released to the water column, near to the bed, around each pile. This will marginally increase the suspended sediment concentration (SSC) for a short intermittent period during piling. This temporary change in SSC is likely to be well within the natural background variability in the water column over a tide. Following the pile installation, some sediment disturbance is also anticipated due to scour. The scour effects on the water column will also be temporary and short lived until a new equilibrium bed level develops around the piles.

Overall, the magnitude of the release of suspended sediments as a result of the jetty works during piling and for the period of scour is considered to be negligible (due to their small scale and temporary nature), and the construction phase is thus unlikely to result in a significant impact on water and sediment quality.

More generally, a number of standard impact avoidance measures will be implemented during the construction phase to minimise the risk of accidental spillages or pollution incidents (and written into the marine licence, should this be granted). These will include the following measures:

Any coatings/treatments utilised have to be suitable for use in the marine environment and are to be used in accordance with best environmental

practice. Bunding and/or storage facilities are to be installed to contain and prevent the release of fuel, oils, and chemicals associated with plant, refuelling and construction equipment, into the marine environment,

The Environmental Statement indicates that during the works, all wastes are to be stored in designated areas that are isolated from surface water drains, open water and bunded to contain any spillage, whilst the applicant must ensure that no waste concrete slurry or wash water from concrete or cement works are discharged into the marine environment.

The view expressed is that it is not anticipated that there will be any discernible changes in the sediment or water quality of the area as a result of the proposed marine works. Similarly, in terms of WFD compliance, as previously noted, it is not anticipated that the proposed works will cause deterioration to the current status of the Crouch transitional water body, nor prevent this water body from achieving future WFD status objectives.

Marine ecology and Designated sites

Article 3 of the Habitats Directive (92/43/EEC, as amended) requires the establishment of a European network of important high-quality conservation sites known as SACs that will contribute to conserving habitats and species identified in Annexes I and II of the Directive. The listed habitat types and species are those considered to be most in need of conservation at a European level (excluding birds). In accordance with Article 4 of the Birds Directive (2009/147/EC), SPAs are strictly protected sites classified for rare and vulnerable birds (Annex I of the Directive), and for regularly occurring migratory species. Ramsar sites are wetlands of international importance designated under the Ramsar Convention (adopted in 1971 and came into force in 1975), providing a framework for the conservation and wise use of wetlands and their resources.

European and international designations are generally underpinned by national designations known as Sites of Special Scientific Interest (SSSIs), notified under the Wildlife and Countryside Act 1981. Furthermore, MCZs are established under the Marine and Coastal Access Act 2009 to protect nationally important marine wildlife, habitats, geology and geomorphology.

The proposed jetty would be constructed on an intertidal and subtidal area which lies inside the boundary of several national and international designations which recognise the importance of the Crouch and Roach Estuaries as a resource for wildlife (as previously summarised in Section 3.3.2). As shown in Figures 7 and 8, these include the Essex Estuaries SAC, the Crouch and Roach Estuaries SPA, Ramsar site and SSSI and the Blackwater, Crouch, Roach and Colne Estuaries MCZ. In addition, the Foulness SPA is nearby, and the proposed extension of the Outer Thames Estuary extends into the Crouch and also covers Allfleet's Marsh. The Allfleet's Marsh site is not yet formally within the boundaries of the adjacent SPA, SAC and Ramsar sites but, as a compensatory realignment, it is to be afforded the same protection as these European sites (i.e. as if it was already

protected). Table 1 provides a summary of nature conservation designations in the vicinity of the proposed works, specifically highlighting the features protected.

A European Marine Site (EMS) is the collective term used to refer to SACs and SPAs (and Ramsar sites) that are covered by tidal water and protect some of the most special marine and coastal habitats and species of European importance. They are defined by the Conservation of Habitats and Species Regulations 2010 (SI 2010/490), which transpose the Habitats and Birds Directives into national law. Natural England provides advice under Regulation 35(3) of the Habitats Regulations on the conservation objectives of EMSs in England. The proposed jetty overlaps with the Essex Estuaries EMS which incorporates the Essex Estuaries SAC and the Crouch and Roach Estuaries SPA and Ramsar site.

As mentioned in Section 3.3.2, the Southern North Sea CSAC, which is proposed for the protection of Harbour porpoise (*Phocoena phocoena*), lies some 55 km from the proposed jetty. Harbour porpoises from this CSAC could conceivably occasionally venture into the Crouch / Roach estuaries. The Sea watch Foundation's marine mammal sighting website lists two sightings for harbour porpoise in the Crouch estuary for the past 18 months (November 2015 to June 2017; three individuals in total).

Impact appraisal

The Environmental Assessment indicates no impact pathways relating to the features of the designated sites have been assessed in this subsection as all features for which sites have been designated have been addressed in the subsequent sub-sections, and as separate HRA and MCZ screening assessments are provided as appendices (Appendices B and D).

Benthic ecology

The Crouch is a 'canalised' system characterised by narrow intertidal mudflats often flanked by reclaimed land and saltmarsh. Results from the June 2004, 2007 and 2011 benthic surveys associated with the Allfleet's Marsh managed realignment project provide a detailed description of the intertidal invertebrate assemblages within the mudflat habitats in the vicinity of Grassland Point (ABPmer, 2008). The sites sampled along the northern margin of Wallasea Island were relatively impoverished communities (i.e. low numbers of species and low organism abundance). This finding indicates that the sites are subject to 'stresses' induced by regular physical disturbance from tidal scour. Surveys carried out in 2004 showed that sites on the upper/middle shore areas (where typically more stable conditions occur) had organism abundance levels of around 500-1,000/m². Those sites which are exposed to stronger tidal flows by virtue of being either on the low shore (which is where the intertidal pile for the jetty would be placed) or in regions with a particularly narrow intertidal zone had only around 500-1,000/m² (ABPmer, 2008).

By way of comparison the muddy habitats in more stable and settled conditions (including near the mouth the Roach Estuary) were found to have

higher abundances of up to 25,000/m² (ABPmer, 2008). The mudflat that developed within the Allfleet's Marsh realignment had abundance of around 10,000 to 30,000/m² during the first five years of its development (with the species composition of the assemblages also maturing over this time).

The more exposed sites were dominated by ragworm (*Hediste diversicolor*), nematods, polychaetes (*Pygospio elegans*, *Streblospio shrubsoll*) and oligochaetes (*Tubificoides benedii*). These species are generally considered opportunistic and would be expected to recover quickly to physical disturbance.

Impact appraisal

The area of seabed that will be directly impacted by the proposed piles is approximately 0.00008 ha and the area of potential indirect effect from scour is at most 0.002 ha (as outlined in Section 4.1, this is thought to be a conservative estimate, and would not lead to habitat loss, but slight change). In addition, small sections of the jetty (up to 0.0015 ha) will temporarily rest on the seabed at low states of the tide during operation. Given the small areas involved, and consequent small magnitude, it is considered that impacts on the impoverished local benthic assemblage would be insignificant.

Non-native species

The construction of the new jetty will introduce new hard substrate into the estuary, suitable for colonization by marine invertebrates and macroalgae, including non-native species.

The potential risk of introduction or spread of non-native species as a result of the scheme can be managed through the production of a risk-based Biosecurity Plan. Statutory standard guidance has been published in the 2015 report 'Marine biosecurity planning guidance for producing site and operation-based plans for preventing the introduction and spread of invasive non-native species in England and Wales' (Payne et al., 2015). This guidance will inform the development of any required Biosecurity Plan which will need to include:

The identification of scheme activities which risk introducing or spreading non-native species; The development of appropriate best practice biosecurity control measures; and

Contingency planning if the presence or spread of a non-native species is linked to the works. The requirement for a risk assessment and implementation of best practice measures, if required, may be included as a condition of the marine licence/river works consent.

Fish and shellfish

The Essex estuaries are known to support a range of fish species including grey mullet (*Mugilidae*), twaite shad (*Alosa fallax*), smelt (*Osmerus eperlanus*), sprat (*Sprattus sprattus*), eels (*Anguilla anguilla*) and flounder (*Pleuronectes flesus*), and in total 25 species have been recorded in the Crouch. Bass (*Dicentrarchus labrax*) also spawn offshore and then complete their three-year development to adulthood within the estuaries (English Nature, 2000). The

Crouch and Roach are both valuable estuaries in terms of their shellfishery resource, especially for Native oyster (*Ostrea edulis*) and Blue mussel (*Mytilus edulis*).

As part of a PhD study (Leila Fonseca, pers. comm.), the fish populations (fish species, age classes and differences in diet with habitat) within the Allfleet's Marsh managed realignment were compared against the adjacent established saltmarsh. It was found that the semi-permanent lagoons and surrounding shallow vegetated intertidal areas within Allfleet's Marsh were feeding and refuge grounds for juvenile sea bass (24-42 mm) and herring (35-65 mm). Stomach content analysis found that these species fed on estuarine shrimps, polychaete worms, gammarids and marine zooplankton. Other fish species recorded in the surveys included sand gobies (*Pomatoschistus minutus*) and common gobies (*P. microps*), sand smelt (*Atherina presbyter*), sticklebacks (*Gasterosteidae*), flounder, pollack (*Pollachius pollachius*), and halfbeak (a relative of garfish).

Pawson et al. (2002) found that the Crouch and Roach estuaries provide a rich feeding ground for finfish and shellfish, together with shelter for the small fishing boats that are active for most of the year. Burnham-on-Crouch is identified as the most important landing place along the Crouch and Roach, supporting six full-time and six part-time vessels (ABPmer, 2008). Sprats and whiteweed (a hydroid) are taken from within the estuary and nearshore waters, with demersal fish caught further offshore. Drift netting for herring is undertaken in the autumn and winter, with drift and set nets used in warmer months for mullet, bass, rays and sole. Trawlers catch shrimps in both the Crouch and Roach during the summer, occasionally landing smelts. Green shore crabs are taken as 'peeler crabs' during the moulting period for bait.

The Shellfish Waters Directive (2006/113/EC) was repealed in December 2013 and subsumed within the WFD. However, the latest standards for the implementation of the WFD in England and Wales suggest 'Protected areas under WFD include shellfish waters and the microbial standard in shellfish waters should continue to be observed, to contribute to a high quality shellfish product directly edible by humans' (Defra, 2014). It is understood that the guideline bacteriological standard of the former directive has been retained but the water column standards have been dispensed with as these are considered to be adequately covered by other aspects of the WFD (Environment Agency and Water UK, 2013).

The proposed works are located within the Upper Crouch Shellfish Water Protected Area and approximately 1.5 km from the Roach and Lower Crouch Shellfish Water Protected Area (see Figure 9). The nearest Classification Zones are the Outer Crouch (approximately 1 km downstream) and Bridgemarsh (approximately 2.5 km upstream). In 2016, the Outer Crouch (*O. edulis*) and Bridgemarsh (Pacific oyster, *Crassostrea gigas*; Hard clam, *Mercenaria mercenaria*; Blue mussel, Mediterranean mussel and hybrids, *Mytilus* spp.; and *O. edulis*) production areas were categorised as Class B whereby 90% of sampled molluscs must be less than or equal to 4,600 *E. coli* per 100 grams (g) of flesh and the remaining 10% of samples must not

exceed 46,000 E. coli per 100 g of flesh. Harvested products can go for human consumption after purification in an approved plant or after relaying in an approved ABPmer, Class A relaying area or after a European Commission (EC) approved heat treatment process (all samples must be less than 46,000 E. coli per 100 g).

Impact appraisal.

It is not considered that water quality impacts from the piling and minor scouring which might occur would be significant, and thus impacts on fish and shellfish ecology due to changes in water quality are equally assumed to be insignificant. Noise disturbance could arise during the brief period (likely to be undertaken over one or two days depending on weather and tide conditions) during which the four small piles would be driven into the intertidal and subtidal. It is proposed that any disturbance due to noise from piling would be short term and limited and would be mitigated by using soft start procedures (the gradual increase of piling power, incrementally, until full operational power is achieved). Soft start piling methods allow larger fish in the vicinity of the construction work to actively move against the tide and away from the zone of disturbance. This technique is considered appropriate given that many fish species are able to discriminate sound source location (Fay, 2011). This should deter larger fish (and also marine mammals) in the vicinity away before the full power of the pile driver is felt through the estuary.

Ornithology

The Crouch Estuary is an important overwintering resource for a wide range of waders and wildfowl. Brent geese, Redshank, Black-tailed godwit and Golden plover are present in nationally important numbers. Lapwing, Dunlin, Wigeon and Teal have frequently been observed as present in abundances of more than 5,000 birds (ABPmer, 2015). During the breeding season, many waterbirds utilise the marshes and seawalls of the estuary, most notably Redshank, Skylark and Shelduck (ABPmer, 2008). Some of the nearby SPAS, namely Foulness and the Dengie, furthermore have breeding bird interest features which may fly into the Crouch estuary to forage for invertebrates and fish.

As discussed in Section 2, Allfleet's Marsh is a compensatory site and should thus be viewed as designated (and is indeed part of the Foulness Thames SPA extension, see Figure 7). The site supports many of the above-mentioned species, with Dunlin, Lapwing, Shelduck, Teal and Redshank being the species most frequently observed. In 2015, ABPmer undertook an analysis of the available bird use data for Allfleet's Marsh (ABPmer, 2015). Over nine years of monitoring analysed, peak bird numbers observed were found to have fluctuated, with the highest peak of 16,500 being observed in 2010/11. Thereafter, peak numbers declined - though generally decreased survey frequency could account for some of this.

The Allfleet's Marsh site however clearly remained an important feeding and roosting/non-feeding resource for birds, with feeding behaviour fluctuating

over the years. Between 2011 and 2014, there appeared to have been a relatively subtle shift in balance from mainly roosting to mainly feeding behaviour.

With regard to the areas of Allfleet's Marsh that lie closest to the proposed jetty (but inside the old seawalls), the ornithological monitoring has generally recorded good numbers of waders and waterfowl. A1, the most westerly realignment compartment (see Figure 2) which lies west of the Grassland Point saltmarsh, has consistently seen the lowest numbers of birds across Allfleet's Marsh; on average, only around 4% of the total waterbirds observed here. Lapwing, Brent geese and Redshank have been the species observed most frequently in this area (mostly feeding). East of the proposed jetty and the proposed footpath, around half of the middle realignment compartment of Allfleet's Marsh (compartment A2) could potentially be affected when applying standard bird disturbance zones. This area has generally accommodated around 17% of the total waterbird numbers in Allfleet's Marsh, with birds feeding most of the time. The following species have frequented these areas in the highest numbers over the years: Dunlin, Lapwing, Ringed plover and Redshank.

Recent overwintering bird surveys were undertaken in 2014/15 over mid and high tides by the RSPB, to specifically understand bird use around the proposed jetty. These determined that the mature saltmarsh area west of Grassland Point is a mid to high tide roost, where relatively low numbers of birds tend to rest, though flocks of Lapwing, Redshank and Dunlin were observed. The overall peak seen on this saltmarsh during the high tide survey represents around 3% of the estuary at high water.

Impact appraisal

During construction, pontoon and footpath construction works, and piling in particular, could lead to significant impacts to overwintering birds, if construction were to take place during the overwintering period. The saltmarsh west of Grassland Point, as well as the relatively small area of Allfleet's Marsh which would be affected, are utilised by both feeding and roosting birds. The saltmarsh is designated, and Allfleet's Marsh should be viewed as essentially European designated. However, the RSPB is not suggesting constructing the jetty during the overwintering period and will avoid the period between 01 October and 31 March.

Birds could conceivably breed on the small seawall and saltmarsh which would be constructed on / over (saltmarsh areas would not be directly affected but constructed over/nearby). The RSPB will seek to avoid the bird breeding period but if work had to happen during the season, the RSPB would employ vegetation management on the seawall to minimise impacts.

Sandwich, Common and Little Tern nest at Foulness during the breeding season. If the works were to be undertaken during the Tern nesting season (generally between April and August at Foulness (RSPB, pers. comm., June 2017)), then the Tern features might be affected if they flew into the Crouch estuary to forage. These birds mainly breed on the shellbanks around Foulness Point (at least 8.3 km away). Terns are known to preferentially

forage as close to the nest as possible, and mean foraging ranges of 11.5 km, 4.5 km and 2.1 km have been determined for Sandwich, Common and Little Tern respectively (Thaxter et al., 2012), though maximum foraging ranges extend to 49 km, 15.2 km and 6.3 km respectively. Thus, Sandwich and Common Tern breeding at Foulness Point could theoretically be affected through construction disturbance (whilst foraging) or prey effects. However, given the distances involved and the short-term nature of the works, and as no impacts on prey items are anticipated (see Section 4.3.4), impacts are not considered to be significant.

During operation, the presence of the ferry and walkers on the seawall could disturb overwintering and foraging breeding birds utilising the adjacent mudflats, saltmarsh and Allfleet's Marsh site. A fairly small proportion of the Allfleet's Marsh site lies within a 100 m disturbance zone where flight responses or site avoidance could occur in response to human disturbance. It is considered that the remnant seawalls will offer some visual and noise shielding from some of the disturbance, and a degree of habituation to the passengers' presence is furthermore expected. It is considered that a minor adverse impact on overwintering birds could result from disturbance should a regular ferry service be initiated during winter. A regular summer service is envisaged, but bird densities are generally much reduced during the summer (ABPmer, 2008), and the magnitude would thus be lower, leading to an insignificant to minor impact to birds present in the summer. Whilst no mitigation is required per se, the following mitigation measures will be observed:

The Environmental Statement indicates that visitors will be advised to keep their dogs on leads and to remain on the footpath at all times (signage will be erected to that effect). In addition, the ferry operator will be advised to approach the jetty at a speed below 2 knots to minimise noise from the engine. Initial (precautionary) monitoring of ferry passenger impacts on bird behaviour during winter will also be undertaken once a regular winter ferry service has commenced, to facilitate adaptive management if required.

The ferry will not be licenced to operate to the new jetty during severe winter weather (whenever the Secretary of State imposes a temporary close season of waterfowl shooting during 'severe weather' (under the Wildlife and Countryside Act, Section 2). It is also worth noting that the current landing point at the marina is located along designated intertidal utilised by birds, and that disturbance of overwintering birds by people would to some extent be displaced / moved to a different location, rather than being completely newly introduced.

Protected species

From extensive past work, it is known that several protected species are present on Wallasea Island, in particular water vole, reptiles and badger. Throughout the Wallasea Island Wild Coast Project, there has therefore been a programme of measures in place to address and mitigate impacts to these species.

Impact appraisal

Water voles and badgers would not be expected to be affected by the proposed works. It is known that common lizards and adders are present on Wallasea Island (e.g. ABPmer, 2008), with seawalls being a favoured location. An existing Protected Species Plan has been reviewed with Natural England for the above-mentioned s73 application (ABPmer, 2017b), and the measures observed for the latter for reptiles and breeding birds would also be observed during the jetty and footpath construction works.

Coastal protection and flood defence

The seawall section on which the new permissive footpath is to be constructed, and to which the jetty is to be attached, no longer fulfils any coastal protection or flood defence function (it was breached for the Allfleet's Marsh realignment, and a new landward defence constructed). Thus, no impacts on this receptor are anticipated.

Historic environment

Lying at the confluence of the Roach and Crouch, the low-lying Wallasea Island is likely to have been an area of tidal flats during the Neolithic (ca. developing into a marshland island by the Later Bronze Age (ca. 1,000-700BC). By this date it may have been used as pasture. There are no recorded archaeological remains of these periods within the scheme area. In the Late Iron Age and Roman periods (ca. 100BC-400AD) the Island may have been the site of a number of red hills (salt production sites), three of which are recorded on the Essex Historic Environment Record (EHER) along the south of the Island. From the 13th or 14th centuries, the island was slowly embanked until by it had become surrounded by a single seawall.

These walls have frequently been breached during surge events (most recently in 1953), and have been subject to periodic upgrading (Heppell, 2002; 2004). The wall where the bankseat is to be installed is redundant, having become thus when the Allfleet's Marsh realignment was implemented in 2006, which included six breaches through the existing (old) seawalls and the construction of a new landward seawall.

Throughout its history, the land-use and economy of the Island has been agriculturally based. In the Medieval period this would have been primarily pastoral, but there is also likely to have been some arable production. Prior to the Wallasea Island Wild Coast Project commencing, the island had become dominated by arable production. The locations of the known existing and previous farmsteads on Wallasea Island are all located to the west and south of the island, away from the proposed works. It is also worth noting that no significant archaeological finds have been made during the construction (and excavation) works for either the Allfleet's Marsh realignment scheme, or the completed phases of the Wallasea Island Wild Coast Project.

According to the Heritage Gateway, the National Record of the Historic Environment (NRHE) (as accessed through Historic England's PastScape website) and the local Heritage Environment Records (HER), the only known wrecks or historical sites located in the immediate vicinity to where the jetty is proposed are listed below. These are all wrecks of unknown or recent origin, and they do not appear to directly overlap with the location where the new jetty is proposed.

An 'assemblage of two hulked vessels in the inter-tidal zone to the east of Overland Point, Wallasea Island' (Monument No. 1526648). These were recorded in a walkover survey of 2002, and their location, as shown on PastScape, is displayed in Image 3 within the submitted Environmental Appraisal.

A 'stranded wreck lying N/S embedded into the saltings on the south bank of the river Crouch'. Reported in 1975 as 'wreck of a large barge' and confirmed in 1982; age is described as 'uncertain' (Monument No. 801275). Its location, as shown on PastScape, is displayed in Image 4. within the submitted Environmental Appraisal.

A 'stranded wreck lying N/S lying on the mud bank on the south side of the river Crouch', reported in 1975 as 'wreck of a large barge' and confirmed in 1982, though described as 'position not fixed' (Monument No. 832418). The barge is thought to be 'early medieval or later'. Its location, as shown on PastScape, is displayed in Image 5 within the submitted Environmental Appraisal.

Impact appraisal

The area of seabed that will be directly impacted by the proposed piles is approximately 0.00008 ha and the area of potential indirect effect from scour is about 0.002 ha. In addition, sections of the jetty (up to 0.0015 ha) will temporarily rest on the seabed at certain states of the tide during operation (Section 4.1). Given the small-scale nature of the proposed works and the fact that there are no known heritage features at the piling locations, it is considered highly unlikely that the scheme will adversely affect any unrecorded archaeology or historic features. Overall, the impact on the historic environment is therefore considered to be insignificant.

Commercial and recreational navigation

The Crouch Harbour Authority is the statutory authority for the River Crouch (and Roach), with responsibilities for areas that involve the main rivers and creek systems making up the estuary. By virtue of the Crouch Harbour Act 1974, the Crouch Harbour Authority controls a number of activities on the estuary and can make/implement byelaws enabling enforcement of rules that it considers necessary to protect and maintain safety in the harbour area.

Following the cessation of Crossrail material deliveries to Wallasea Island in 2015, commercial shipping within the Crouch Harbour Authority area has again reduced, with recreational craft being the main users of the estuaries.

The River Crouch now has approximately 85 commercial shipping movements per year (pers. comm. E. Hawksworth, CHA, June 2017), all of which berthed at Baltic Wharf on Wallasea Island, which has wharf facilities together with open and covered storage. These vessels were typically 80-120 m in length with a draught of 6 m. The main products shipped were timber and steel (ABPmer, 2008).

A wide range of statutory and non-statutory organisations have an active interest in leisure and recreation in the River Crouch. The Crouch and Roach are regarded as one of the leading sailing and power boating centres in the UK (Crouch Harbour Authority, 1996) with Burnham-on-Crouch being a key centre. It is estimated that there are between 2,000 and 2,500 boats with a permanent mooring in the Crouch Harbour Authority Statutory Area (pers. comm. E. Hawksworth, CHA, June 2017). A number of clubs hold competitive races and training events on both the Crouch and Roach, with the largest of these events being Burnham Week Regatta with fleets of up to 100 competitors; the regatta is usually held during August.

Impact appraisal

The interaction between construction activities and ongoing vessel movements in the estuary during construction are likely to be minor and any navigational risks to existing sea users will be managed through dialogue with the harbour master and if necessary, a 'Notice to Mariners'. During operation, vessel (ferry) movements between Burnham and the new jetty would not be anticipated to change significantly when compared to the current situation, but merely go to a different location (at times), along a different route through existing moorings. However, the RSPB would licence an operator experienced with navigating the Crouch, and it is thus not anticipated that navigational risk would change due to the introduction of an alternative landing location.

Green Belt assessment

Wallasea Island lies in the Green Belt. Permission to install reserve infrastructure in relation to the Wallasea Island Wild Coast Project has previously been granted in recognition of the comprehensive social, economic and environmental benefits of the Wallasea Island Wild Coast Project as a whole, which were summarised in the 2017 s73 Planning Statement (ABPmer, 2017c).

Since the implementation of the project, the NPPF (as updated February 2019) has come into force, which specifies that 'local planning authorities should plan positively to enhance the beneficial use of the Green Belt, such as looking for opportunities to provide access; to provide opportunities for outdoor sport and recreation; to retain and enhance landscapes, visual amenity and biodiversity; or to improve damaged and derelict land'.

Impact appraisal

The local planning authority considers the development proposed to be appropriate development as defined for the purposes of Green Belt assessment as cited by paragraph 145 of the NPPF which cited circumstances where development would be unacceptable or acceptable subject to specific limitations and circumstances. The development is proposed in connection with outdoor recreation which is an activity which is acceptable under criteria B of paragraph 145 whilst it is not considered that the development would undermine one of the 5 key objectives of including land within the Green Belt. The authority is of the view that providing improved visitor facilities through the installation of the jetty essentially within the reserve would be in keeping with this guidance.

It is also noted that the 2014 RDC Local Development Framework Management Plan directly links the Wallasea Island Wild Coast Project to its vision for the 'Green Belt and the Countryside' by identifying that 'new visitor facilities at the RSPB nature reserve at Wallasea Island are being developed'.

Cumulative and in-combination effects

The following projects or plans are known to be taking place in the Crouch Estuary:

Wallasea Island Wild Coast Project - Cells 2/4 design modification; and
Wallasea Island Wild Coast Project - Removal of offloading facility / pontoon.

With regard to the former, the RSPB has recently applied to ECC to modify the design of the consented scheme of Cells 2 and 4. This involves a tidal exchange design, whereby water is let onto the south of Wallasea Island using a pipe, and let back out into the estuary via Cells 3 and 1 (and ultimately mostly through Breach 1 of Jubilee Marsh) (illustrated in Figure 2). Effects from this modification on the estuary are anticipated to be significantly reduced from the consented design.

Small localised changes to the pattern of flows are anticipated at Breach 1 under lower water conditions. Breach 1, which is the most northerly breach in Jubilee Marsh, near the confluence of the Crouch and Roach estuaries. This is over 3.5 km distant from the location of the proposed new ferry jetty, and no in-combination / cumulative effects are hence anticipated.

The RSPB is furthermore currently applying for permissions to remove the offloading facility and pontoon which was constructed in the Crouch Estuary to facilitate the delivery of Crossrail materials for the Wallasea Island Wild Coast Project, and ultimately the land forming of Cell 1 / Jubilee Marsh. This is located some 1.3 km east of/ downstream from the proposed new ferry jetty at Grassland Point. Removal of this pontoon formed part of the marine licence conditions for its installation and operation (L/2011/00043/2). Some negligible temporary and localised noise and sediment resuspension impacts (within the

impacts of the project as already consented) are anticipated for the removal of the offloading pontoon (and its 18 piles).

Should the removal of the pontoon piles and the installation of the subtidal piles for the jetty coincide, this could conceivably lead to minor cumulative/in-combination effects from both projects due to the noise involved (re. fish mostly), and also the suspension of sediments (re. benthic invertebrates and fish). However, it is not planned for these projects to coincide, and no in-combination / cumulative effects are hence anticipated from the very temporary (de)construction phases of these two projects.

The offloading facility / pontoon removal will lead to subtidal and intertidal habitat restoration and other benefits due to the removal of 18 piles and the pontoon (which measures around 2,000 m²), as well as its linkspan and conveyor to the island. No adverse in-combination / cumulative effects are hence anticipated between the pontoon removal and jetty installation in habitat terms.

The Local Planning Authority's Assessment

Rochford District Council as the competent authority instructed Place Services to undertake a Habitats Regulations Assessment screening of the proposals and consulted with Natural England on this matter. Natural England initially expressed a view that further information was required both with regard to impacts of the development on internationally designated sites (specifically the Crouch and Roach Estuaries Special Protected Area (SPA) and Ramsar sites), as well as the marine conservation zone present in the estuaries.

On consideration of the Addendum Natural England expressed the view that that sufficient information had been submitted to carry out the HRA including a detailed 'appropriate assessment' of disturbance effects on the Special Protected Area (SPA) / Ramsar site. The aim of such an (HRA) assessment is to ensure that the relevant SPA, SAC and Ramsar site features are considered pulling out key points from the submitted Environmental Appraisal and Addendum in order to come to a clear view on the mitigation measures needed to ensure that no adverse effects on the integrity of the sites.

The local planning authority noted that one of the key issues identified has been that of the route the Ferry would take which could potentially disturb wintering birds if the line of travel was along the south side of the river over a 2km distance in front of the western part of Allfleets Marsh and the saltmarsh west of Grassland Point. It has been identified that if the ferry took this line of travel during the winter and did not keep far enough away from the south shoreline then it might cause significantly more bird disturbance, particularly when the high tide roost west of Grassland Point was in use. By confirming that the ferry route is only B/from Burnham to Grassland Point this would avoid the need for this mitigation measure and would avoid additional assessment as would be required by the Habitat Regulations Assessment.

A further issue identified is that of public access to the old sea wall running out to the new Grassland Point jetty. It is identified that the sea wall will be needed to allow people onto and off the ferry when in operation, however if such access was allowed during the winter and migration periods then disturbance along the sea wall would probably be much more frequent than the Ferry's operation. The recommendation received from the Ecological Consultant in this respect is that (except during the summer) the public should only be allowed onto the sea wall running out of Grassland Point to gain access to and from the ferry. If not, this mitigation measure would be necessary to avoid additional assessments.

The RSPB in response confirmed that as they will own the pontoon, they will only license a ferry operator to go to Burnham straight to Grassland Point (and back) not stopping at Essex Marina during the overwintering season. On the second point of concern the RSPB has confirmed that it will erect signage clarifying that the new permissive footpath is for ferry access only.

The response received from the Principal Ecological Consultant at Essex County Council place Services highlighted the fact that currently there is a fence with a stile in it at the southern end of the sea wall leading out to Grassland Point and a clear 'No Unauthorised Access' sign next to the stile. Observations by Natural England during visits to Wallasea have not noted anyone ignoring that sign. It is noted that it is stated that there is a proper permissive footpath along the Grassland Point seawall to the jetty and people have got used to using it to get to / from the ferry, some may be tempted to ignore a sign telling them that it is for ferry access only. It is indicated within the correspondence that there is a need to monitor compliance with that restriction during the winter and / or erect a lockable barrier in place to enforce this restricted use.

In terms of the operation of the ferry, although the addendum indicates that no mitigation is required per se, the RSPB will advise visitors to keep their dogs on their leads and to remain on the footpath at all times whilst the ferry operator will be advised to approach the jetty at a speed below 2 knots so as to minimise noise from the engine. Initial (precautionary) monitoring of ferry passenger impacts on bird behaviour during winter will also be undertaken once a regular winter ferry service has commenced, to facilitate adaptive management if required whilst the ferry will not be licenced to operate to the new jetty during severe winter weather (whenever the Secretary of State imposes a temporary close season of waterfowl shooting during 'severe weather' (under the Wildlife and Countryside Act, Section 2)).

It is also worth noting that the current landing point at the Essex Marina is located along designated intertidal utilised by birds, thus there is a current level of disturbance within the SPA already due to the on-demand winter ferry services. Thus, some of the disturbance of overwintering birds by people would to some extent be displaced/moved to a different location, rather than being completely additional and newly introduced.

Furthermore, it should be noted that, in the event that birds should take flight, they would find large areas of suitable, undisturbed habitat within a very short distance, as the Wallasea Island Wild Coast Project has led to a large increase in wetland habitat on Wallasea Island. This includes 165 ha of new intertidal habitats in Jubilee Marsh, and over 200 ha of saline and freshwater wetlands in Cells 3 and 5.

Given all these considerations, with regard to the SPA and Allfleet's Marsh, it is not considered that the proposed ferry operation will have impacts on the mortality of protected birds, and thus estuary level impacts on the designated overwintering bird features. Please refer to Section 3.4.4 for an updated favourable condition table for the Crouch and Roach Estuary SPA, which should be viewed as a replacement table to that presented in the Appropriate Assessment Signposting Appendix of the Environmental Appraisal Report (i.e. Table B.3 of ABPmer, 2017).

Reptile Mitigation

The addendum indicates that in addition to the information presented in this report on the bird and MCZ effects, it is notable also that mitigation measures will be adopted to avoid significantly affecting protected reptile species. This issue was highlighted during separate discussions that the RSPB's project manager has had with the planning officer at Rochford District Council (RDC). As briefly outlined in Section 4.3.6 of the Environmental Appraisal report (ABPmer, 2017), in this respect, the measures that the RSPB will adopt are comparable to the approaches they have pursued for past works, including the 'enabling works' that were carried out in Allfleet's Marsh to provide a platform for the material transfer and conveyor equipment. These reptile management measures were carried out under a plan agreed with Natural England.

In advance of the jetty installation and introduction of footpath hardstanding, the vegetation on top of the sea wall will be cut back along the footpath alignments and for 1 m either side of the path. This will be done in the February of the year before reptiles emerge from hibernation. The sward in this zone will then be cut regularly until the works are undertaken. This will ensure that reptiles do not use this area before the works are carried out. There will be multiple features and dense vegetation coverage alongside the seawall crest that will provide hibernaculum for reptiles before, during and after the project is carried out.

The works detailed above for reptile management will also ensure that there are no issues relating to ground nesting birds (as previously outlined in ABPmer, 2017).

Habitat Regulations Assessment and Conclusions

The conclusions reached by the contracted specialist which undertook the HRA indicates the following:

The Addendum report (ABPmer, Oct 2017) addressed the concerns that birds of the Crouch and Roach Estuaries SPA/Ramsar site may be disturbed. The effects on birds in the immediate vicinity of the jetty through disturbance have been found to be minor at worst. A level of disturbance to birds is expected to occur from the ferry and people walking along the seawall crest (should they do so in the winter months), but any effects will be localised and limited through the implementation of mitigation measures that will manage the behaviour of the ferry operator and visitors (e.g. signage and insistence of dogs being on leads). The birds on site are also expected to become habituated to regular movements of people on the defined footpath connecting the jetty to the Wallasea Island Wild Coast site. The range of potential impacts on the SPA/Ramsar and various mitigation measures have been considered and assessed. A package of mitigation measures including construction timing and methods, visitor management measures, operation methods and monitoring of the impacts of recreational disturbance at the Crouch and Roach Estuaries SPA/Ramsar. In an Appropriate Assessment, it is necessary to determine whether the project or plan would adversely affect the integrity of the designated site in the light of the site's conservation objectives. The integrity of a site has previously been defined as the coherence of its ecological structure and function, across its whole area that enables it to sustain the habitat, complex of habitats and/or the levels of populations of the species for which it was classified.

It is concluded that, provided the mitigation proposals described in Table 4.1 are implemented in their entirety, this project to install a jetty at Grassland point, and operate a ferry to and from Burnham-on-Crouch will have no adverse impact on integrity of any of the European/Ramsar sites listed in Table 3.8 as no failure of the conservation objectives is predicted, either alone or in combination. The development can therefore, subject to other considerations, be granted consent.

Economic Considerations

The National Planning Policy Framework (NPPF) sets out the Government's planning policies for England and how these are expected to be applied. Planning authorities must take the NPPF into account in the preparation of local and neighbourhood plans. At the heart of the NPPF is a presumption in favour of sustainable development, which it states, 'should be seen as a golden thread running through both plan-making and decision-taking'.

The submitted assessment sets out the case that the Wallasea Island Wild Coast Project is fully in keeping with the NPPF objectives for sustainable development because of the multiple social, environmental and economic benefits that it provides. The installation of the proposed jetty will particularly aid in supporting rural tourism and promoting healthy communities.

This objective is embodied by the policies cited particularly the Core Strategy which sets out the overall strategy for the future development of the District. The strategy specifically mentions the Wallasea Island Wild Coast Project, and highlights that it 'represents a particular tourism opportunity', though 'one which will have to be carefully managed given the area's ecological importance'. A specific policy is dedicated to the Project, which reads:

Policy URV2 - Wallasea Island: 'The Council will support the RSPB in delivering the Wallasea Island Wild Coast Project with the aim of enhancing the biodiversity value of the area. The Council will also promote recreational use and additional marina facilities in the area, along with access improvements. Such development will be supported provided any adverse ecological impacts are avoided or mitigated for.

The Wallasea Island Wild Coast Project can also be considered to be in line with many other policies of the Core Strategy, particularly with those listed under the heading 'Environmental Issues', including: ENVI (Protection and Enhancement of the Natural Landscape and Habitats and the Protection of Historical and Archaeological Sites), ENV2 (Coastal Protection Belt), and ENV3 (Flood Risk). Policies from other headings are also relevant, most notably: CLTII (Tourism), and EDI (Employment growth).

The RDC Local Development Framework Management Plan 2014 sets out the detailed day-to-day planning policies through which development within the District will be delivered. Under this plan (as adopted 16 December 2014), a short-term vision for 'Green Belt and the Countryside' identifies that 'New visitor facilities at the RSPB nature reserve at Wallasea Island are being developed'.

Under the long-term vision there is also a desire to see Wallasea Island being part of initiatives to enhance Rochford as a tourist destination (especially by virtue of the town providing access to green spaces) and for Wallasea Island to be accessible by secure and improved road access over this longer term. Wallasea Island is also cited as an area which can encourage the growth of local employment opportunities. The local planning authority recognises as the application has indicated that the proposed development will help to realise these short and long-term visions by providing visitor access facilities.

It is worth noting that Burnham-on-Crouch lies within Maldon District. The consultation version of the Local Plan which was at examination stage in 2017 does not specifically mention the Wallasea Island Wild Coast Project, but has clear aspirations to improve access to open spaces and coastal tourism, stating, amongst others that 'appropriate development proposals and projects will be supported by the Council to improve public access to the coast and the countryside' (see policies N3 and NI). Policies T1 and T2 regarding sustainable transport and accessibility are also relevant to the proposed new jetty. With the Burnham railway station being around 1.2 km from the Burnham ferry jetty, the proposed new landing facility would bring Wallasea Island closer to public transport links for more people

Representations:

CANEWDON PARISH COUNCIL: No adverse comments.

MALDON DISTRICT COUNCIL: No objection

MARINE MANAGEMENT ORGANISATION: No objection

The Marine Management Organisation (MMO) is a non-departmental public body responsible for the management of England's marine area on behalf of the UK government. The MMO's delivery functions are; marine planning, marine licensing, wildlife licensing and enforcement, marine protected area management, marine emergencies, fisheries management and issuing European grants.

Marine Licensing

Activities taking place below the mean high-water mark may require a marine licence in accordance with the Marine and Coastal Access Act (MCAA) 2009. Such activities include the construction, alteration or improvement of any works, dredging, or a deposit or removal of a substance or object below the mean high-water springs mark or in any tidal river to the extent of the tidal influence. You can also apply to the MMO for consent under the Electricity Act 1989 (as amended) for offshore generating stations between 1 and 100 megawatts in England and parts of Wales. The MMO is also the authority responsible for processing and determining harbour orders in England, and for some ports in Wales, and for granting consent under various local Acts and orders regarding harbours. A wildlife licence is also required for activities that that would affect a UK or European protected marine species.

Marine Planning

As the marine planning authority for England the MMO is responsible for preparing marine plans for English inshore and offshore waters. At its landward extent, a marine plan will apply up to the mean high-water springs mark, which includes the tidal extent of any rivers. As marine plan boundaries extend up to the level of the mean high-water spring tides mark, there will be an overlap with terrestrial plans which generally extend to the mean low water springs mark. Marine plans will inform and guide decision makers on development in marine and coastal areas. On 2 April 2014 the East Inshore and Offshore marine plans were published, becoming a material consideration for public authorities with decision making functions. The East Inshore and East Offshore Marine Plans cover the coast and seas from Flamborough Head to Felixstowe. For further information on how to apply the East Inshore and Offshore Plans please visit our Marine Information System. The MMO is currently in the process of developing marine plans for the South Inshore and Offshore Plan Areas and has a requirement to develop plans for the remaining 7 marine plan areas by 2021.

Planning documents for areas with a coastal influence may wish to make reference to the MMO's licensing requirements and any relevant marine plans to ensure that necessary regulations are adhered to. For marine and coastal areas where a marine plan is not currently in place, we advise local authorities to refer to the Marine Policy Statement for guidance on any planning activity that includes a section of coastline or tidal river. All public authorities taking authorisation or enforcement decisions that affect or might affect the UK marine area must do so in accordance with the Marine and Coastal Access

Act and the UK Marine Policy Statement unless relevant considerations indicate otherwise. Local authorities may also wish to refer to our online guidance and the Planning Advisory Service soundness self-assessment checklist.

THE CROUCH HARBOUR AUTHORITY: No objection subject to a number of stipulations which are summarised as follows:

x 2 Navigation Lights Fixed Red at both ends of the Jetty, Supply Of Lifebelts with Lines

Lighting for Passengers, Regular Maintenance Checks - including Bollards Maintenance Contract, 24/7 Contact Details in case of emergencies

NO vessel to be alongside while commercial shipping is underway in the Fairway vicinity (to be further defined)

ENVIRONMENT AGENCY: No objection

Provided that the development does not begin before the second week of April. This is because:

1. Presently, the proposed development is not scheduled to commence within the period 1 October - 31 March, so as to avoid the overwintering bird season and avoid impacting upon the bird interest features for which the Crouch & Roach Estuaries are notified for.

2. This also largely correlates with the migratory period of a number of important fish species that use the estuary and for which the estuary is designated for (European eel, Smelt). For example, Smelt gather in the estuary in winter, and then proceed to swim upstream to spawn in February-April. They are a priority species, protected under Salmon and Freshwater Fisheries Act (1975), s41 of the NERC Act (2006), and are listed on the UK post-2010 Biodiversity Framework.

3. Because the habitat contiguous to the proposed development is not suitable for spawning, it is only the migratory route that is of relevance. Therefore, it is requested that works do not begin before the second week of April, so as to allow for local variations in migratory and spawning times.

The soft-piling methods proposed are welcomed and should mitigate for any effects for fish species using the estuary. If works are pushed back to later in the year, sensitive working methods such as those outlined in the application must be adhered to in order to avoid any impacts during the sensitive time for salmonids when fish return to the sea following spawning (Aug-Dec).

Environmental Permitting Regulations

A permit is required for the jetty as flood risk activity (a) "Erecting any structure (whether temporary or permanent) in, over or under a main river" is triggered.

The proposal does not meet the criteria of an exclusion, exemption or standard rule permit and, therefore, the applicant will need to apply for a bespoke permit. More information about how to apply for a bespoke permit can be found on our website at <https://www.gov.uk/guidance/flood-risk-activities-environmental-permits#apply-for-a-bespoke-permit>

NATURAL ENGLAND ((advice received February 2018) NO OBJECTION - SUBJECT TO APPROPRIATE MITIGATION BEING SECURED

As submitted, this development proposal has the potential to affect the Crouch and Roach Estuaries SPA and Ramsar site which are European sites (also commonly referred to as Natura 2000 or N2K sites) afforded protection under the Conservation of Habitats and Species Regulations 2010, as amended (the 'Habitats Regulations'). This site is also notified at a national level as the Crouch and Roach Estuaries SSSI; the relevant interest features of the SSSIs in this case broadly relate to those associated with the European sites and so the following comments are applicable in both an international and national context.

As acknowledged through the revised Habitats Regulations Assessment (HRA) Screening Report (Sue Hooton, Essex Place Services, dated 7th December 2017), there are currently concerns for the impacts of recreational pressure on the Crouch and Roach SPA and Ramsar site, in particular the disturbance of birds for which the sites are in part notified. Natural England considers that small-scale developments (or 'projects' in HRA terms) such as this have the potential to increase levels of recreational disturbance to the estuary. The birds associated with the estuary are sensitive to disturbance from recreation, in particular off-lead dog walking, and the unique attraction of the estuary presents a strong draw for undertaking such activities.

There is also a risk that the construction of the pontoon and jetty could cause disturbance to birds, in particular those activities which generate sudden and loud noises. This can be particularly significant when the works are close to an important roosting or feeding area and if they are carried out during the winter period when birds are likely to be weak and vulnerable during prolonged periods of cold weather. Wintering bird populations are typically present within the period September - March inclusive, and are progressively sensitive to disturbance as temperatures reduce, and especially during the core winter months of November - February inclusive, and during severe weather conditions, (e.g. prolonged freezing conditions).

Taking these potential impact pathways into account, we note that the HRA Screening Report for this development proposes the following disturbance mitigation measures:

1. No construction during the over-wintering period.
2. Instructions to visitors to keep dogs on leads and remain on footpath (including signage and lockable barrier if needed following monitoring),

3. Ferry speed restricted to below 2 knots on approach
4. If regular winter service initiated, monitoring of disturbance impacts.
5. No operation during severe winter weather (whenever temporary close season of waterfowl shooting is imposed.)

Based on the above, we have no objection to this development provided these measures are secured through appropriate planning conditions or obligations.

OTHER ADVICE

We would expect the Local Planning Authority (LPA) to assess and consider the other possible impacts resulting from this proposal on the following when determining this application:

- o local sites (biodiversity and geodiversity)
- o local landscape character
- o local or national biodiversity priority habitats and species.

Natural England does not hold locally specific information relating to the above. These remain material considerations in the determination of this planning application and we recommend that you seek further information from the appropriate bodies (which may include the local records centre, your local wildlife trust, local geoconservation group or other recording society and a local landscape characterisation document in order to ensure the LPA has sufficient information to fully understand the impact of the proposal before it determines the application. A more comprehensive list of local groups can be found at [Wildlife and Countryside link](#).

Protected species

We have not assessed this application and associated documents for impacts on protected species.

Natural England has published Standing Advice on protected species.

You should apply our Standing Advice to this application as it is a material consideration in the determination of applications in the same way as any individual response received from Natural England following consultation.

The Standing Advice should not be treated as giving any indication or providing any assurance in respect of European Protected Species (EPS) that the proposed development is unlikely to affect the EPS present on the site; nor should it be interpreted as meaning that Natural England has reached any views as to whether a licence is needed (which is the developer's responsibility) or may be granted.

CONCLUSIONS

The impacts of the development which has been assessed in the light of the stated and discussed legislation and corresponding material planning considerations together with all other relevant material planning considerations including the provisions of the NPPF (February 2019) is considered acceptable.

This conclusion is reached having screened potential impacts through the HRA process which was undertaken by a consultant contracted by the local planning authority to do so.

Many of the implications which may arise directly or indirectly as a consequence of the development it is considered can be mitigated to a degree that the impact of the development on the biodiversity and ecological integrity of designated sites including impacts upon individual species is acceptable.

The planning authority does not consider that the imposition of conditions to address issues that are within the regulatory remit of any other authority is appropriate and imposes only conditions which serve a planning objective since stringent controls applies to this development which is subject to a range of requirements under separate consenting regimes.

APPROVE

- 1 The development hereby permitted shall be begun before the expiration of three years from the date of this permission.
- 2 The development shall be undertaken in strict accordance with the details of the of the drawings referenced: Q5840/002 Rev A plan reference 4479 Jetty_RedLine_cu2.mxd, 4479 Jetty_RedLine_cu3.mxd4479 Fig_Design_WJetty, and 4479 Jetty_RedLine_cul_v2.mxd
- 3 Unless otherwise agreed in writing by the local planning authority the development shall be undertaken in accordance with the mitigation measures highlighted by the submitted Environmental Appraisal dated June 2017 and the Addendum to the Environmental Statement dated October 2017 which includes reptile management measures, measures to mitigate the disturbance of construction works and consequential ferry crossings to birds .
- 4 No construction works associated with any part of the development shall take place over the over wintering period
- 5 Prior to the first use of any part of the path to be constructed a sign shall be erected at a location instructing visitors to keep dogs on leads and to remain on the footpath. This signage should make it clear that the new permissive footpath is for ferry access only. This method of mitigation shall be monitored and reviewed and if found to be an issue

an additional means of restricting access shall be provided in accordance with details to be submitted which shall include a timescale for implementation to be submitted to and agreed in writing by the local planning authority

- 6 When in operation ferry speeds shall be restricted to below 2 knots on approach
- 7 In the event of a regular winter service being initiated monitoring of disturbance impacts will take place over a time period to be agreed in writing by the local planning authority. If negative impacts are found, appropriate mitigation shall be undertaken in accordance with details which shall be submitted to and agreed in writing by the local planning authority.
- 8 No operation of the ferry service shall take place during severe winter weather (whenever temporary close season of waterfowl shooting is imposed.)

Relevant Development Plan Policies and Proposals:

National Planning Policy Framework (February 2019) Chapters:

- 2 Achieving Sustainable Development
6. Building a strong, competitive economy
- 8 Promoting Healthy Communities (including provision of recreational facilities);
9. Promoting sustainable transport
- 10: Meeting the challenge of climate change, flooding and coastal change;
12. Achieving well-designed places
13. Protecting Green Belt land
14. Meeting the challenge of climate change, flooding and coastal change;
15. Conserving and enhancing the natural environment
16. Conserving and enhancing the historic environment

Rochford District Council's Local Development Framework Core Strategy (adopted December 2011) policies

- GB1 (Green Belt Protection),
- GB2 (Rural Diversification and Recreational Uses),
- URV2 Wallasea Island,
- ENV1 Protection and Enhancement of the Natural Landscape and Habitats and the Protection of Historical and Archaeological Sited,
- ENV2 Coastal Protection Belt,
- CLT11 Tourism,
- ED1 Employment Growth.

Rochford District Council's Local Development Framework Local Development Management Plan policies:

- DM1 (Design of New Developments),

DM14 Green Tourism,
DM26 Other Important Landscape Features and,
DM27 Species and Habitat Protection.

The EIA Directive (2011/92/EU)

The Town and Country Planning (Environmental Impact Assessment)
Regulations 2017

European Habitat Directive Adopted in 1992, (Directive 92/43/EEC)

The Conservation of Habitats and Species Regulations 2017

The local Ward Member(s) for the above application is/are Cllr S Wootton Cllr
G J Ioannou Cllr Mrs L Shaw