Marine Management Organisation

Habitats Regulations Assessment

Table 1: Proposed plan or project details

Title of project	South Bank Quay - Phase 1 and 2
Case reference	MLA/2020/00506 and MLA/2020/00507
Applicant name	South Tees Development Corporation
Type of licensable activity/ies	Section 66 (7) of the Marine and Coastal Access Act 2009: To construct, alter or improve any works within the UK marine licensing area either— (a) in or over the sea, or (b) on or under the seabed. Section 66 (9) of the Marine and Coastal Access Act 2009: To carry out any form of dredging within the UK marine licensing area (whether or not involving the removal of any material from the sea or seabed).
Location of works	See Annex 1. – Insert map(s) showing the location of the activity/ies in relation to the Natura 2000 site(s) (N2K). Several maps of varying scales may be necessary to show the required detail.
Description of proposed project	The proposed scheme comprises demolition, capital dredging, offshore disposal of dredged material, placement of rock in the berth pocket and construction and operation of a new quay (to be set back into the riverbank). The construction phase of the proposed scheme would comprise the following main elements:

	• Demolition of the dilapidated wharf, three jetties downstream of the wharf (including the conveyor at the extreme downstream end jetty), a live electrical substation and pipework which previously abstracted water from the Tees estuary associated with the pumping station. • Construction of a new solid piled quay structure up to 30m wide and 1,230m in length (with an approximate 1,050m of usable quay for berthing), set back into the riverbank. Although the useable surface of the quay itself would be up to 30m wide, the overall footprint of the quay would be up to 50m wide due to the proposals to construct an anchor structure further inland of the quay deck. The exact alignment of the quay is currently undefined and, therefore, for the purposes of the assessment, a maximum quay envelope of 1,300m x 75m has been defined and assessed. • Excavation and re-use of approximately 275,000m3 of soils behind the proposed quay wall to install tie rods to the anchor wall. Excavation and re-use of a further approximately 1,140,000m3 of soils in front of the proposed quay wall to create the berth pocket. • Capital dredging of approximately 1,800,000m3 of marine sediments with offshore disposal into the Tees Bay C disposal site. It is proposed that dredging is undertaken using a trailing suction hopper dredger (TSHD) and a backhoe dredger. • Installation of approximately 200,000m3 of rock within the berth pocket to form a rock blanket. See section 3 of the environmental report for further detail.

Table 2: Need for a Habitats Regulations Assessment (HRA)

2.1 - Is the proposal directly connected with, or necessary to the management of a N2K site for the purpose of conserving the habitats or species for which the site is designated?	No. The proposals are not directly connected with, or necessary to the management of a N2K.
2.2 - Is it necessary to carry out a HRA?	Yes
For the reasons given in section 2.1 and 2.2, this proposal is **considered to require HRA.**	

Table 3: Details of N2K site identified

Name of N2K site: Teesmouth and Cleveland Coast Special Protection Area (SPA) - UK9006061
Is a licensable activity taking place within or near a N2K site: Yes - Yes (within)
Conservation advice package used: https://designatedsites.naturalengland.org.uk/Marine/MarineSiteDetail.aspx?SiteCode=UK9006061&SiteName=teesmouth&countyCode=&responsiblePerson=&SeaArea=&IFCAArea=
Date conservation advice was last accessed: 20 November 2020
Conservation objective(s): https://designatedsites.naturalengland.org.uk/Marine/MarineSiteDetail.aspx?SiteCode=UK9006061&SiteName=teesmouth&countyCode=&responsiblePerson=&SeaArea=&IFCAArea=#hlco

Table 4: Details of N2K site identified

Name of N2K site: Teesmouth and Cleveland Coast potential Special Protected Area (pSPA).
Is a licensable activity taking place within or near a N2K site: Yes – the works are within this proposed site.
Conservation advice package used: https://designatedsites.naturalengland.org.uk/Marine/MarineSiteDetail.aspx?SiteCode=UK9006061&SiteName=teesmouth&countyCode=&responsiblePerson=&SeaArea=&IFCAArea=#hlco http://publications.naturalengland.org.uk/publication/6619918699069440?cache=1533111827.56
Date conservation advice was last accessed: N/A
Conservation objective(s): file:///C:/Users/x940352/Downloads/UK9006061-Teesmouth-and-Cleveland-Coast-SPA-V2019.pdf

Table 5: Details of N2K site identified

Name of N2K site: Teesmouth and Cleveland Coast RAMSAR.
Is a licensable activity taking place within or near a N2K site: Yes (within)
Conservation advice package used: http://jncc.defra.gov.uk/pdf/RIS/UK11068.pdf
Date conservation advice was last accessed: 20 November 2020
Conservation objective(s): http://jncc.defra.gov.uk/pdf/RIS/UK11068.pdf

Likely Significant Effect (LSE)

In formulating the LSE alone and in-combination assessments, Natural England's/JNCC's Conservation Advice Packages, as outlined in Table 3, have been consulted and the following principles applied:

- The Advice on Operations (AoO) category of marine activities used is Ports and Harbours (Construction) - Construction of port and harbour structures/capital dredging.
- Where available, the 'Advice on Operations' (AoO) matrix to determine pressures associated with the proposed activities that may potentially harm the qualifying habitat features and/ or species of the site[s] has been used.
- Low risk pressures, unless there is evidence or site-specific factors that increase the risk, or uncertainty on the level of pressure on a receptor, this pressure generally does not occur at a level of concern and should not require consideration as part of the assessment.
- Features deemed sensitive to pressures (medium and high risk) for both direct and indirect pathways are taken forward into the LSE assessment.
- The individual pressure/ feature interactions categorised as 'Not Sensitive' at the benchmark are not taken forward into the LSE assessment. The MMO considers that the impacts on these features as a result of the activities will be less than the benchmarks specified for these pressure/ feature interactions.
- No AoO was available for the RAMSAR or pSPA therefore the AoO for the existing SPA has been used.
- Features deemed sensitive to pressures (medium and high risk) for both direct and indirect pathways are taken forward into the LSE assessment.
- Pressure/ feature interactions categorised as either 'Insufficient Evidence' or 'Not Assessed' have been taken forward into the LSE assessment in accordance with the precautionary principle.

Table 6: Part 1 – Alone

Teesmouth and Cleveland Coast SPA/pSPA/ RAMSAR: Construction of port and harbour structures/Capital Dredging			
Pressure	**Qualifying feature or species (include sub-features and supporting habitats)**	**LSE**	**Justification**
Above Water Noise Visual disturbance	Bird Species: • Knot (NB) • Little Tern (B) • Redshank (NB) • Sandwich Tern (NB) pSPA: • Pied avocet (B) • Ruff (NB) • Common Tern (B) Waterbird assemblage • Wigeon • Gadwall • Shoveler • Lapwing • Sanderling • Herring gull • Black-headed gull	Yes.	The Tees estuary is a busy commercial port, with a number of sources of existing noise disturbance including regular maintenance dredging, movements of large commercial vessels and land-side activities from the various industrial operators on both sides of the river. Given this existing context, the temporary (approximately five months) and any localised disturbance to birds caused by dredging would not be significant. However, as site of works is within the designated site and the activities will generate noise, particularly through the excavation (creation of depressions and berths activities. As such the likelihood of a significant affect cannot be ruled out and so this will be considered further at appropriate assessment. **Screened into appropriate assessment.**
Abrasion/disturbance of the substrate on the surface of the seabed	Supporting habitat: • Salicornia and other annuals colonising mud and sand • Atlantic salt meadows • Intertidal rock • Intertidal biogenic reef: mussel beds • Intertidal mixed sediments • Intertidal mud • Intertidal sand and muddy sand	No	A site check with a ~1km buffer using MAGIC maps indicates that there are the following features: • Intertidal mud • Saltmarsh No other supporting habitats were identified. The proposed dredge footprint is within close proximity to the North Tees mudflat, which is a Priority Habitat and is within the Teesmouth and Cleveland SPA and Ramsar site. However, based on the assumed side slopes to be created as part of the proposed dredge, no direct or indirect impact to this area of habitat is predicted. In addition, due to

			the distance to the intertidal mud there should be no direct impact. Therefore, these features will not be considered further. **<u>No likely significant effect concluded.</u>**
Barrier to species movement	Bird Species. • Knot (NB) • Little Tern (B) • Redshank (NB) pSPA: • Pied avocet (B) • Ruff (NB) • Common Tern (B) Waterbird assemblage • Wigeon • Gadwall • Shoveler • Lapwing • Sanderling • Herring gull • Black-headed gull	**Yes**	The Tees estuary is a busy commercial port, with a number of sources of existing disturbance including regular maintenance dredging, movements of large commercial vessels and land-side activities from the various industrial operators on both sides of the river. According to Natural England's AoO, barrier to species movement refers to obstructions to species movement caused by physical barrier or prolonged exposure to noise, light, visual disturbance or changes in water quality. The works will introduce noise. According to the same AoO visual disturbance is caused by vessels, vehicles and people movement can create visual stimuli which can evoke a disturbance response. These works will involve the use of a vessel. This, along with disturbance caused by physical presence of construction workers and associated machinery, cannot be ruled out at this stage and will be considered further at appropriate assessment. **Screened into appropriate assessment.**
	Supporting habitat: • Salicornia and other annuals colonising mud and sand • Atlantic salt meadows • Intertidal biogenic reef: mussel beds • Water column	No	A site check with a ~1km buffer using MAGIC maps indicates that there are the following features: • Saltmarsh (~990 metres away on the other side of a land barrier – no pathway) • Water Column. No other supporting habitats were identified. Due to the presence of a land barrier there should be no pathway for potential impacts to the saltmarsh. Therefore, this feature will not be considered further. With regard to water column – The Tees estuary is a busy commercial port, with a number of sources of existing disturbance

			including regular maintenance dredging, movements of large commercial vessels and land-side activities from the various industrial operators on both sides of the river. Given this existing context, the temporary (approximately 10 weeks) and highly localised disturbance caused by the proposed scheme would not be significant. Therefore, this feature will not be considered further for this pressure. **No Likely Significant Effect concluded.**
Changes in suspended solids (water clarity)	Bird Species. • Little Tern (B) • Sandwich Tern (NB) pSPA: • Common Tern (B) Waterbird assemblage • Wigeon • Gadwall • Shoveler • Lapwing • Sanderling • Herring gull • Black-headed gull	Yes	Tern foraging may be inhibited by a decrease in water clarity caused by the proposed dredge. The occurrence of almost daily maintenance dredging throughout the estuary suggests that exposure to such effects is high and habituation may be likely. It is predicted that the impact to tern foraging ability from increased suspended sediments during dredging represents a very localised, temporary and short-term disturbance, with any suspended sediment likely to rapidly settle back on the bed following completion of the dredge. The works will involve the excavation (creation of depressions and berths activities. This may lead to an increase in siltation and turbidity over the course of the development and any effect may be significant. As such the likelihood of a significant affect cannot be ruled out and so this will be considered further at appropriate assessment. This will be discussed at appropriate assessment. **Screened into appropriate assessment.**
	Supporting habitat: • Salicornia and other annuals colonising mud and sand • Atlantic salt meadows • Intertidal rock • Intertidal mixed sediments • Intertidal mud • Intertidal sand and muddy sand	No	A site check with a ~1km buffer using MAGIC maps indicates that there are the following features: • Intertidal mud • Saltmarsh • Water column

	• Water Column		No other supporting habitats were identified. Due to the presence of a land barrier there should be no pathway for potential impacts to the saltmarsh. Therefore, this feature will not be considered further. With regard to water column and intertidal mud - it is envisaged that the effects of the proposed scheme may increase suspended sediments (water clarity). However, any changes will be localised and are unlikely to be sufficient to cause alteration of baseline sediment transport patterns. The magnitude of changes in water clarity is likely to be negligible and not sufficient to cause far-field effects on the baseline conditions. Furthermore, the dredging footprint in the main channel does not overlap with the intertidal habitat available at this site or any other intertidal areas along the river, therefore there is likely to be little direct impact on supporting habitat. Therefore, these features will not be considered further for this pressure. **No Likely Significant Effect concluded.**
Emergence regime changes – including tidal level change considerations	Bird Species. • Knot (NB) • Little Tern (B) • Redshank (NB) • Sandwich Tern (NB) pSPA: • Pied avocet (B) • Ruff (NB) • Common Tern (B) Waterbird assemblage • Wigeon • Gadwall • Shoveler • Lapwing	No	It is envisaged that the effects of the proposed scheme on hydrodynamics and waves is likely to be highly localised and very small in magnitude. In respect of both tidal currents and waves, the baseline conditions are very modest and any small magnitude changes will not cause significantly different effects compared with the present situation. Any localised and small magnitude changes in baseline tidal currents or waves are unlikely to be sufficient to cause alteration of baseline sediment transport patterns, except for the principal effect of a likely small increase in potential for marine silt and sand deposition locally within the newly-deepened berthing pocket, requiring ongoing maintenance dredging (but no change in the overall maintenance dredging strategy for the Tees estuary as a whole). The magnitude of changes in hydrodynamics and waves is likely to be negligible and not sufficient to cause far-field effects on the baseline sediment transport process or morphological function of the wider estuary.

	• Sanderling • Herring gull • Black-headed gull		Therefore, these features will not be considered further for this pressure. **No Likely Significant Effect concluded.**
	Supporting habitat: • Salicornia and other annuals colonising mud and sand • Atlantic salt meadows • Intertidal rock • Intertidal biogenic reef: mussel beds • Intertidal mixed sediments • Intertidal mud • Intertidal sand and muddy sand • Water column		A site check with a ~1km buffer using MAGIC maps indicates that there are the following features: • Intertidal mud (~980 metres away on the other side of the river) • Saltmarsh (~990 metres away on the other side of a land barrier – no pathway) • Water column No other supporting habitats were identified. Due to the presence of a land barrier there should be no pathway for potential impacts to the saltmarsh. Therefore, this feature will not be considered further. With regard to water column and intertidal mud - The magnitude of changes in hydrodynamics and waves is likely to be negligible and not sufficient to cause far-field effects on the baseline sediment transport process or morphological function of the wider estuary. Furthermore, the dredging footprint in the main channel does not overlap with the intertidal habitat available at this site or any other intertidal areas along the river, therefore there is likely to be little direct impact on supporting habitat. **No Likely Significant Effect concluded.**
Habitat structure changes – removal of substratum (extraction)	Supporting habitat: • Salicornia and other annuals colonising mud and sand • Atlantic salt meadows • Intertidal rock • Intertidal biogenic reef: mussel beds • Intertidal mixed sediments • Intertidal mud • Intertidal sand and muddy sand • Water column	No	A site check with a ~1km buffer using MAGIC maps indicates that there are the following features: • Intertidal mud • Saltmarsh • Water column No other supporting habitats were identified. Due to the presence of a land barrier and the distance of the feature from the activities there should be direct impact for potential impacts to the saltmarsh or intertidal mud. Therefore, these features will not be considered further.

			With regard to water column –maintenance dredging routinely occurs in this highly modified/commercial port meaning that the area will be habituated to fluctuating sediment levels. The application reports that the area has previously been dredged to this depth. The area will recover through normal estuarine processes. **No Likely Significant Effect concluded.**
Introduction of light	Bird Species. • Knot (NB) • Little Tern (B) • Redshank (NB) • Sandwich Tern (NB) pSPA: • Pied avocet (B) • Ruff (NB) • Common Tern (B) Waterbird assemblage • Wigeon • Gadwall • Shoveler • Lapwing • Sanderling • Herring gull • Black-headed gull	Yes	It is inevitable that the proposed construction works would result in the creation of disturbance to birds due to lighting (if required). However, given that the works are temporary (approximately five months), within a highly localised part of the estuary and are similar in nature to ongoing activities within the area, no significant impact would occur. However, as site of works is within the designated site and the activities will introduce light, as such the likelihood of a significant affect cannot be ruled out and so this will be considered further at appropriate assessment. **Screened into appropriate assessment.**
	Supporting habitat: • Salicornia and other annuals colonising mud and sand • Atlantic salt meadows • Intertidal rock • Intertidal biogenic reef: mussel beds	No	A site check with a ~1km buffer using MAGIC maps indicates that there are the following features: • Intertidal mud • Saltmarsh • Water column

	• Intertidal mixed sediments • Intertidal mud • Intertidal sand and muddy sand • Water column		No other supporting habitats were identified. Due to the presence of a land barrier and the distance of the feature from the activities there should be no pathway for potential impacts to the saltmarsh or intertidal mud. Therefore, these features will not be considered further. With regard to water column - the proposed construction works would result in the creation of disturbance due to lighting (if required). However, given that the works are temporary (approximately five months), within a highly localised part of the estuary and are similar in nature to ongoing activities within the, no significant impact would occur. The proposed scheme is not intended to increase the import or export of product through the facility. Therefore, these features will not be considered further for this pressure. **No Likely Significant Effect concluded.**
Penetration and/or disturbance of the substratum below the surface of the seabed – including abrasion	Supporting habitat: • Salicornia and other annuals colonising mud and sand • Atlantic salt meadows • Intertidal rock • Intertidal biogenic reef: mussel beds • Intertidal mixed sediments • Intertidal mud • Intertidal sand and muddy sand	No	A site check with a ~1km buffer using MAGIC maps indicates that there are the following features: • Intertidal mud • Saltmarsh • Water column No other supporting habitats were identified. Due to the presence of a land barrier and the distance of the feature from the activities there should be no pathway for potential impacts to the saltmarsh or intertidal mud. Therefore, these features will not be considered further. With regard to the water column – any disturbance will be localised and are unlikely to be sufficient to cause alteration of baseline sediment transport patterns, except for the principal effect of a likely small increase in potential for marine silt and sand deposition locally within the newly-deepened berthing pocket, requiring ongoing maintenance dredging (but no change in the overall maintenance dredging strategy for the Tees estuary as a whole). The magnitude of changes in hydrodynamics and waves is likely to

			be negligible and not sufficient to cause far-field effects on the baseline sediment transport process or morphological function of the wider estuary. Therefore, this feature will not be considered further for this pressure. **No Likely Significant Effect concluded.**
Physical change (to another seabed type)	Supporting habitat: • Intertidal rock	No	A site check with a ~1km buffer using MAGIC maps did not identify this feature. Therefore, this feature will not be considered further for this pressure. **No Likely Significant Effect concluded.**
Physical change (to another sediment type)	Supporting habitat: • Salicornia and other annuals colonising mud and sand • Atlantic salt meadows • Intertidal biogenic reef: mussel beds • Intertidal mixed sediments • Intertidal mud • Intertidal sand and muddy sand	No	A site check with a ~1km buffer using MAGIC maps indicates that there are the following features: • Intertidal mud • Saltmarsh No other supporting habitats were identified. Due to the presence of a land barrier and the distance of the feature from the activities there should be no pathway for potential impacts to the saltmarsh or intertidal mud. Therefore, these features will not be considered further. **No Likely Significant Effect concluded.**
Physical loss (to land or freshwater habitat	Supporting habitat: • Salicornia and other annuals colonising mud and sand • Atlantic salt meadows • Intertidal rock • Intertidal biogenic reef: mussel beds • Intertidal mixed sediments • Intertidal mud • Intertidal sand and muddy sand • Water column	No	A site check with a ~1km buffer using MAGIC maps indicates that there are the following features: • Intertidal mud • Saltmarsh • Water column No other supporting habitats were identified. Due to the presence of a land barrier and the distance of the feature from the activities there should be no pathway for potential impacts to the saltmarsh or intertidal mud. Therefore, these features will not be considered further.

			With regard to water column- the capital dredge will cause a temporary loss of marine sediment. The construction activities should not cause a physical loss as it is to remove/replace existing structures. There should be no physical loss to land or freshwater habitat. Therefore, this feature will not be considered further for this pressure. **No Likely Significant Effect concluded.**
Removal of non-target species	Bird Species. • Knot (NB) • Little Tern (B) • Redshank (NB) • Sandwich Tern (NB) pSPA: • Pied avocet (B) • Ruff (NB) • Common Tern (B) Waterbird assemblage • Wigeon • Gadwall • Shoveler • Lapwing • Sanderling • Herring gull • Black-headed gull	No	There is a potential for the construction/dredge to impact prey species of these bird species. Maintenance dredging is routinely conducted at this highly modified/commercial port. Therefore, species should be habituated to these activities. Any disruption will be temporary (5 months) during the activities and should not be significant compared to the baseline conditions. Therefore, these features will not be considered further for this pressure. **No Likely Significant Effect concluded.**
	Supporting habitat: • Atlantic salt meadows • Intertidal rock • Intertidal biogenic reef: mussel beds • Intertidal mixed sediments • Intertidal mud • Intertidal sand and muddy sand	No	A site check with a ~1km buffer using MAGIC maps indicates that there are the following features: • Intertidal mud • Saltmarsh • Water column No other supporting habitats were identified. Due to the presence of a land barrier and the distance of the feature from the activities

	• Water column		there should be no pathway for potential impacts to the saltmarsh or intertidal mud. Therefore, these features will not be considered further. **No Likely Significant Effect concluded.**
Smothering and siltation rate changes (Heavy)	Supporting habitat: • Salicornia and other annuals colonising mud and sand • Atlantic salt meadows • Intertidal rock • Intertidal biogenic reef: mussel beds • Intertidal mixed sediments • Intertidal mud • Intertidal sand and muddy sand	No	A site check with a ~1km buffer using MAGIC maps indicates that there are the following features: • Intertidal mud • Saltmarsh No other supporting habitats were identified. Due to the presence of a land barrier there should be no pathway for potential impacts to the saltmarsh. Therefore, this feature will not be considered further. With regard to intertidal mud – the activities are likely to cause a small increase in potential for marine silt and sand deposition locally within the newly-deepened berthing pocket, requiring ongoing maintenance dredging (but no change in the overall maintenance dredging strategy for the Tees estuary as a whole). The magnitude of changes in is likely to be negligible and not sufficient to cause far-field effects on the baseline sediment transport process, morphological function of the wider estuary, or to the intertidal mud. Therefore, this feature will not be considered further. **No Likely Significant Effect concluded.**
Smothering and siltation rate changes (Light)	Supporting habitat: • Intertidal rock • Intertidal biogenic reef: mussel beds • Intertidal mixed sediments • Intertidal mud • Intertidal sand and muddy sand	No	As above.
Underwater noise changes	Bird Species. • Little Tern (B) • Sandwich Tern (NB) pSPA: • Pied avocet (B)	No	The Tees estuary is a busy commercial port, with a number of sources of existing noise disturbance including regular maintenance dredging, movements of large commercial vessels and land-side activities from the various industrial operators on both sides of the river. Given this existing context, the temporary

	• Ruff (NB) • Common Tern (B) Waterbird assemblage • Wigeon • Gadwall • Shoveler • Lapwing • Sanderling • Herring gull • Black-headed gull		(approximately 10 weeks) and highly localised disturbance to birds caused by the proposed scheme would not be significant. Therefore, these features will not be considered further for this pressure. **No Likely Significant Effect concluded.**
	Supporting habitat: • Intertidal rock • Water column	No	A site check with a ~1km buffer using MAGIC maps indicates that there are the following features: • Water column No other supporting habitats were identified. The Tees estuary is a busy commercial port, with a number of sources of existing disturbance including regular maintenance dredging, movements of large commercial vessels and land-side activities from the various industrial operators on both sides of the river. Given this existing context, the temporary (approximately five months) and any localised disturbance caused by the proposed scheme would not be significant. Therefore, these features will not be considered further for this pressure. **No Likely Significant Effect concluded.**
Vibration	Supporting habitat: • Salicornia and other annuals colonising mud and sand • Atlantic salt meadows • Water column		A site check with a ~1km buffer using MAGIC maps indicates that there are the following features: • Saltmarsh • Water column No other supporting habitats were identified. Due to the presence of a land barrier there should be no pathway for potential impacts to the saltmarsh. Therefore, this feature will not be considered further.

			With regard to the water column - it is possible that vibration may be caused due to the presence of construction plant etc. However, given that the works are temporary (approximately five months), within a highly localised part of the estuary and are similar in nature to ongoing activities within the estuary (i.e. maintenance dredging which is undertaken almost daily), no significant impact would occur. Therefore, this pressure will not be considered further. **No Likely Significant Effect concluded.**
Visual disturbance	Bird Species. • Knot (NB) • Little Tern (B) • Redshank (NB) pSPA: • Pied avocet (B) • Ruff (NB) • Common Tern (B) Waterbird assemblage • Wigeon • Gadwall • Shoveler • Lapwing • Sanderling • Herring gull • Black-headed gull	Yes	It is inevitable that the proposed construction works would result in the creation of visual disturbance to birds due to the presence of construction plant, lighting (if required) and personnel. As site of works is within the designated site and the activities will generate noise, particularly through the excavation (creation of depressions and berths activities. As such the likelihood of a significant affect cannot be ruled out and so this will be considered further at appropriate assessment. **Screened into appropriate assessment.**
	Supporting habitat: • Water column	No	A site check with a ~1km buffer using MAGIC maps indicates that there are the following features: • Water column The proposed activities could result in the creation of visual disturbance due to the presence of construction plant, lighting (if required) and personnel. However, given that the works are within a

			highly localised part of the estuary and are similar in nature to ongoing activities within the estuary (i.e. maintenance dredging which is undertaken almost daily), no significant impact would occur. Therefore, this pressure will not be considered further for this pressure.
Water flow (tidal current) changes, including sediment transport considerations	Bird Species. • Little Tern (B) • Sandwich Tern (NB) pSPA: • Pied avocet (B) • Ruff (NB) • Common Tern (B) Waterbird assemblage • Wigeon • Gadwall • Shoveler • Lapwing • Sanderling • Herring gull • Black-headed gull	Yes	Tern foraging may be inhibited by a reduction in water quality caused by the proposed dredge. The occurrence of almost daily maintenance dredging throughout the estuary suggests that exposure to such effects is high and habituation may be likely. It is predicted that the impact to tern foraging ability from increased suspended sediments during dredging represents a very localised, temporary and short-term disturbance, with any suspended sediment likely to rapidly settle back on the bed following completion of the dredge. No effect on overall population level or status is predicted to occur, and it is therefore concluded that no significant impacts would occur. The works will involve the excavation (creation of depressions and berths activities. This may lead to an increase in siltation and turbidity over the course of the development and any effect may be significant. As such the likelihood of a significant affect cannot be ruled out and so this will be considered further at appropriate assessment. This will be discussed at appropriate assessment. **Screened into appropriate assessment.**
	Supporting habitat: • Intertidal rock • Intertidal biogenic reef: mussel beds • Intertidal mixed sediments • Intertidal mud • Intertidal sand and muddy sand • Water column	No	A site check with a ~1km buffer using MAGIC maps indicates that there are the following features: • Intertidal mud • Water column No other supporting habitats were identified. With regard to water column - It is envisaged that the effects of the proposed scheme on hydrodynamics and waves is likely to be highly localised and very small in magnitude. In respect of both tidal currents and waves, the baseline conditions are very modest and

			any small magnitude changes will not cause significantly different effects compared with the present situation. Any localised and small magnitude changes in baseline tidal currents or waves are unlikely to be sufficient to cause alteration of baseline sediment transport patterns, except for the principal effect of a likely small increase in potential for marine silt and sand deposition locally within the newly-deepened berthing pocket, requiring ongoing maintenance dredging (but no change in the overall maintenance dredging strategy for the Tees estuary as a whole). The magnitude of changes in hydrodynamics and waves is likely to be negligible and not sufficient to cause far-field effects on the baseline sediment transport process or morphological function of the wider estuary.
Wave exposure changes	Supporting habitat: • Intertidal rock • Intertidal biogenic reef: mussel beds • Intertidal sand and muddy sand • Water column	No	As above.

Part 2 – In-combination.

Table 7: Projects considered for in-combination assessment

Name of N2K site: Teesmouth and Cleveland Coast SPA/pSPA		
Name of plan or project	**Type of plan or project with compatible pressures**	**Other plan or project taking place within or near an N2K site?**
L/2017/00012/3 - Able Seaton Port Holding basin and Channel. TERRC Basin (including Grounding Bed, Quay 7,8,9 and Terrc Basin)	Capital/Maintenance dredging (expires 01/03/2026) Compatible pressures: Above water noise Barrier to species movement Visual disturbance	Yes – within the pSPA/partially within the SPA. The relevant compatible pressures have been taken through to AA alone so are not considered further here.
L/2019/00220 - Inter Terminals	Jetty 1 upgrade - License expires 31/12/2022 Compatible pressures: Above water noise Barrier to species movement Visual disturbance	The proposed works to Jetty 1 are highly localised and the construction works are short-term. The relevant compatible pressures have been taken through to AA alone so are not considered further here.
MLA/2020/00073	Alternative use of dredged material Compatible pressures: Changes in suspended sediment (water clarity) The MMO do consider an in-combination effect is likely as the dredged sediment will be reused as part of this project.	This is in conjunction with this application, as dredge material from this application (if suitable) will be used for the reclamation). This project is the Site 4 activity submitted with this application. Licence application submitted for determination, partially within the site of works. The relevant compatible pressures have been taken through to AA alone so are not considered further here.

Likely Significant Effect Conclusion

The MMO:

Likely Significant Effect Conclusion

The MMO:

Has decided to carry out an appropriate assessment because significant effects alone could not be screened out.

The application contains mitigation that cannot be considered at LSE stage, and so this will be discussed at appropriate assessment. This is specific relation to above water noise, barrier to species movement, visual disturbance water flow (tidal current) changes, including sediment transport considerations and changes in suspended sediments (water clarity).

Name of MMO officer: Emmanuel Mulenga

Job Title: Marine licensing case officer

Date: 22 December 2020

Appropriate Assessment

Below is the MMO's assessment of those aspects of the project that it was not possible to rule out the likelihood of significant effects on the designated sites listed in table 3.

Part 1 – Alone

Name of designated site: Teesmouth and Cleveland Coast SPA				
Pressure	**Qualifying feature or species (include sub-features and supporting habitats)**	**Adverse Effect on Integrity on qualifying feature of species?**	**Justification**	**After mitigation, can you conclude no adverse effect on site integrity?**
Above water noise Barrier to species movement Visual disturbance Introduction of light	Sandwich tern, Breeding Common tern, Breeding Little tern, Breeding Ruff, Breeding Pied avocet, Breeding Red knot, Breeding Common redshank, Breeding	No	The applicant has stated in their application that works will be carried out outside of the overwintering period to avoid disturbance of the bird populations. The works are proposed to take place from 1 May 2020 to 30 September 2020, a short time period of five months.	Yes- The MMO consider that carrying out the works outside of the over wintering period will significantly reduce displacement pathways to such that any effect is not likely to be significant. Furthermore, the short duration of the works is not likely to have a sustained impact with regards to displacement from barriers to species movement or visual disturbance.
Changes in suspended sediment (water clarity) Water flow (tidal current) changes, including sediment transport considerations	Sandwich tern, Breeding Common tern, Breeding Little tern, Breeding Ruff, Breeding Pied avocet, Breeding Red knot, Breeding Common redshank, Breeding Intertidal sand and muddy sand Subtidal coarse sediment Subtidal mud Subtidal sand	No	The applicant has stated that excavation of the foreshore, and the placement of site won will be carried out during the low tide. This is in order to reduce the impact of sedimentation with the aim of reduction turbidity.	Yes- The MMO consider that carrying out the works at low tide will significantly reduce displacement pathways to such that any effect is not likely to be significant

Part 2: In-combination

Name of N2K site: Teesmouth and Cleveland Coast SPA/pSPA		
Name of plan or project	**Type of plan or project with compatible pressures**	**Other plan or project taking place within or near an N2K site?**
L/2017/00012/3 - Able Seaton Port Holding basin and Channel. TERRC Basin (including Grounding Bed, Quay 7,8,9 and Terrc Basin)	Capital/Maintenance dredging (expires 01/03/2026) Compatible pressures: Above water noise Barrier to species movement Visual disturbance	Yes – within the pSPA/partially within the SPA. The maintenance dredge covers the whole approach channel for the Port of Able in order for access to be maintained for commercial operations. Dredging in this area is longstanding. Applicant has stated in their application that works will be carried out outside of the overwintering period to avoid disturbance of the bird populations. The works are proposed to take place from 1 May 2020 to 30 September 2020, a short time period of five months. The MMO consider that carrying out the works outside of the over wintering period will significantly reduce displacement pathways to such that any in-combination effect is not likely to be significant. Furthermore, the short duration of the works is not likely to have a sustained impact with regards to displacement from barriers to species movement or visual disturbance. The MMO has concluded that the proposed project would not have an adverse effect on the integrity in-combination with L/2017/00012/3.
L/2019/00220 - Inter Terminals	Jetty 1 upgrade - License expires 31/12/2022 Compatible pressures: Above water noise Barrier to species movement Visual disturbance	The proposed works to Jetty 1 are highly localised and the construction works are short-term. Applicant has stated in their application that works will be carried out outside of the overwintering period to avoid disturbance of the bird populations. The works are

		proposed to take place from 1 May 2020 to 30 September 2020, a short time period of five months. The MMO consider that carrying out the works outside of the over wintering period will significantly reduce displacement pathways to such that any in-combination effect is not likely to be significant. Furthermore, the short duration of the works is not likely to have a sustained impact with regards to displacement from barriers to species movement or visual disturbance. The MMO has concluded that the proposed project would not have an adverse effect on the integrity in-combination with L/2019/00220.
MLA/2020/00073	Alternative use of dredged material Compatible pressures: Changes in suspended sediment (water clarity) The MMO do consider an in-combination effect is likely as the dredged sediment will be reused as part of this project.	This is in conjunction with this application, as dredge material from this application (if suitable) will be used for the reclamation). This project is the Site 4 activity submitted with this application. Licence application submitted for determination, partially within the site of works. Applicant has stated that excavation of the foreshore, and the placement of site won will be carried out during the low tide. This is in order to reduce the impact of sedimentation with the aim of reduction turbidity. The MMO consider that carrying out the works at low tide will significantly reduce displacement pathways to such that any in-combination effect is not likely to be significant. The MMO has concluded that the proposed project would not have an adverse effect on the integrity in-combination with MLA/2020/00073.

Appropriate Assessment Conclusion

This is a record of the appropriate assessment required by regulation 63 of The Conservation of Habitats and Species Regulations 2017 and undertaken by the Marine Management Organisation in respect of the proposed project outlined in table 1.

The LSE alone assessment concluded that the proposed project would be likely to have a significant effect on the following N2K site:

- Teesmouth and Cleveland Coast SPA.

No LSE in-combination was identified.

An alone and in-combination appropriate assessment has been undertaken of the implications of the proposal in consideration of the applicable conservation objectives.

The MMO has concluded that the proposed project would not have an adverse effect on the integrity of the following site(s), either alone:

- Teesmouth and Cleveland Coast SPA.

This conclusion is dependent on mitigation measures being secured by the following conditions being secured in a marine licence:

- No works will take place during the overwintering period 1st October to 31st March inclusive.
- All excavation works and works to take place at low tide.

Natural England was consulted on the appropriate assessment [date(s)] and to which the MMO has had regard. The conclusions of this appropriate assessment [are/are not] in accordance with the advice and recommendations of Natural England.

Name of MMO officer: Emmanuel Mulenga

Job Title: Marine Licensing Case Officer

Date: 22 December 2020

Annex 1

Full location information (including site coordinates) is available on the MMO's Public Register. A map detailing the proposed project site(s) is below.