

Falmouth Docks Development

Environmental Statement Non-Technical Summary

April 2025

RAMBOLL

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Photo looking towards existing Falmouth Docks

Overview

This document provides a simplified overview of the Environmental Statement (ES) prepared for the Falmouth Docks Development. Falmouth Docks and Engineering Company (FDEC) are seeking to deliver the proposed redevelopment and upgrade of facilities at Falmouth Docks (the 'site'), which is located within the administrative boundary of Cornwall Council (CC).

Comprehensive environmental assessments have been undertaken to understand how the proposed development might impact the environment, as well as identifying ways to reduce any adverse impacts. The findings of these assessments have been reported in an Environmental Statement, which is a technical report that helps decision-makers understand the potential environmental impacts of a new development.

This document, the Non-Technical Summary, concisely presents the key elements of the Environmental Statement and includes:

- A description of the site and proposed development;
- An outline of the main alternatives to the proposed development and how the design has been developed;
- A summary of effects which the project is likely to have on the environment;
- A description of the measures needed to avoid, reduce and, where possible, remedy significant adverse effects; and
- Consideration of other neighbouring developments that could contribute to effects in combination with the proposed development.

This Non-Technical Summary has been prepared by Ramboll and summarises work undertaken by a team of technical environmental specialists. Both the Environmental Statement and the Non-Technical Summary have been prepared in accordance with The Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (as amended) and the Marine Works (Environmental Impact Assessment) Regulations 2007 (as amended).

submitted to CC and the Marine Management Organisation (MMO), setting out the proposed methods and approaches for the environmental assessments. The project team requested input and agreement on the proposed scope, which was formally provided by CC on the 6 October 2023 and the MMO on 25 October 2023 in the form of their 'Scoping Opinions'. The assessments contained in the Environmental Statement have been undertaken based on the Environmental Impact Assessment Scoping Opinions provided by CC and the MMO.

Further Information

If you need more information, the full ES (including technical appendices) and other supporting documents to the planning application are available for viewing on the CC website:

<https://planning.cornwall.gov.uk/online-applications/>

Further information on the Marine Licence Application (MLA) can be found on the MMO Public Register Portal, including the full ES (including technical appendices):

https://marinelicensing.marinemanagement.org.uk/mmofox5/fox/live/MMO_PUBLIC_REGISTER

A CD version of the ES is available for purchase at a cost of £25 +VAT by contacting Ramboll, Twenty3 Brunswick Place, Southampton, SO15 2AQ. Paper copies of the ES can be requested at a charge to reflect printing and distribution costs.

<https://www.ramboll.com/en-gb/contact-us/united-kingdom>

Comments on the Application

If you have any comments on the planning application, these should be forwarded to CC at:

Cornwall Council Planning Department

New County Hall

Treyew Road,

Truro

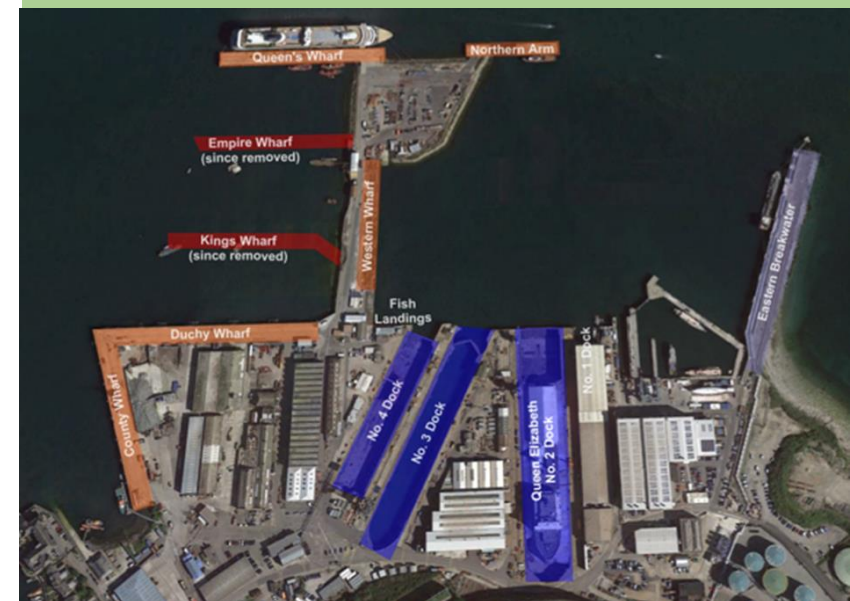
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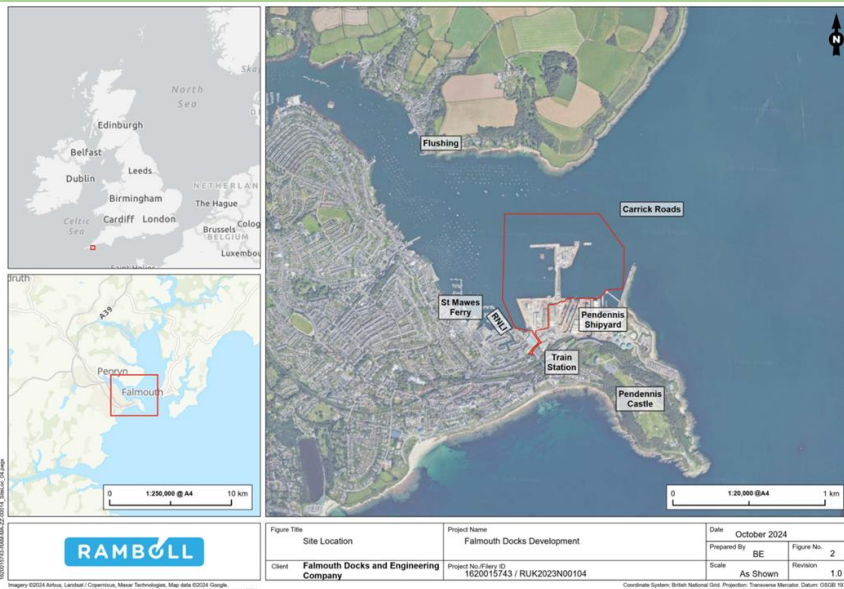
Comments on the MLA can be made through the MMO Public Register Portal.

1. Introduction

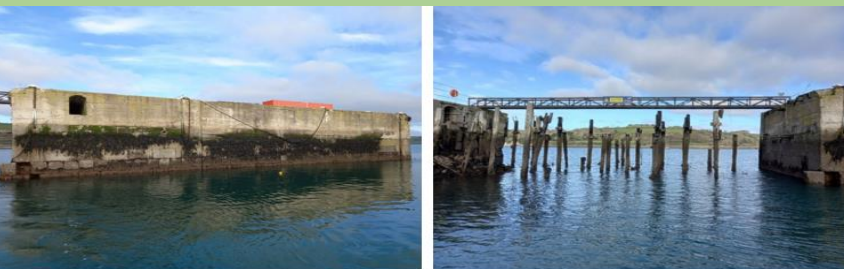


Photograph of the existing site, also showing the old Empire and Kings Wharfs (shown red) which were demolished in 2008/2009

2. Site Context



Site Location

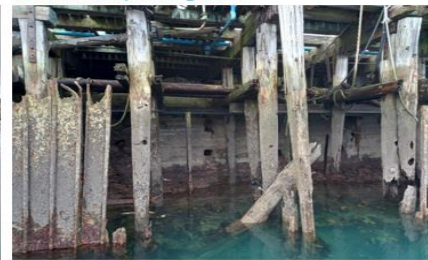


A: Northern Arm Concrete structure, looking north

B: Timber Piles and Gang Walkway adjacent to the Northern Arm, looking north



C: Western Wharf, looking northwest



D: Western Wharf Condition of Timber Piles, looking west

Representative Site Photographs

Site Location and Surroundings

The site is located at Falmouth Docks, Cornwall, TR11 4NR; and covers a total area of approximately 47.2 hectares. The approximate National Grid Reference of the site is SW 81765 32796.

The site comprises:

- 7.6 hectares of hardstanding, building structures and wharf structures, which can be summarised as follows:
 - A central causeway from which the docks run, leading from the main dockside to the central part of the site, where the hardstanding ends at the operational Queens Wharf and Northern Arm;
 - Queens Wharf and the Northern Arm area (located in the central part of the site), between which lies a section of open revetment;
 - A berth to the south of Queens Wharf;
 - The former Western Wharf situated to the east of the central causeway;
 - The Duchy and County Wharfs, located to the south-west of the central causeway; and
 - The footprints of two former wharfs, Empire Wharf and Kings Wharf. These were removed in 2008/2009, however structures remain as foul ground on the seabed, creating shallow water areas.
- 39.5 hectares of the Carrick Roads channel.

The site is bound:

- To the north by the Carrick Roads channel, leading to the English Channel. The Flushing headland is located approximately 500 m to the north.
- To the east by the A&P dry docks, followed by the Pendennis Shipyard. The Eastern Breakwater is located approximately 430 m further east. Pendennis Castle lies approximately 1 km south-east.
- To the south by Tinnars Walk, beyond which are the Falmouth Docks operational buildings and Falmouth train station.
- To the south-west by the RNLI Falmouth Lifeboat Station, Cockwells at the Lock House and Port Pendennis Marina, beyond which lies the National Maritime Museum Cornwall. A number of visitor moorings are located adjacent to the site within the Carrick Roads/Falmouth Bay area. The St Mawes-Falmouth ferry service runs adjacent to the site boundary along a west to north orientation. Falmouth town and residential area lies further west of the site.

The site is within the control of A&P, who act as the Falmouth Docks and Engineering Company (FDEC) under the Falmouth Docks Act 1959. FDEC is itself "a competent harbour authority".

Falmouth Docks currently provides alongside deep-water berthing for vessels up to 100,000 tonnes and handles many different types of cargo and also provides alongside facilities and deep-water anchorage for cruise ships. The wider dock area is home to the largest ship-repair complex in the UK, providing a complete range of marine repair services, including the use of three dry docks.

Extension and Reconfiguration of Falmouth Docks

FDEC are looking to redevelop and modernise the existing facilities at Falmouth Docks to reinstate full alongside berth capacity and increase berth capacity. The proposed development aims to maintain existing business and future proof the docks with respect to cruise capacity, cargo capacity and renewable FLOW (Floating Offshore Wind), supporting the offshore wind market.

Demolition and removal of existing structures:

- Demolition of the existing Western Wharf timber piles and above surface infrastructure;
- Demolition of the Northern Arm concrete structure;
- Demolition of eight on-site buildings;
- Removal of foul ground within areas of the former Kings and Empire Wharves; and
- Removal of the gangway.

Construction of new buildings and structures:

- Reclamation of land behind Western Wharf through back-filling.
- Construction of a new Western Wharf suspended deck structure;
- Construction of Northern Wharf, a suspended deck between Queens Wharf and the Northern Arm;
- Upgrades and extension of the Queens Wharf suspended desk structure; and
- Upgrades to Duchy Wharf structure to facilitate the FLOW Deck;
- Potential strengthening of piles at County and Duchy Wharfs; and
- Installation of the FLOW Deck.

Dredging:

- Pocket dredge berth area to create clearance for large cruise vessels (Excellence class) and to meet FLOW renewable energy device underkeel requirements, depth of -10.5 m; and
- Surface skim of seabed to the east of the site to maintain - 5.5 m depth.

Access and parking:

- A new designated area located adjacent to the cruise berths would be provided to facilitate the additional coaches and taxis for cruise passengers.

Landscaping and finishing works:

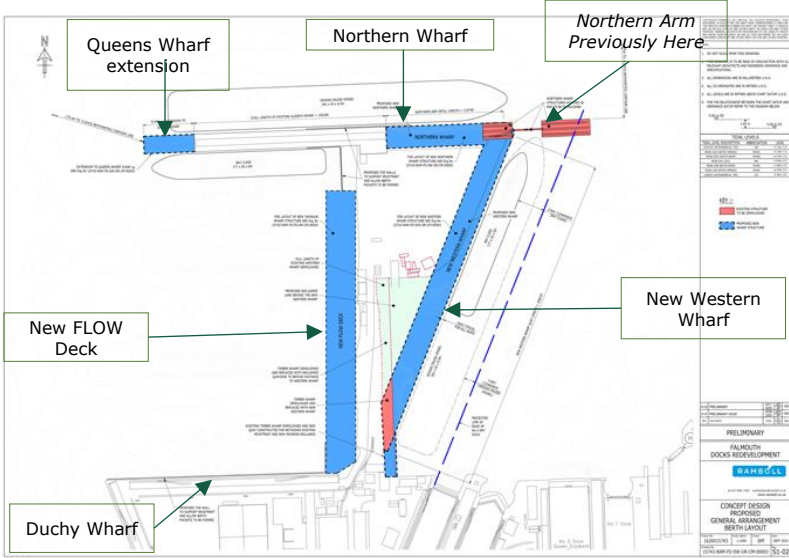
- Minor internal roadway improvements to mark internal routes.
- Installation of a number of trees in planters for biodiversity.

Consenting of the Proposed Development

- FDEC is submitting a **full planning application**, which is required for works above the Mean Low Water Mark (MLWM).
- A **Marine Licence Application (MLA)** is also being submitted to the MMO, which is required for works that would be undertaken below Mean High Water Springs (MHWS).

This Non-Technical Summary and the Environmental Statement supports both the planning application and the MLA and considers the proposed development as a whole.

3. The Proposed Development

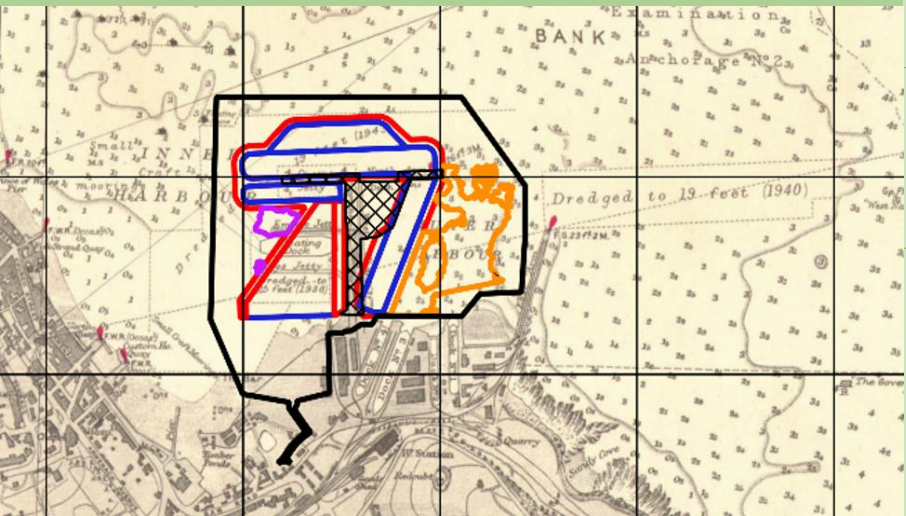
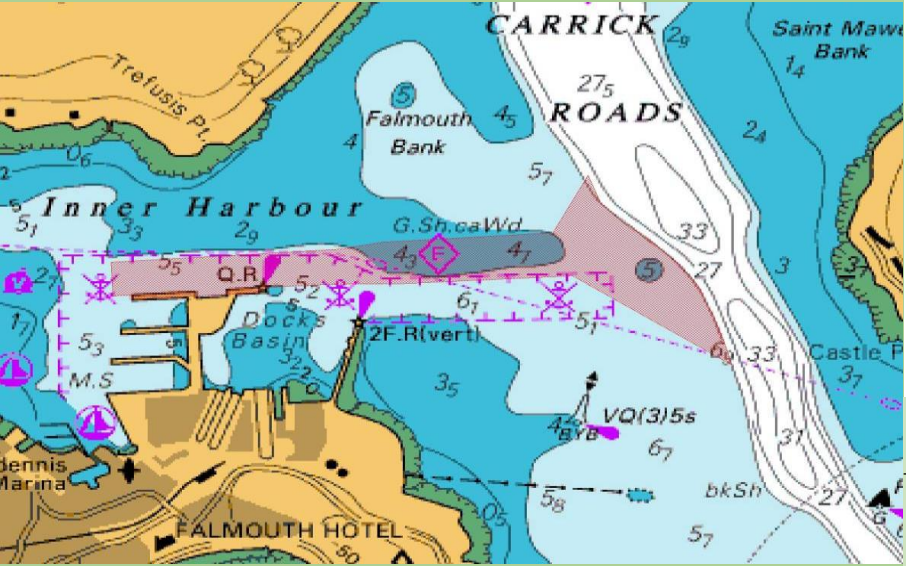


Proposed Development Site Arrangement Plan



Access arrangements (to remain as existing)

4. Design Alternatives and Evolution



Consideration of Alternatives

FDEC and the project team, supported by stakeholders through consultation, studied a range of alternative options before reaching the final design. Environmental considerations were integral to the design development and included:

- Presence of maerl habitat, which is a protected species under Natural Environment and Rural Communities Act 2006, Section 41 and for which the Fal and Helford Special Area of Conservation (SAC) is designated;
- Proximity of the site to Falmouth Bay to St Austell Bay Special Protected Area (SPA), which is designated for over-wintering birds;
- Landscape, seascape and visual amenity, particularly in relation to the Cornwall National Landscape;
- The levels of contamination within seabed sediments, as informed by Ground Investigation (GI) testing;
- Flood risk at the site, including allowances for future climate change;
- Existing small areas of reasonable quality vegetation within the site, including modified grassland, vegetated vacant/derelict land and supralittoral rock (boulders above the high tide line);
- Embedded carbon, and other sustainability measures, which were considered within a Sustainability Workshop held with the applicant and design team in December 2023; and
- Nearby sensitive receptors (such as residential properties and ecological receptors, and particularly in relation to traffic, adverse air quality, noise, underwater noise and sediment mobilisation).
- Safe navigation and access to existing wet docks and dry docks and wider harbour infrastructure.

Alternative considered	Details	Environmental and other considerations	Outcome
Do nothing	The proposed development is not progressed, and the site is left in its current state	In the 'Do-Nothing' scenario the following would occur: - Part of the dock infrastructure would remain unsafe for operational use and access, and other sections would reach the end of their design life; - The dock would remain unable to accommodate modern cruise ships, resulting in a lost opportunity to increase tourism in Falmouth and Cornwall; - The lost opportunity to enhance port infrastructure for e.g., FLOW operations and to contribute to the UK's transition to offshore renewable energy; and - A continued lack of berth and landside space capacity.	Not considered further
Alternative locations	Alternative sites for the proposed development	- The site is owned by the applicant; already has a significant operational dock; and is safeguarded for marine-related employment by CC. The site is also already an existing cruise terminal. - The feasibility of other ports in south-west England were considered but no alternative location was identified that could meet requirements and offer a practical option.	No other locations or sites identified
Alternative designs and layouts	Dock development	Different layout options were considered, which focused on various improvements to infrastructure around the docks estate. Consideration was made for the demolition of the Northern Arm and part of the remaining Western Wharf, the construction of the new Western Wharf, the joining of Queens Wharf and Northern Wharf, the westward extension of Queens Wharf westward and the potential installation of the FLOW Deck.	Most favourable environmental and commercial option was taken forward
	Dredging	The 2009 Falmouth Cruise Project sought to dredge an area of seabed in the eastern part of the navigation channel. The revised approach for the proposed development was a considerably reduced dredge area and a pocket dredge of berth areas instead (within previously dredged areas), making use of the high tides to accommodate the deeper underkeel clearance required from vessels entering and leaving the docks via Carrick Roads. Notable consideration was made to the presence of Maerl beds, and ensuring impacts were avoided.	Most favourable environmental option taken forward

It is anticipated that the demolition and construction stage would be delivered through five key activities:

- ## Timescales

Component	Description of Works	Estimated Start Date	Estimated End Date
Western Wharf	Enabling, demolition, dredging and constructions	Q4 2025	Q4 2027
Northern Wharf	Strengthening and enabling, demolition, dredging and construction	Q4 2025	Q4 2027
Queen’s Wharf	Strengthening and enabling, dredging and construction	Q1 2026	Q4 2027
FLOW Deck	Strengthening and enabling, dredging and construction	Q1 2026	Q1 2029
Duchy and County Wharf	Strengthening and enabling	Q2 2026	Q3 2026
Dock Quayside Areas	Demolition and landscaping	Q1 2026	Q2 2026

The dock currently operates 24 hours per day, 7 days per week, and it is anticipated that the majority of construction works will also be undertaken on this basis, with the exception of the following activities, which would not be undertaken at nighttime:

- ### Construction Environmental Management Plan:

- A commitment to environmental protection;
- A list of measures to comply with environmental aspects of any planning and marine licence conditions;
- Control measures and activities to minimise environmental impacts, as well as associated roles and responsibilities;
- Any requirements for monitoring and record-keeping; and
- Point of contact(s) for addressing environmental issues.

All construction HGVs will access the site via the designated construction HGV route that includes the A39 Melville Road, Bar Road, and Tinnars Walk, where the main site entrance is located.

It is anticipated that workforce levels could peak at 100 construction workers per day when there are potential overlaps of dredging, piling and construction of wharfs. As a worst-case, it is assumed that there will be 100 construction workers per day from Q1 2026 to Q4 2027. Where suitably skilled local labour is available, this would be used where viable to do so. Sustainable travel modes for construction workers will be encouraged and used where possible and will be set out in a construction traffic management plan, once the contractor is appointed.

PRELIMINARY FALKENBACH DOCKS REDEVELOPMENT

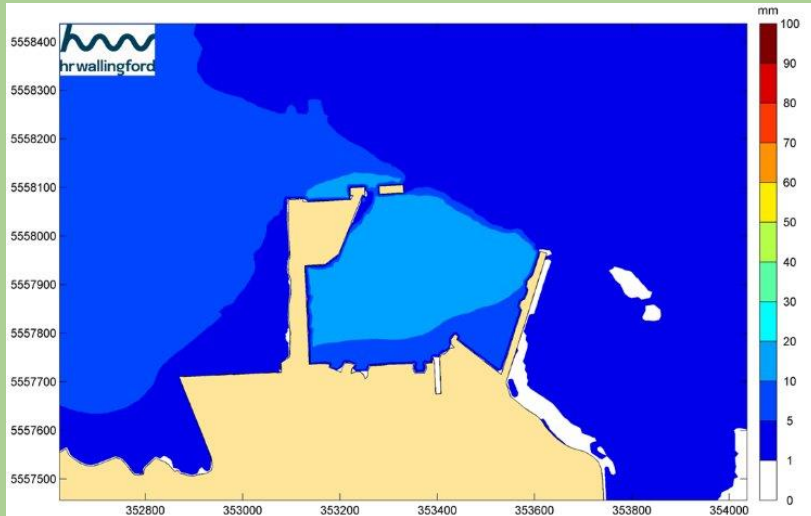
CONCEPT DESIGN GENERAL ARRANGEMENT DRAINAGE PLAN

LEGEND

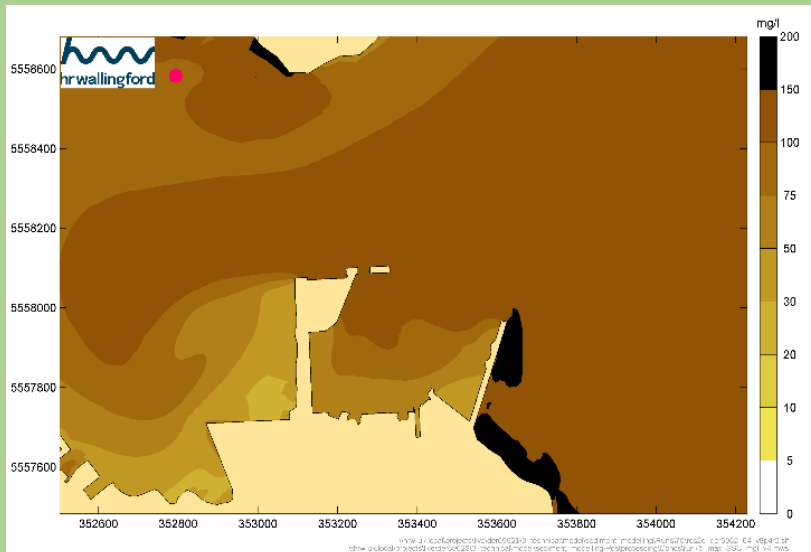
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6. Coastal Processes and Sediment Regime



Modelled annual deposition of fine sediments at the existing site



Modelled maximum suspended sediment concentration during storm events (expected to occur on average once per year) at the existing site

The coastal processes and sediment regime ES chapter reports on the predicted changes as a result of the proposed development on water levels, currents, waves, suspended sediment concentration, sediment deposition and sedimentation. The chapter presents the *predicted changes* to coastal processes and sediment regime but does not assess the *effect* of these changes (such as on ecology and water quality). These effects are reported in their respective technical chapters.

Existing Conditions

Relevant data sets and information sources were reviewed to understand the existing coastal processes and sediment regime of the area, including water quality sampling data, near-surface turbidity data, and measurements of waves, water levels, currents, etc. Models were set up and calibrated against available data.

Tidal Level and Currents: Tides at Falmouth are semi diurnal with two high and low waters per day. Currents in the area are primarily driven by the rise and fall of the tides with higher currents seen towards the mouth of the harbour across from St Anthony's Head. Current speeds reduce notably into the Inner Falmouth Harbour. There are relatively low tidal currents (less than 0.2 m/s) present in the area of the proposed development.

Waves: Waves at the proposed development site are a result of both the propagation of waves from offshore and those generated by the wind flowing over Falmouth Harbour and its approaches. There are relatively low wave heights (generally less than 0.3 m) present in the area of the proposed development.

Sediment Regime: The site has generally low suspended sediment concentration and sedimentation rates. Deposition is generally very low at the site with rates generally less than 20 mm/year. There is natural variability in turbidity in the Carrick Roads channel, especially during storm events when the sediment loading of the channel increases naturally to around 75-100 mg/l.

Dredging and Disposal

A sediment model was used to predict the dispersion of fine sediment in the water and its deposition in new areas during dredging. The sediment model was also used to predict the dispersion of fine sediment in the water and its deposition in new areas following its release at the licensed disposal site in the English Channel.

In order to reduce sediment dispersion, dredging will be undertaken using a backhoe dredger(s) with a 10 m³ (or smaller) lidded bucket, which minimises sediment mobilisation and release into the water. Dredging will be undertaken between 1.75 hours before low water to 1.75 hours before high water which also reduces total deposition of sediment to the east of the site in sensitive areas.

The modelling provided the following results:

- During dredging, mean sediment concentrations are modelled to disperse no more than 200 m outside of the red line boundary to the east and west of the site;
- In the immediate vicinity of the dredging, peak suspended sediment concentrations are around 100 mg/l above background; and
- Predicted total deposition of fine sediment at the end of dredging/disposal is minimal in more sensitive areas outside of the site boundary, with a patch of about 20 mm predicted to deposit at the end of the eastern breakwater.

Operational Stage

Tidal flow, wave and sediment transport models were run for the baseline environment (without the proposed development) and run with the proposed development in place, to predict changes to coastal processes and sediment regime as a result of the proposed development.

The modelling provided the following results:

- No effect on tidal water levels with the proposed development in place;
- Some current speed increases for the flow passing the Western Wharf on both the ebb and flood tide, however these changes are small and transient;
- Some current speed decreases associated with the increased cross sectional area with the dredging to the north of the proposed development;
- Minimum change in wave heights at the proposed development (up to 0.35 m increase for a storm event);
- Overall effect of the proposed development on suspended sediment concentrations is small; and
- The predicted change in infill volume for the overall port operational area is very small.

7. Underwater Noise



AIS vessel movement counts recorded for 14-day period in August 2023



Locations from which demolition and construction activities that would generate underwater noise were modelled

The underwater noise ES chapter reports on the outputs of underwater noise modelling undertaken for various construction and demolition activities that will generate underwater noise. It also reports on the changes in background sound levels due to the additional number and greater size of vessels that will access the site once the proposed development is operational.

The effects of underwater noise on marine ecology are reported in the Marine Ecology chapter.

Existing Conditions

The existing underwater noise climate is predominantly dominated by vessel noise from vessels transiting in and around the Fal Estuary. Vessel data from the UK government data service platform and from CCTV images around Falmouth Docks were reviewed to understand existing background sound levels.

Demolition and Construction

Various activities during the demolition and construction stage of the proposed development will generate noise underwater. The worst-case activities were modelled, from worst-case locations around the site:

- Capital dredging using a backhoe dredger;
- Demolition of the Northern Arm using a hydraulic hammer; and
- Impact pile driving (with soft-start methodology) to install new structures.

Capital dredging has been modelled as a continuous source of sound during this phase of construction. Impact piling and demolition would produce impulsive sound.

The impact of the underwater noise is assessed based on whether the activity causes an increase in underwater noise level above the background sound levels in the environment. Where activities would cause an increase in underwater noise, the consequences for marine animals (fish and mammals) are assessed based on injury criteria (relating to the cumulative sound exposure level predicted over a given length of time). For impulsive sounds, the peak sound pressure levels are also compared with published thresholds for effects on animals.

Operation

It is assumed that there would be 11 additional cruise vessels and 12 additional cargo vessels visiting Falmouth Docks per year once the proposed development is in place. This is calculated to be approximately an additional 15 hours/year during which animals could be disturbed from underwater noise associated with vessels. Additional boat movements will therefore contribute intermittent noise which will not have a discernible effect on the noise climate.

The marine water and sediment quality ES chapter reports on the likely effects associated with the demolition and construction stage and operational stage of the proposed development.

Existing Conditions

A combination of a desk-based review of publicly available information, water sampling and sediment sampling was undertaken to understand the quality of marine sediment and water quality within the proposed dredging area.

The site and study area comprises:

- **Surface water bodies:**
 - Water Framework Directive Surface Water: the site is located in the Carrick Roads Outer water body. Downstream of the Carrick Roads Outer water body lies the Fal / Helford coastal waterbody.
 - Bathing Water: the nearest designated bathing water to the site is at Gyllyngvase beach, located approximately 1 km to the south-west of the site, on the far side of Pendennis Point
 - Shellfish Water: the site straddles the boundary between two designated shellfish water protected areas (Penryn and Carrick Roads). The Percuil shellfish water protected areas lies approximately 3.5 km to the east of the site on the far side of the Fal estuary.
 - Potential Disposal Site: the nearest operational marine sediment disposal site is Falmouth Bay located approximately 9.4 km to the south-east of the site, in the English Channel.
- **Surface Water Quality:** According to an independent environmental database, a sewage outfall is present to the east of the site. A total of 11 surface water samples were taken as part of the 2024 ground investigation at the site and tested for a range of determinants. Elevated concentrations of heavy metals were present due to the industrial uses of the surrounding land and the harbour and also may be as a result of naturally high metal concentrations in the local geology and impacts from the historic metal mining in the area.
- **Marine Sediment Quality:** Various contaminants have been encountered in the marine sediment across the site, such as

heavy metals, PCBs, Organo-tins, pesticides, PAHs, and BDE. These show clear lateral and vertical patterns across the site: there is a general trend of decreasing contamination at greater sediment depths, and with increasing distance away from the wharfs.

- **Geology, Hydrology and Groundwater:** The site is underlain by a Secondary A Aquifer (permeable foundations with potential to support localised abstractions). The site is not located within a source protection zone and is not within a drinking water safeguard zone.

Demolition and Construction

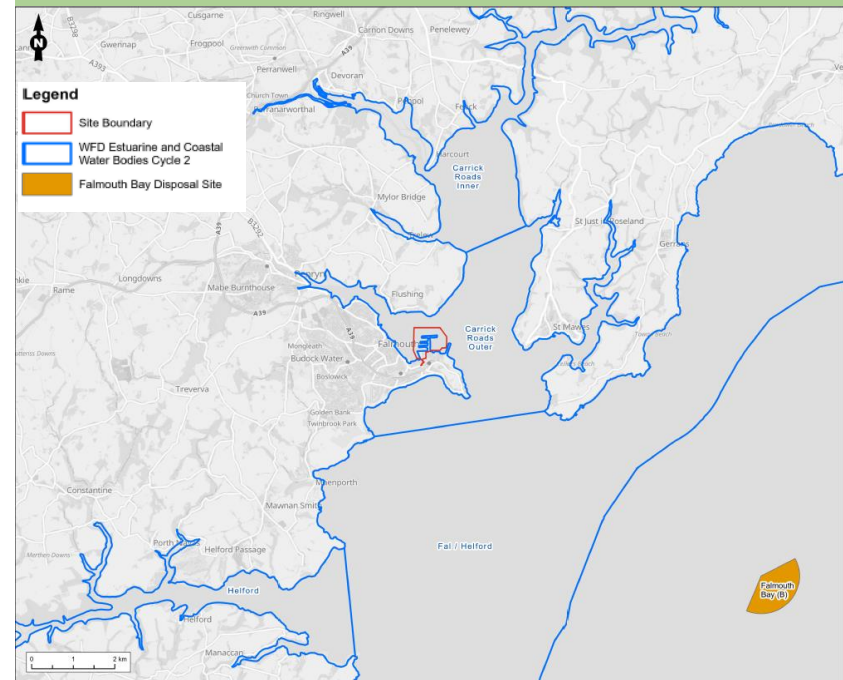
During the demolition and construction stage the following impacts and effects have been assessed:

- Direct impacts on the marine sediment and water body receptors at the site from dredging activities which would result in not significant effects ranging from negligible to minor in scale;
- Direct impacts on the marine sediment and water body receptors downgradient of the site from the dredging activities which would result in a not-significant effect of minor scale.
- Direct impacts to the marine sediment and water body receptors at the off-shore disposal site which would result in not significant effects that are minor in scale; and
- Impact to marine sediments and waterbodies from piling activities and other in-ground works which would result in not significant effects ranging from negligible-minor in scale.

Operation

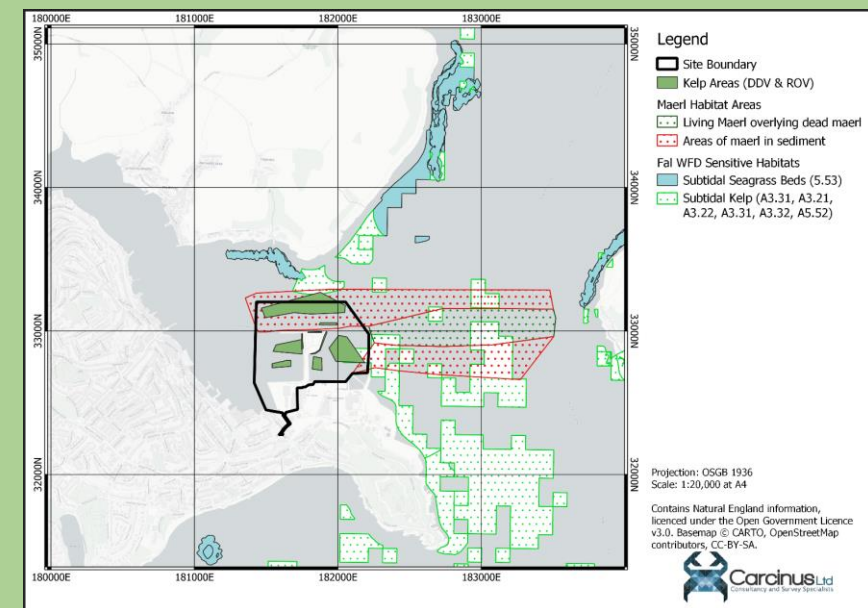
Impacts during operation would comprise some small-scale maintenance dredging, which would result in not-significant effects that are minor in scale.

8. Marine Water and Sediment Quality

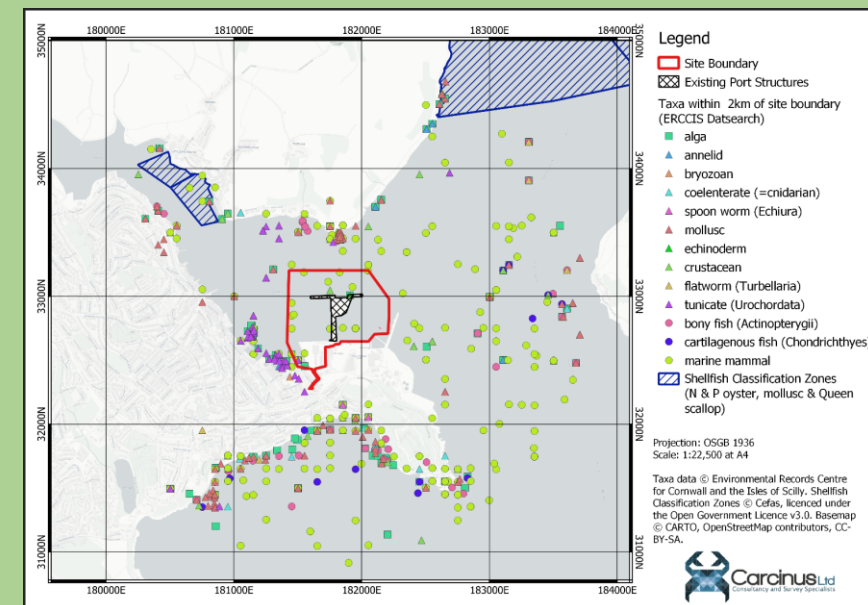


Falmouth Bay Disposal Site

9. Marine Ecology



Relevant sensitive habitats within vicinity of the proposed development



Marine Species identified as being within 2km of the proposed development

The marine ecology ES chapter reports on the likely effects associated with the demolition and construction stage and operational stage of the proposed development.

Existing Conditions

To characterise the marine ecology baseline, including designated sites, communities and supporting habitats, and species of conservation or commercial value in the study area, a desk-based review of available data and existing field studies was undertaken with the use of the following sources:

- Biosys Marine Benthic Surveys;
- Marine Life Information Network;
- MAGIC Map;
- Reporting by Natural England and others into the benthic habitats within the Fal and Helford Special Special Area of Conservation (SAC);
- Data from the Environment Agency National Fish Populations Database for Freshwater and Transitional and Coastal Waters;
- Reporting published by Cornwall Inshore Fisheries and Conservation Authority;
- Reporting published by the Sea Mammal Research Unit; and
- Environmental Records Centre for Cornwall and the Isles of Scilly data.

The field study involved subtidal benthic habitat surveys undertaken at the site as part of a multidisciplinary ecological survey, the scope of which was agreed with statutory bodies.

The following sensitive receptors were identified:

- Designated sites (such as Fal and Helford SAC);
- Benthic ecological communities (including intertidal and subtidal benthic communities, maerl, subtidal seagrass meadows and subtidal kelp beds);
- Fish and shellfish ecological communities; and
- Marine mammals (including common dolphin, bottlenose dolphin, harbour porpoise and grey seal).

Demolition and Construction

During the demolition and construction stage the following impacts and effects have been assessed:

- Habitat removal and disturbance which would result in not significant adverse effects ranging from negligible to minor in

scale for benthic ecological communities and minor in scale for fish and shellfish, marine mammals and designated sites;

- Overshadowing which would result in not significant negligible adverse effects on all benthic ecological communities;
- Elevated suspended sediment concentrations which would result in not significant minor adverse effects on all benthic ecological communities, fish and shellfish and marine mammals;
- Suspended fine sediment deposition which would result in not significant adverse effects ranging from negligible to minor in scale on benthic ecological communities;
- Mobilisation and deposition of contaminated sediment which would result in not significant minor adverse effects on all benthic ecological communities;
- Underwater noise and vibration from impact piling, which would result in minor adverse not significant effects on fish and shellfish and all marine mammal groups with mitigation measures in place (use of soft-starts where appropriate and Marine Mammal Observer(s)); and
- Underwater noise and vibration from demolition with a hydraulic breaker, which would result in minor adverse not significant effects for marine mammal groups with mitigation measures in place (use of soft-starts where appropriate and Marine Mammal Observer(s)).

Operation

During the operational stage the following impacts and effects have been assessed:

- Scour which would result in not significant adverse effects, negligible in scale for all benthic ecological communities and minor in scale for designated sites;
- Overshadowing which would result in a not significant negligible adverse effect on all benthic ecological communities;
- Effects relating to maintenance dredging which would be minor adverse (not significant) for all benthic ecological communities;
- Vessel strike which would result in not significant adverse effects, negligible in scale for fish and shellfish and minor in scale for marine mammal groups; and
- Noise and vibration due to increased vessel movements, which would result in a not significant minor adverse effect on marine mammal groups.

The commercial fisheries and shellfisheries ES chapter reports on the likely effects associated with the demolition and construction stage and operational stage of the proposed development.

Existing Conditions

A desk-based study was used to determine existing commercial fisheries and shellfisheries and fishing effort in the study area. Baseline conditions were determined from a review of past surveys/studies and data, including the following sources:

- Marine Life Information Network;
- The Centre for Environment, Fisheries and Aquaculture Science;
- Marine Management Organisation;
- Environment Agency National Fish Populations Database;
- Cornwall Inshore Fisheries and Conservation Authority; and
- Published literature.

The waters around the south-west of England provide an important variety of fishing areas and species for commercial fishing activity.

The study area comprises:

- Six ports within vicinity of the site that received fishery landings in 2023 with majority of vessels listing 'River Fal – Falmouth' as their home port which is located within the site boundary;
- The value of the fish landed into ports within vicinity of the site in 2023 was £988,942.37;
- The most valuable species landed into ports within vicinity of the site included scallops, lobsters, crabs, monks, anglers, pilchards, crawfish, mackerel and Ballan Wrasse;
- Between 2007 – 2020 the total weight of fish landed has increased continually. Covid-19 decreased fishing efforts and caused a temporary decrease in fish landed;
- The Fal Estuary is designated as a Shellfish Water with a number of zones classified for shellfish harvesting (including native oyster, blue mussel, and queen scallops). There are no classification zones for shellfish harvesting within the site, the closest being 1 km north-west of the site; and
- The fish wholesaler Falfish have a landings and processing plant within the site to the south-east of Western Wharf.

The following sensitive receptors were identified:

- Vessels less than 10 metres deploying traps, targeting lobsters, crabs and/or wrasse;
- Vessels less than 10 metres targeting native oyster, blue mussels, and queen scallops;
- Vessels more than 10 metres deploying dredges, targeting scallops;
- Vessels more than 10 metres deploying surrounding nets, targeting pilchards; and
- Any/all fishing vessels landing to Falfish.

Demolition and Construction

There may be the potential for the demolition and construction stage of the proposed development to result in impacts on commercially exploited fish and shellfish species. This in turn could indirectly affect the productivity of the fisheries that target them.

During the demolition and construction stage the following impacts and effects have been assessed:

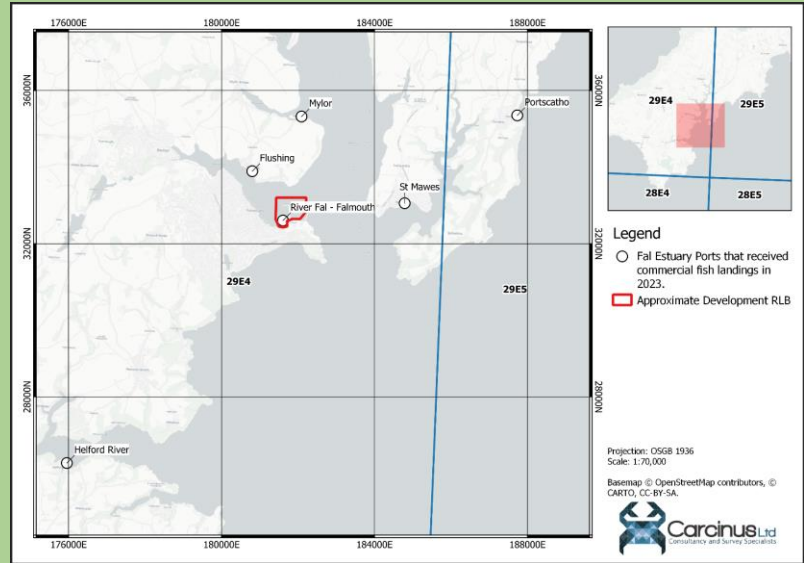
- Temporary exclusion of fishermen/fishing effort from fisheries/harvesting areas in the vicinity of the site which would result in not significant adverse effects ranging from negligible to minor in scale;
- Temporary and permanent displacement of stock away from the site which would result in a negligible adverse not significant effect; and
- Temporary and permanent depletion of stock which would result in a minor adverse not significant effect. Increased suspended sediment concentrations and deposition would not represent a significant change from ambient conditions and would be within natural variation levels outside of the site boundary. Any effect would also be away from known nearby fisheries, such as for lobster, crabs and other shellfish caught within the Fal and Helford Estuary.

Operation

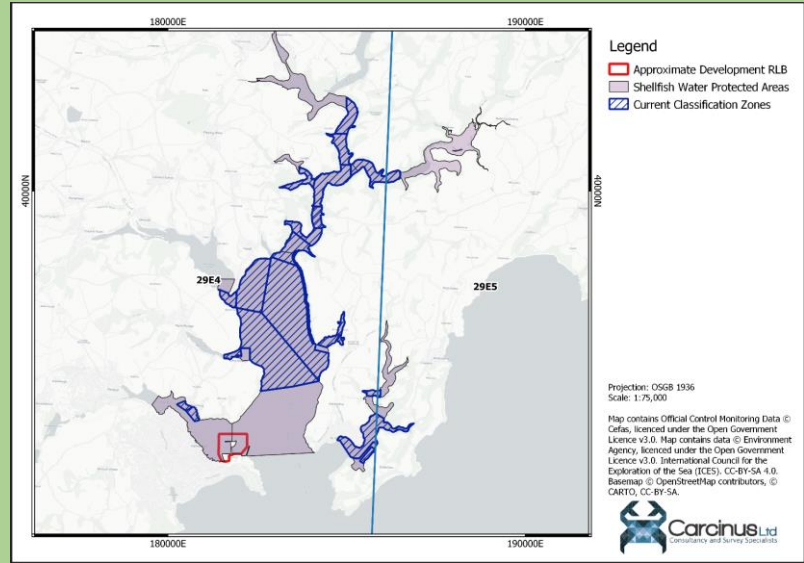
During operation the following impacts and effects have been assessed:

- No significant effect on the fish wholesaler within the site, Falfish; and
- Permanent displacement of fishing effort which would result in not significant negligible adverse effects.

10. Commercial Fisheries and Shellfisheries

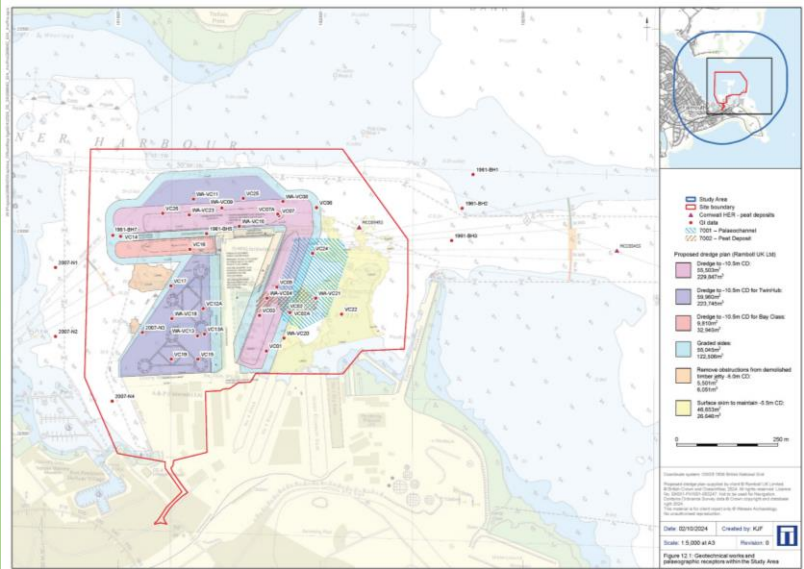
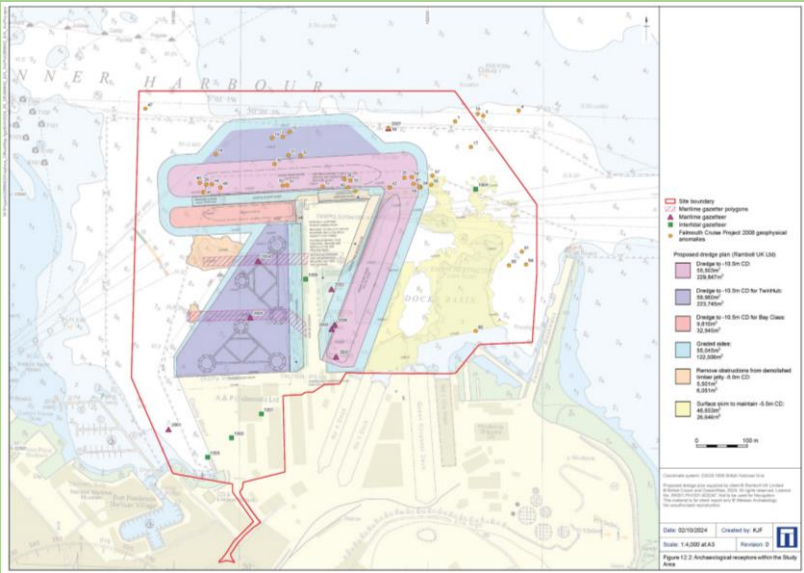


Ports within the Fal Estuary and approaches that received commercial fisheries landings in 2023



Designated shellfish waters and classification zones within Fal Estuary

11. Marine Archaeology



Archaeological Receptors within the Study Area

The marine archaeology ES chapter reports on the likely marine archaeology effects associated with the demolition and construction stage and operational stage of the proposed development.

Existing Conditions

A combination of a desk-based (review of mapping and documentary sources) and field studies (site walkover, geoarchaeological assessment of marine sediment cores and interpretation of geophysical data) was undertaken to establish the marine archaeology baseline conditions that might be affected by the proposed development.

The following have been identified within the study area:

- Pleistocene and Holocene deposits with archaeological and geoarchaeological potential occur within the site;
- No sites that are subject to statutory protection;
- Four known recorded wrecks within the study area, in addition to a further wreck and an identified anchor and length of chain;
- Two known obstructions in the intertidal zone to the west of the Western Wharf, constituting two anchors and removed or covered military infrastructure; and
- A record of peat within the seabed to the east of the Northern Arm.

Demolition and Construction

During the demolition and construction stage the following impacts and effects have been assessed:

- Direct impacts on known and potential marine archaeology receptors from demolition and construction activities (including dredging) due to physical disturbance of the seabed and sub-seabed. This would result in a **significant major adverse effect**;
- Direct temporary impacts on the setting of a heritage receptor and the character of the historic seascape due to the dredging, demolition and construction works. This would result in a not significant negligible adverse effect; and
- Indirect impacts to marine archaeology receptors due to

changes to hydrodynamic and sediment transport processes. This would result in a not significant negligible adverse effect.

It has been agreed with Historic England that a Written Scheme of Investigation (WSI) will detail mitigation measures required, including:

- Archaeological Exclusion Zones if required;
- Recovery and recording of identified anchors;
- Recording of wreck along eastern side of Western Wharf;
- Protocol for Archaeological Discoveries; and
- Palaeoenvironmental assessment of peat deposits.

These will be subject to agreement with Historic England. This will reduce any significant effects to negligible adverse and not significant.

Operation

During operation the following impacts and effects have been assessed:

- Direct permanent impacts on the setting of a heritage receptor and the character of the historic seascape due to the operation of the development. This would result in a not significant negligible adverse effect.

The heritage ES chapter reports on the likely heritage effects associated with the demolition and construction stage and operational stage of the proposed development on the terrestrial historic environment (including both archaeological remains and built heritage assets).

Existing Conditions

A combination of a desk-based study and a walkover survey were completed to establish the baseline heritage conditions in the study areas that might be affected by the proposed development.

The study area for buried terrestrial archaeological remains was 500 m from the site boundary. The study area for built heritage assets consisted of the inner study area (1.5 km buffer from the site boundary) and the outer study area (5 km buffer from the site boundary). For each of these study areas, including within the site itself, the presence of designated heritage assets, non-designated built heritage assets and terrestrial archaeological remains was explored.

The following sensitive receptors were identified within the site and study area:

- Pendennis Peninsula Fortification Scheduled Monument;
- Pendennis Castle Grade I Listed Building;
- St Mawes Castle Grade I Listed Building;
- Custom House Quay, King Charles Quay, North Quay and Quay Walls and Steps Grade II* Listed Building;
- Quay Walls Grade II Listed Building;
- Quay Walls and Piers Grade II Listed Building;
- Kiln Quay House Grade II Listed Building;
- Falmouth Conservation Area; and
- Archaeological remains associated with earlier phases of Falmouth Dock.

Demolition and Construction

The terrestrial works of the proposed development involve demolition and removal of approximately 8 buildings within the quay side area. The buildings would be demolished down to ground level, with the below ground foundations remaining.

However, during demolition there is the potential for minimal below ground disturbance which is assumed to be no greater than 1 metre below ground level (BGL).

Therefore, during the demolition and construction stage the following impacts and effects have been assessed:

- Partial truncation or complete removal of known and unknown below ground terrestrial archaeological remains which would result in a not significant negligible adverse effect.

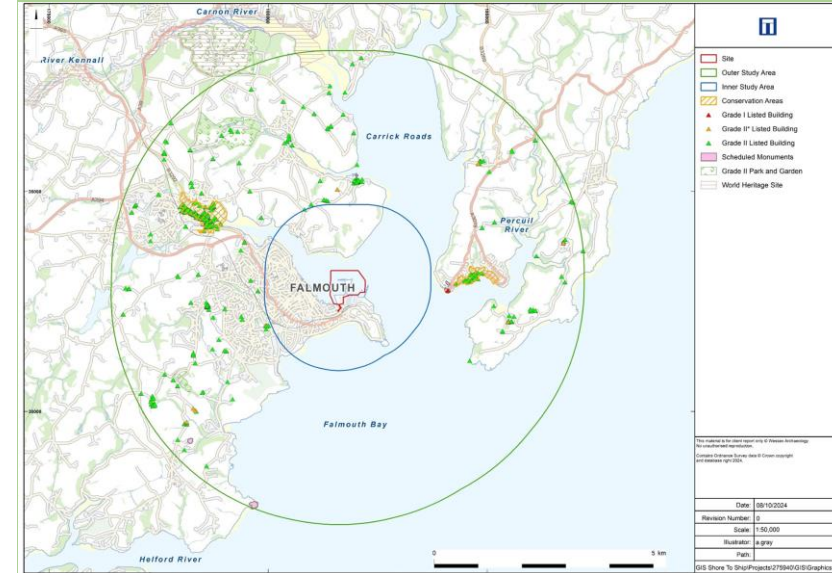
A limited programme of archaeological works would be undertaken to allow any remains to be investigated and recorded if required (as agreed with consultees).

Operation

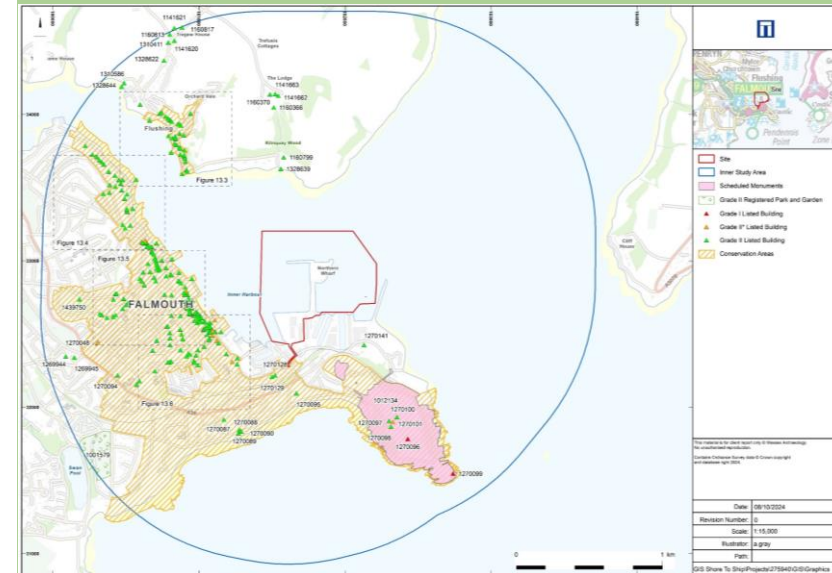
During operation the following impacts and effects have been assessed:

- Harm to above ground designated heritage assets by way of change in setting which would result in:
 - Pendennis Peninsula Fortifications (Scheduled Monument) – Not significant minor adverse effect;
 - Pendennis Castle (Grade I Listed Building) – Not significant negligible adverse effect;
 - St Mawes Castle (Grade I Listed Building) – Not significant negligible adverse effect;
 - Custom House Quay, King Charles Quay, North Quay and Quay Walls and Steps (Grade II* Listed Building), Quay Walls (Grade II Listed Building) and Quay Walls and Pier (Grade II Listed Building) - Not significant negligible adverse effect;
 - Kiln Quay House (Grade II Listed Building) - Not significant minor adverse effect; and
 - Falmouth Conservation Area - Not significant minor adverse effect.

12. Heritage



Designated Heritage Assets within the Outer Study Area

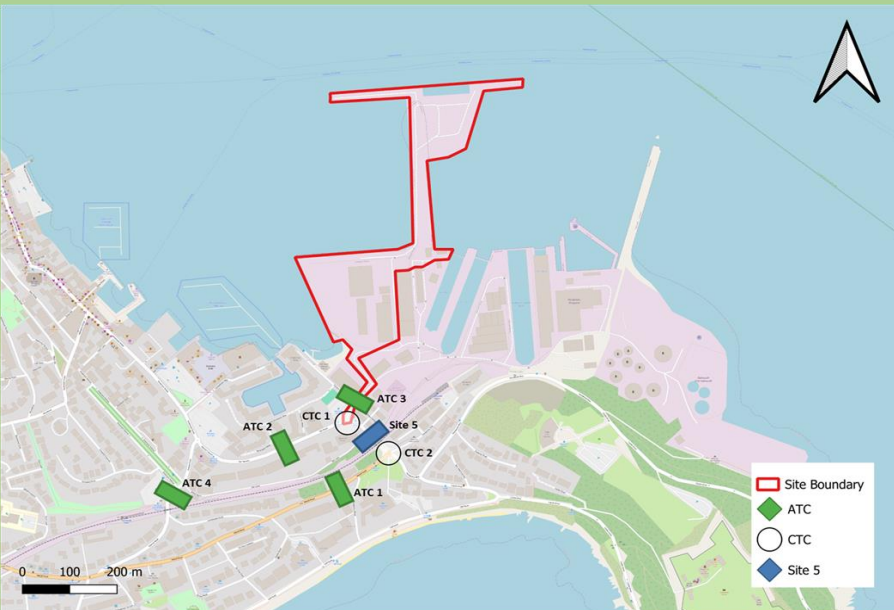


Designated Heritage Assets within the Inner Study Area 14

13. Transport and Accessibility



Transport and Accessibility Study Area



Transport and Accessibility Survey Locations

The transport and accessibility ES chapter reports on the likely transport and accessibility effects associated with the demolition and construction stage and operational stage of the proposed development.

Existing Conditions

A desk-based review was undertaken to establish existing and future transport and accessibility conditions in the study area. Two classified turning count surveys and four automatic traffic count surveys were undertaken in the study area to establish background traffic conditions on the local highway network.

The following sensitive receptors were identified:

- Non-motorised users;
- Public right of way users;
- Motorists and freight vehicles;
- Public transport users; and
- Emergency vehicles.

Demolition and Construction

The demolition and construction traffic effects are anticipated to be short-term (less than 5 years), temporary, direct, and relate to the arrival and departure of construction workers and construction materials/equipment and waste.

The demolition and construction stage would be expected to generate a peak of up to 488 vehicle movements per day (244 vehicle arrivals and 244 vehicle departures), of which there would be 354 HGV movements (177 HGV arrivals and 177 HGV departures) and 134 construction worker movements (67 car arrivals and 67 car departures).

During the demolition and construction stage the following impacts and effects have been assessed:

- Increase in severance for non-motorised users which would result in a not significant minor adverse effect;
- Increase in driver delay for motorists and freight vehicles and emergency vehicles which would result in a not significant negligible adverse effect;
- Increase in pedestrian and cyclist delay which would result in a not significant minor adverse effect; and
- Increase in accidents and safety due to increase in traffic flows which would result in not significant minor adverse effects.

Operation

Operational traffic effects are anticipated to be long-term (more than 10 years), permanent, direct, and relate to the arrival and departure of trips associated with additional cruise and freight ships that will berth at the docks as a result of the development.

The primary access route for vehicles entering the site, particularly large HGVs, coaches, and taxis, is via the main strategic route from A39 Melvill Road, Bar Road and into Tinnars Walk (at the existing site entrance).

The proposed development could result in 11 additional Excellence Class cruise ships per year calling at Falmouth As a maximum, this could generate 384 additional vehicle movements in a day (192 vehicle arrivals and 192 vehicle departures) in the worst-case whereby two Excellence Class cruise ships are docked at once. This is broken down into 160 coach movements (80 arrivals and 80 departures), 54 shuttlebus movements (27 arrivals and 27 departures) and 170 car/taxi movements (85 arrivals and 85 departures). Note that most of the time, there are no cruise ships docked at the site, so this is a worst-case scenario in terms of assessing the impacts of the proposed development.

During operation, the following impacts and effects have been assessed:

- Increase in severance for non-motorised users which would result in not significant negligible adverse effects;
- Increase in driver delay for motorists and freight vehicles and emergency vehicles which would result in not significant negligible adverse effects;
- Increase in accidents and safety due to increase in traffic flows would result in not significant minor adverse effects; and
- Change in public transport trips which would result in not significant minor adverse effects.

The noise and vibration ES chapter reports on the noise and vibration effects associated with the demolition and construction stage and operational stage of the proposed development.

Existing Conditions

A desk study of ordnance survey maps and satellite imagery was undertaken to identify the nearest noise sensitive receptors to the site. A baseline noise survey was also undertaken to establish the current background noise environment at the nearby noise sensitive receptors during day and night periods.

The existing baseline noise climate is characterised by road traffic noise, harbour and docks activity and noise associated with people shopping and visiting the harbour public realm.

The following receptors sensitive to construction noise were identified:

- Residential Receptors to the South of the Dock known as Maritime Studios, Pendennis Rise;
- Residential Apartments at Challenger Quay;
- Residential properties along Church Street; and
- Residential properties along Trefusis Road, Flushing.

The following receptors sensitive to construction and operational traffic were identified:

- Residential receptors along Melvill Road A39;
- Residential receptors along Bar Road (West of Tinnars Walk);
- Residential receptors along Tinnars Walk;
- Residential receptors along Avenue Road; and
- Residential receptors along Bar Road (East of Tinnars Walk).

Demolition and Construction

Demolition and construction works will produce varied noise levels as the type of activity and distance to receptor changes throughout the development. Effects would be direct, temporary, reversible and short-term.

During the demolition and construction stage the following impacts and effects have been assessed:

- Changes in daytime noise levels during demolition and construction which would result in not-significant adverse effects, ranging from negligible to negligible to minor in scale;

- Changes in evening noise levels during demolition and construction which would result in not-significant adverse effects ranging from negligible to minor in scale for most receptors. One minor to moderate adverse, **potentially significant** effect was assessed for residential receptors at Challenger Quay;
- Changes in night-time noise levels during demolition and construction which would result in not-significant adverse effects ranging from negligible to minor in scale for most receptors. One minor to moderate adverse, **potentially significant**, effect was assessed for residential receptors at Challenger Quay; and
- Changes in road traffic noise levels during demolition and construction which would result in not-significant adverse effects ranging from negligible to minor in scale for some receptors. Moderate adverse, **potentially significant**, effects were assessed for residential receptors along Tinnars Walk and Bar Road (East of Tinnars Walk).

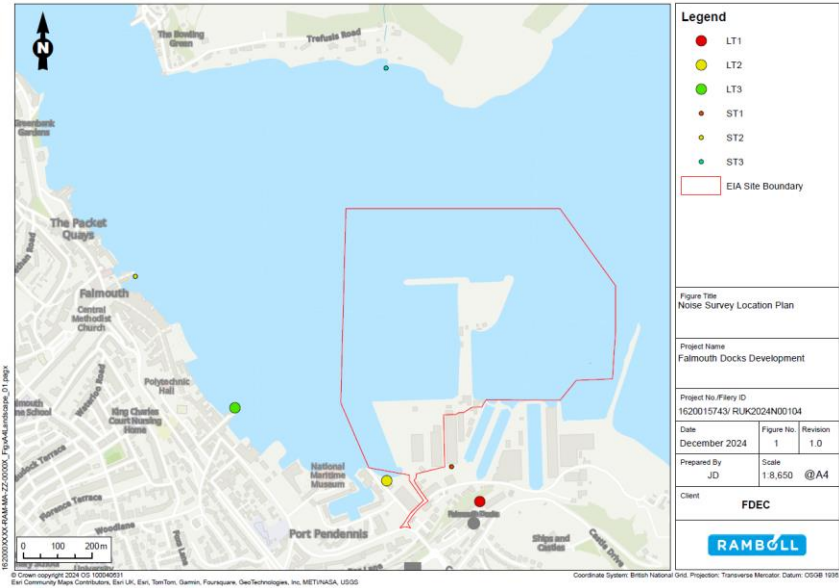
Operation

The operational stage of the proposed development could lead to increases in road traffic noise on nearby sensitive receptors. In addition to existing maritime/industrial operations at Falmouth Docks, activities associated with floating offshore wind (FLOW), such as crane operations to dismantle or lower wind turbines, would occur infrequently.

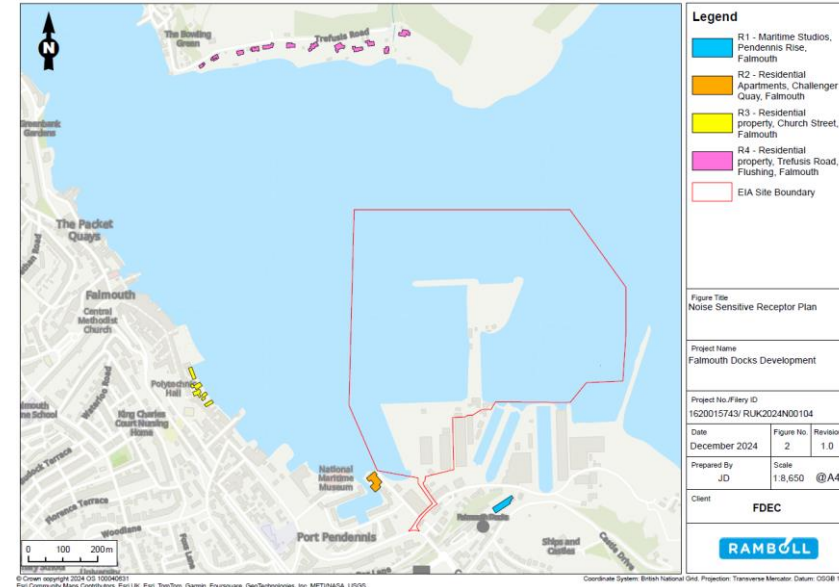
During the operational stage the following impacts and effects have been assessed:

- Changes in road traffic noise levels during operation of the proposed development which would result in not significant negligible to minor adverse effects; and
- Operational activity noise from FLOW operations which would result in not significant negligible to minor adverse effects.

14. Noise and Vibration



Noise Survey Locations



Location of Noise Sensitive Receptors

The air quality ES chapter reports on the likely air quality effects associated with the demolition and construction stage and operational stage of the proposed development.

Existing Conditions

A desk-based review was undertaken to establish the existing baseline conditions in the study area. The latest Cornwall Council air quality status report and Defra estimated background pollution maps were used to determine the existing and future air quality of the site and study area.

Baseline air quality surrounding the site is likely to be primarily influenced by emissions from local road traffic, including traffic accessing Falmouth Docks, as well as emissions from existing vessels using Falmouth Docks.

The site is not located within an Air Quality Management Area. Air quality monitoring in the immediate vicinity of the site has not been undertaken since 2020. Air quality is no longer monitored by Cornwall Council in Falmouth due to pollutant concentrations continuously being recorded well below the National Air Quality Objectives.

The following sensitive receptors were identified with respect to road traffic emissions:

- Residential properties (Railway Cottages, Bar Road, Ridge House Apartments, Melvill Road, Lansdowne Road, Imperial Court);
- Retirement Home (Trelawny House); and
- Student Accommodation (Pendennis Rise).

The following sensitive receptors were identified with respect to vessel emissions and odour:

- Residential properties (predominantly located south and south-west of the site, the closest residential properties include Challenger Quay, those on Tinnars Walk, St Smithwick Way, Bar Road and Pendennis Rise);
- Retirement home (Trelawny House, Bar Road);
- Student Accommodation (Pendennis Rise); and
- Commercial & Recreational Facilities (Discovery Quay, Mooring, Hotels and Holiday Rentals, the closet of which are predominantly located south and west of the site. National Maritime Museum).

Demolition and Construction

During the demolition and construction stage the following impacts and effects have been assessed:

- Demolition and construction stage dust impacts and associated effects on human health and amenity which would result in not significant effects;
- Odour emissions from dredging which would result in not significant negligible to slight adverse effects; and
- Demolition and construction stage vehicle exhaust emissions and the associated air quality effects of NO₂, PM₁₀ and PM_{2.5} at existing off-site human health receptors which would result in not significant negligible adverse effects.

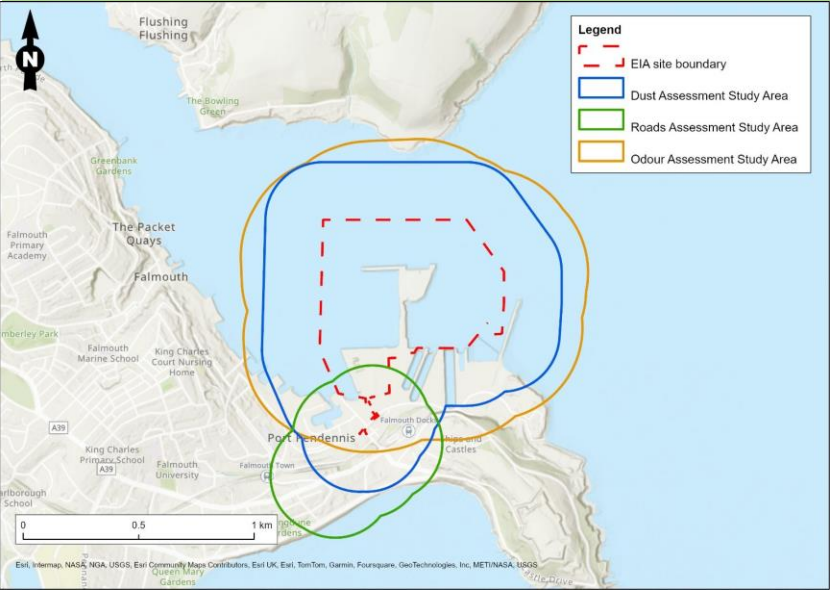
Operation

The proposed development would increase freight activity and cruise ship capacity at Falmouth Docks whereas the other existing activities and associated berthing vessels would remain the same. It is assumed that 12 additional freight ships would dock each year and 11 additional Excellence Class cruise vessels may visit the docks each year when the proposed development is complete, which is not expected to lead to a significant increase in emissions.

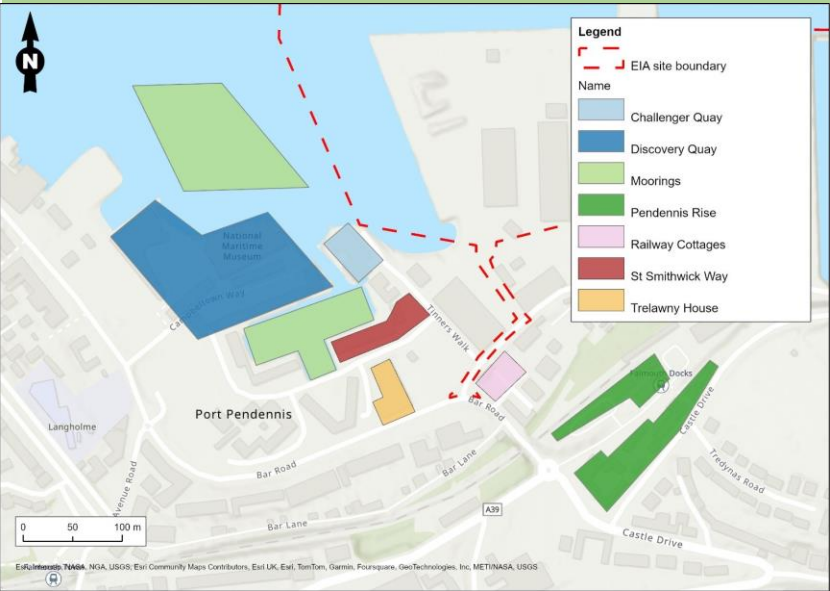
During operation the following impacts and effects have been assessed:

- Operational stage vessel emissions and the associated air quality effects of NO₂, PM₁₀ and PM_{2.5} on sensitive receptors which would result in not significant negligible adverse effects; and
- The site’s suitability for human health receptors, considering potential air pollutant impacts from existing and new emission sources, was assessed. It is concluded that the site is suitable for the proposed uses during the operational stage.

15. Air Quality



Air Quality Study Areas



Sensitive Receptors for Vessel Emissions and Odour

16. Climate Change



Photograph of existing causeway, taken south-east of the causeway, facing north-west

The climate change ES chapter reports on the likely climate change effects associated with the demolition and construction stage and operational stage of the proposed development.

Existing Conditions

To establish the existing climate change conditions, a desk study was completed. Relevant data was reviewed, such as from the Met Office UK Climate Averages, the United Kingdom Climate Projections and UK Carbon Budgets.

Average monthly climate data for the period 1991-2020 was obtained from Camborne climate station, the closest station to the site, to establish the following understanding of climate at the site:

- Annual maximum (13.65°C) and minimum (8.61°C) temperatures are higher than UK averages (12.79°C and 5.53 °C respectively);
- Higher rainfall annual total (1075.84 mm) than the average for England (869.60 mm); and
- Less air frost days experienced (7.38 days) than the UK average (53.36 days).

In the UK, general climate trends for the period up to 2080 are projected to lead to milder, wetter winters and warmer, drier summers, in addition to increased frequency and intensity of extreme weather, such as windstorms, heatwaves, droughts and rainfall.

The climate assessment comprised two separate assessments:

- In-Combination Climate Impacts Assessment – considered how extreme weather and projected climate change could have an additive effect on impacts identified by other technical disciplines as a result of the proposed development during the demolition and construction stage and operational stage; and
- GHG Emissions Assessment – considered the potential for significant effects to arise from the proposed development in terms of GHG emissions during the demolition and construction stage and operational stage.

Demolition and Construction

The In-Combination Climate Impacts Assessment for the proposed development has identified no significant effects as a result of climate change during the demolition and construction stage given embedded design mitigation measures.

The GHG Emissions Assessment has calculated that the net contribution of the proposed development's demolition and construction stage is expected to contribute 0.006 % to the UK's fourth carbon budget (2023-2027). This is considered to be a not significant minor adverse effect.

Operation

The In-Combination Climate Impacts Assessment for the proposed development has identified no significant effects as a result of climate change during the operational stage given embedded design mitigation measures.

The GHG Emissions Assessment has calculated that the net contribution of the proposed development's operational stage is expected to contribute to:

- 0.0001 % of the UK's carbon budgets for 2023-2027;
- 0.0003 % of the UK's carbon budget for 2028-2032; and
- 0.001 % of the UK's carbon budget for 2033-2037.

This is considered to be a not significant minor adverse effect.

Taking into account both the demolition and construction stage and the operational stage contribution to the UK carbon budgets, the proposed development is assessed as being compatible with the budgeted, science-based 1.5 °C trajectory in terms of rate of emissions reduction (a not significant minor adverse effect).

The proposed development is required to provide the supporting infrastructure for offshore wind in the area which is beneficial to the UK meeting its net zero by 2050 target.

The material resource and waste ES chapter reports on the likely waste generation effects associated with the demolition and construction stage of the proposed development.

Existing Conditions

A desk-based assessment was undertaken to establish the existing baseline waste conditions in the study area, using data sets and information from Cornwall Council and the Environment Agency.

The study area for waste is south-west England. The Environment Agency Waste Management 2023 data indicates that 20,198,641 tonnes of waste were received/handled within the south-west England in 2023. Of these, 1,665,293 tonnes of waste were received/handled in Cornwall.

As of 2023, in the south-west of England, the landfill void capacity for inert and non-hazardous waste was 16,584,931 m³, whilst the landfill void capacity for hazardous waste was 339,125 m³.

By 2030, based on predicted demolition and construction waste arisings and municipal, commercial and industrial waste to be generated, landfill void capacity in south-west England would reduce by 5%.

Demolition and Construction

The non-hazardous waste generation quantities arising from the proposed development demolition and construction stage activities are presented in the following table:

Stage	Waste Type	Waste Quantity (m³)
Dredging	Seabed and rock material	543,050
Demolition	Concrete (Northern Arm)	14,854
	Precast concrete (Warehouses)	53
	In-situ concrete (Warehouses)	429
	Steel (excluding reinforcement) (Warehouses)	6
	Steel reinforcement (Warehouses)	1
Construction	Concrete	2,718
	Fill materials, including revetments	20,269
	Reinforcement	36
	Rock Armor	1,266
	Steel excluding (reinforcement)	11
Total		582,693

The hazardous waste generation quantities arising from the proposed development demolition and construction stage activities are presented in the following table:

Stage	Waste Type	Waste Quantity (m³)
Dredging	Seabed and rock material	99,950
Excavation	Revetment fill material	36,840
Demolition	Concrete (Northern Arm)	6,366
	Timber (Western Wharf)	684
	Asbestos cementitious cladding (Warehouses)	17
Total		143,857

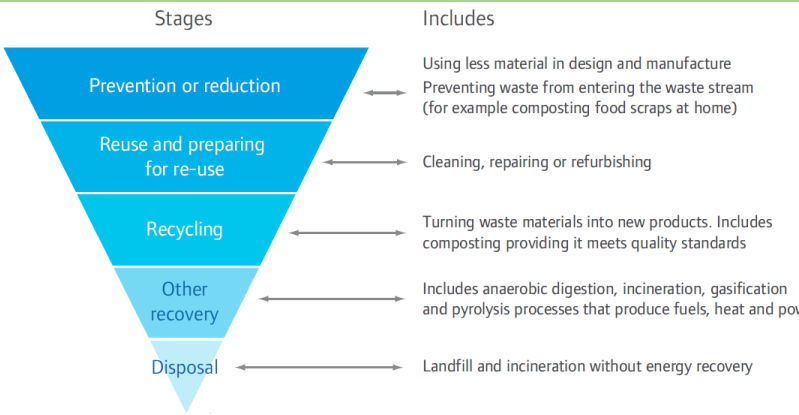
During the demolition and construction stage, the following impacts and effects have been assessed:

- Reduced regional landfill void capacity for non-hazardous waste: this effect is assessed to be slight adverse (not significant), and with the implementation of additional mitigation, which would comprise maximising re-use and recycling of waste generated as far as possible (using landfill as a last resort in line with the waste hierarchy), this effect is assessed to be neutral to slight adverse (not significant).
- Reduced regional landfill void capacity for hazardous waste: this effect is assessed to be very large adverse (**significant**).

Operation

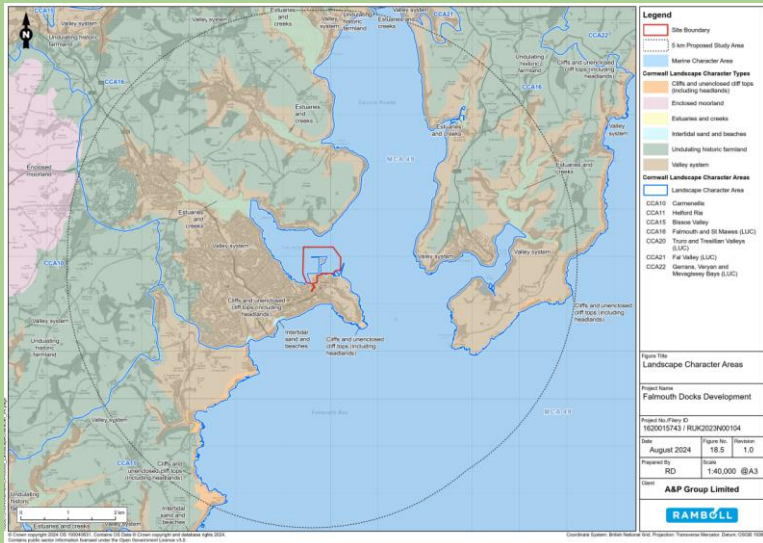
Generation of waste during operation of the proposed development was scoped out of assessment. Falmouth Docks is an existing operational facility with waste management practices in accordance with relevant waste legislation. The proposed development is not expected to affect existing activities at the site such as export of glass recycling.

17. Material Resource and Waste



Waste Hierarchy

18. Seascape, Landscape and Visual Impact Assessment



Landscape Character Areas



Day-time visualisation of Scenario Two, including 2 Excellence Class cruise vessels and FLOW device fully assembled (maximum worst-case)

The seascape, landscape and visual impact assessment ES chapter reports on the likely effects on the seascape, landscape character and visual amenity associated with the demolition and construction stage and operational stage of the proposed development.

Existing Conditions

A combination of a desk-based study and a walkover survey with day-time and night-time photography from agreed viewpoint locations was undertaken to establish the baseline landscape and visual conditions.

The study area comprised a 5 km buffer from the site boundary. Within the site and study area the following sensitive receptors were identified:

- 8 landscape character areas;
- 5 designations and classified landscapes;
- 1 seascape classified landscape;
- 4 settlement areas;
- 2 transport routes;
- 6 recreational routes; and
- 4 tourist attractions.

Demolition and Construction

During the demolition and construction stage the following impacts and effects have been assessed, mostly relating to the temporary change in views due to demolition and construction activities, material transportation and the movement of plant machinery around the proposed development:

- Effects on the landscape fabric which would result in a not significant moderate adverse effect;
- Effects on seascape and landscape character which would result in not-significant adverse effects ranging from minor to moderate in scale;
- Effects on designated landscapes which would result in not-significant moderate adverse effects; and
- Effects on visual amenity which would result in not-significant moderate adverse effects for visual receptors within 1 km of the site, and not significant moderate/minor adverse for visual receptors over 1 km away.

Operation

During operation, the proposed development would involve the

assembly of FLOW devices within the dock to support offshore wind sites. At any one time, there would only be one fully assembled FLOW device (with two turbines), with a second FLOW device base alongside this awaiting assembly. It is anticipated that once a FLOW device is fully assembled it would be towed out to sea. A fully assembled FLOW device would remain in port for up to two weeks before being towed away. A fully assembled FLOW device would only return to Falmouth docks if significant repairs were needed that were unable to be conducted at sea.

Therefore, the presence of FLOW devices within the site is temporary. Accordingly, two scenarios have been assessed: Scenario One where FLOW is absent (reasonable worst-case scenario) and Scenario Two where FLOW is present (maximum worst-case scenario).

During the operational stage the following impacts and effects have been assessed:

- There would be no effects on landscape fabric;
- Effects on seascape and landscape character (Scenario One) which would result in not significant adverse effects ranging from minor/moderate to moderate in scale;
- Effects on seascape and landscape character (Scenario Two) which would vary from moderate/minor to major/moderate. During the day-time only, short-term, temporary and reversible **significant** adverse effects would be experienced in localised areas around the site and along the coastline with direct views towards Falmouth and from areas with visibility towards the proposed development, that would be major/moderate in scale;
- Effects on landscape designations (Scenario One) which would result in not significant moderate/minor to moderate adverse effects;
- Effects on landscape designations (Scenario Two) which would range from moderate to major/moderate. During the day-time only, short-term, temporary and reversible **significant** major/moderate adverse effects were concluded for four receptors;
- Effects on visual amenity (Scenario One) which would result in not significant adverse effects ranging from minor to moderate in scale; and
- Effects on visual amenity (Scenario Two) which would range from moderate/minor to major/moderate. During the day-time only, short-term, temporary and reversible **significant** major/moderate adverse effects would occur for some visual receptors.

The socioeconomics ES chapter reports on the likely effects associated with the demolition and construction stage and operational stage of the proposed development.

Existing Conditions

A desk-based review of Census data, labour market statistics and visitor and tourist information was used to establish the baseline socio-economic conditions in the study area. Existing social and economic conditions were considered at different spatial levels: Site (the site including wider Falmouth dock area), Local (four Falmouth wards, 2022), District (Cornwall County), Regional (South-West Region).

FDEC own and operate Falmouth Docks, and there are tenants within and outside the site boundary. FDEC activities and operations include but are not limited to cargo, cruise, ship repair and Ministry of Defence support.

Some of the dock infrastructure is currently in poor condition and without the investment and upgrading that the proposed development would provide, existing activities on site and within the wider Falmouth docks area would at best remain at current levels or could decline.

FDEC’s current contribution to the economy is as follows:

- 336 jobs (7 part-time) in July 2024, an increase from 159 in 2020-21, which then had an average gross annual full-time salary of £46,733;
- Annual turnover of £51.3 million (2018-2021);
- Average labour productivity at FDEC is significantly higher than found in the wider Cornwall economy, reflecting the high value jobs that are sustained at the site;
- FDEC have important supply chain linkages into the local economy. It is estimated that approximately 45% of their supply chain expenditure is with Cornwall based businesses which supports an average of 136 jobs (indirect) per annum; and
- In 2023, cruise ship visits generated approximately 45,557 passenger visits, bringing tourism to Falmouth.

Demolition and Construction

During the demolition and construction stage, the following impacts and effects have been assessed:

- Buildings relating to Falfish operations may need to be demolished and operations will be relocated within the docks. During construction, their fish landing location will be temporarily moved to Duchy or County Wharf. This results in a negligible to minor adverse (not significant) effect at local and

- district level and a negligible adverse (not significant) effect at regional level;
- ~397 FTE jobs could be generated and another 318 indirect FTE, resulting in a minor beneficial (not significant) effect at local and district levels and negligible to minor beneficial (not significant) effect at regional level;
- ~£56.0 million GVA could be generated, with indirect and induced factors of £106.4 million GVA, resulting in a minor beneficial (not significant) effect at local and district levels and negligible beneficial (not significant) effect at regional level;
- Additional spending from temporary construction related jobs, impacting the local economy, resulting in a minor beneficial (not significant) effect at a local level and negligible beneficial (not significant) effect at district level; and
- No direct disruption to cruise visits or decrease in cruise visitors, however demolition and construction activities may negatively impact tourist/visitor experience, resulting in a minor adverse (not significant) effect at a local level and negligible adverse (not significant) effect at district and regional levels. A temporary effect on local visitor accommodation due to construction workers could become significant during summer (peak holiday season). This will need to be monitored.

Operation

During the operational stage, the following impacts and effects have been assessed:

- The proposed development will create additional employment across cargo, cruise and FLOW activities, resulting in a moderate beneficial (**significant**) effect at local and district levels and minor beneficial (not significant) effect at regional level;
- Economic output (GVA) will increase as a result of the proposed development across cargo, cruise and FLOW, resulting in a moderate beneficial (**significant**) effect at the local and district levels and minor beneficial (not significant) effect at a regional level;
- Additional spending by new on-site employees, impacting the local economy, resulting in a negligible to minor beneficial (not significant) effect at local level and a negligible beneficial (not significant) effect at district level; and
- The increase in cruise vessels will increase spending in the local economy, resulting in a moderate beneficial (**significant**) effect at the local level and negligible to minor beneficial (not significant) effect at a regional level.

19. Socioeconomics

The map displays the Falmouth area with various wards outlined. Four wards are specifically labeled with callout boxes: Penwerris Ward, Arwenack Ward, Boslowick Ward, and Trescobeas & Budock Ward. The map includes geographical features like the A39 road, the River Fowey, and surrounding areas like Porth Navas and Mawnan. A legend indicates 'Area' and 'Hover over an area'. The map is credited to 'Leaflet | Map data © OpenStreetMap contributors, CC-BY-SA, Nomis'.

Local Level Spatial Scope of Socio-economics Chapter (2022 Falmouth Wards)

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20. Cumulative Effects



Existing view from south-east of the site, from Viewpoint 1 (Pendennis Rise)

Cumulative Effects

The EIA Regulations require that 'cumulative' effects are considered, which include

- Inter-project effects – this form of cumulative effect occurs as a result of the likely effects of the proposed development interacting with the effects of other reasonably foreseeable development schemes in the vicinity occurring together with the proposed development and the cumulative effects combining to worsen the effect of a particular effect; and
- Intra-project effects – these effects occur as a result of impact interaction between different environmental topics within the same proposal or project, as a result of that development's direct effects. For example, a project might affect a species as a result of direct loss of habitat and by noise and light disturbance. Each of these when considered in isolation may have a limited effect, but when taken together the sum is greater than the parts.

Inter-Project Effects

No cumulative schemes that meet the criteria have been identified for consideration at the time of preparation of the ES, and this has been confirmed by both the MMO and Cornwall Council.

Intra-Project Effects

There are beneficial intra-project cumulative effects associated with both the construction and operational stages of the proposed development, as a result of temporary increases in construction employment and spending in the local economy and long-term benefits associated with the increase in cargo and cruise operations.

There are a number of potential adverse intra-project cumulative effects during the demolition and construction stage. The mitigation measures described in Chapter 5: Demolition and Construction Description and associated technical appendices (Outline Construction Environmental Management Plan and Outline Site Waste Management

Plan) would manage these impacts. Any issues will be managed via a site Environmental Manager (or equivalent) to manage any local concerns during the demolition and construction stage.

Demolition and Construction Stage

There are no residual significant beneficial environmental effects that have been identified associated with the demolition and construction stage.

The following residual significant adverse environmental effects have been identified during the construction stage:

- Potential significant effect relating to evening and night-time demolition and construction noise, which is temporary and reversible;
- Potential significant effect relating to demolition and construction road traffic noise, which is temporary and reversible; and
- Significant effects relating to regional landfill void capacity from hazardous waste.

Operational Stage

The following residual significant beneficial environmental effects for the operational development stage have been identified:

- Employment creation and expansion of port activities; and
- Increased volume of cruise ship passengers and crew disembarking benefiting the local economy.

The following residual significant adverse environmental effects for the operational development have been identified relating to the seascape, landscape and visual amenity of the area. These only relate to the maximum worst-case scenario of a fully assembled FLOW device and two Excellence Class cruise vessels docked alongside the wharfs. These effects would be temporary and reversible:

- Change to the intensity and scale of operations at existing landscape features with effects on some parts of the seascape and landscape character;
- Damage to the perceived rural character and tranquillity of some areas of the seascape and landscape;
- Changes to the setting and visual amenity of the coastline for some receptors; and
- Changes to skyline for some receptors.

21. Summary of Significant Residual Effects



Day-time visualisation of Scenario Two, including 2 Excellence Class cruise vessels and FLOW device fully assembled (maximum worst-case)

22. Mitigation and Monitoring



Site Access and Egress Throughout Demolition and Construction Stage

Implementation of Mitigation Measures

It is important that measures set out in the Environmental Statement to reduce adverse effects are implemented. These are likely to be secured via appropriately worded planning and licence conditions attached to the planning consent and marine licence.

During the demolition and construction stage, effects would be managed by implementation of a Construction Environmental Management Plan (based on the Outline Construction Environmental Plan already produced). This would be the responsibility of the contractor, and would include measures such as:

- Construction Traffic Management Plan;
- Written Scheme of Investigation for marine archaeology;
- Site Waste Management Plan;
- Dust Management Plan;
- Materials Management Plan;
- Noise, traffic, contamination and dust controls;
- Planning working hours and locations of noise-generating work to take account of the effects of noise upon sensitive receptors, and minimising overlap of noisy activities;
- Piling, compaction, breaking and demolition would not occur at night-time;
- Waste and materials management, storage and handling measures, including maximising re-use and recycling of waste;
- Scheduling of construction HGV arrivals/departures to minimise trips in peak hours, and avoid multiple HGV arrivals/departures at one time;
- Proposed site management controls, roles and responsibilities, and a review and monitoring regime including inspections;
- Details of construction working hours and start and end dates of activities;
- Contractor responsibilities such as adherence to the Considerate Constructors Scheme;

- An environmental and communication/liason strategy;
- Emergency procedures;
- Measures for contamination prevention and protection of water resources; and
- Detailed method statements for dredging, piling (including soft-start) and demolition, to include environmental considerations.

The technical assessments and reports of the Environmental Statement have resulted in some specific recommendations which will be implemented, such as the following:

- Dredging using a backhoe dredger(s) with a 10 m³ (or smaller) lidded bucket to minimise sediment mobilisation and release into the water;
- Dredging non-continuously, between 1.75 hours before low water to 1.75 hours before high water to reduce total deposition of sediment in sensitive areas;
- Use of a Marine Mammal Observer(s) during impact piling and demolition using a hydraulic hammer/breaker, in line with JNCC (Joint Nature Conservation Committee) guidelines.

During the operational stage, measures will be the responsibility of FDEC. FDEC will continue to implement the existing operational provisions and controls at the port.