ANNEX A

Professional Services Tender

For the National Museum of Royal Navy

HMS Warrior – Dry Docking and Mooring Works

ANNEX A - SPECIFICATION / SCOPE OF REQUIREMENT

Reference: NMRN_HMSWDDP_001

June 2023

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PART 1

SUMMARY TENDER INFORMATION

1.0 NOTICE TO TENDERERS

NMRN will be funding the works up to and including RIBA Stage 4B procurement of the main contractors and detailed design development. RIBA Stage 5 the implementation of the works, will be dependent on third party funding, and permissions and availability of a dry dock within the Portsmouth Naval Base. Availability of a dry dock within the Portsmouth Naval Base will be subject to requirements of the Royal Navy, who will take precedence over HMS Warriors requirements.

2.0 PROCUREMENT LOTS

The HMS Warrior Dry-Docking Project is seeking the following professional team and is procuring them in the respective Procurement Lots:

- **Lot 1 - Health and Safety/CDM Regs Advisor (H&SA)**. Attending project meetings. Prepare and manage Pre-Construction Information, review and comment on Construction Plans, Risk Assessments and Method Statements, site visits and audits and produce the Health and Safety File on completion.

- **Lot 2 - Dry Docking - Naval Architect (NArch)**
  - Naval architect with structural engineering capabilities. Responsible for specifying all works to the ship and brows whilst the ship is being prepared for and in dry-dock.
  - Engage or act as Employers Agent whilst the ship is in dry-dock.
  - Liaise with the Mooring Engineer to design any necessary improvements to the onboard moorings.
  - Assist with the procurement of the works contractors.
  - CDM Principal Designer - Drydocking

- **Lot 3 – Moorings Engineer (MEngr)**
  - Specify and arrange for NMRN appointment of further surveys and monitoring as required.
  - liaise with the Maritime Management Organisation and make and secure application/s and consents respectively.
  - Develop and or amend existing mooring model to improve the factor of safety to two
  - Liaise with the Naval Architect regarding onboard moorings.
  - Prepare performance specifications for development by the appointed Mooring and Dredging Contractor.
  - Act as Employers Agent during the mooring work
  - Principal Designer - Moorings

- **Lot 4 – Integrated Consultant Team**
  - This Lot is for Suppliers that have the capability and wish to provide the services for Lots 2 and 3 as set out above. If the Supplier does not have all the necessary expertise, then Sub Consultants may be proposed for NMRN acceptance.

3.0 MODEL CONTRACT

The contract/s will be let using a Professional Services Contract, from the NEC 4 model contract suite.

4.0 RIBA STAGES

For the avoidance of doubt the RIBA Stages are as follows:

- RIBA Stage 2 – Concept Design
- RIBA Stage 3 – Coordinated Design
- RIBA Stage 4 – Broken down into two sub-stages namely 4A Technical/Detailed Design and 4B Procurement (tendering for the main contractor/s)
- RIBA Stage 5 – Delivery or works stage. Where the ship is towed to a drydock and the mooring works are conducted
- RIBA Stage 6 – Handover
- RIBA Stage 7 – In-Use (Defects and Liability Stage 12month duration)

5.0 INTERVIEWS

Post Tender interviews are to be conducted week commencing **24th July (likely date is Wednesday 26th July exact date and time to be advised)** at Portsmouth Historic Dockyard. Tenderers will be notified of their requirement to attend interviews after the Tender submission.

The Employer reserves the right to select Tenderers for interview and therefore there is a possibility that not all Tenderers will be invited for interview.

6.0 TIMETABLE FOR PROFESSIONAL SERVICES APPOINTMENTS

The anticipated timetable for the appointment of the professional team is as follows:

Issue Tender	**19th June 2023**
Site Visit Day	**WC 26th June**
Deadline for Queries	**Friday 7th July @1630hrs**
Tender Return	**Friday 14th July @ 1200hrs**
Post Tender Interviews	**26th July 2023 TBC**
Appointment/Commencement	**31st July 2023**

7.0 PROFESSIONAL SERVICES FEES

Consultants are required to submit their fee proposals and bids on the basis of this brief or its approved written amendment, on a **fixed lump sum basis inclusive of all incidental costs and expenses such as travelling, printing, photocopying, postage etc but exclusive of VAT.**

Once agreed this lump sum fee will not be adjusted unless there are valid and agreed reasons which are beyond the Consultants control. As this tender is directed to Suppliers who have had previous experience of the works specified, in preparing their fee the Consultant will be deemed to have considered those characteristics and previous knowledge of the asset.

The resolution of reasonable works contract variations, extensions of time, contractors claims etc. shall be deemed to be included in the fixed lump sum fee except where legal advice is required. Thereafter such assistance shall be provided at the Employer's request and on the basis of a separate fee agreement.

Employer instigated variations will be quoted for by the Consultant and if acceptable, agreed by the Employer prior to implementation. The Employer reserves the right to instruct the Consultant to proceed with a change prior to full agreement of costs.

The Employer will appoint consultants directly on a RIBA stage by stage basis and does not commit to appoint for the full scope of the work stages or any remaining work stages at any given time.

The Employer will reserve the right to terminate appointments at any time at its own discretion and to pay an appropriate proportion of the agreed lump sum fee on a 'quantum meruit' basis.

Particular attention is drawn to the fact that the Employer, notwithstanding any other action it may take, will not pay fees on the cost of any additional work or on any other expenditure that arises as a direct result of the failure of the consultants in question to carry out their services to the standards required and/or expected by this document, their respective Professional Institutions, Codes of Practice, British Standards or any other generally accepted standards followed by the building industry. This is particularly pertinent to instances where the Consultant has caused a delay in the Contractors procurement or works programme due to a lack of suitably detailed information.

All designs will be the responsibility of the designers.

All consultants will be required to satisfy the Employer that they have appropriate and valid Professional Indemnity Insurance cover. Details of such cover to be submitted to the Employer with the fee Tender.

All drawings, designs and other intellectual property produced or provided by the consultants in relation to this project will become the property of the Employer.

All consultants will be deemed to have included for attending design team meetings, pre-contract meetings, site meetings etc and all necessary travelling expenses. As a basis for the Consultants Fee Proposal the following is to be allowed for:

RIBA Stage	Discipline	Monthly Site Meeting	2Weekly MS Teams Meeting	Weekly Site Meeting	Comments
2 to 4	All	●	●		
5	Lot 1 – H&SA	●	●	●	
5	Lot 2 – NArch	●	●	●	
5	Lot 3 – MEngr	●	●	●	
5	Lot 2 - Employers Agent			● Daily On Site	
6		●			First 2 Months of In-Use then 6 monthly to End of Defects

8.0 INSURANCES & WARRANTIES

Shall be for each and every claim up to the stated amount:

- Public - £10,000,000
- Employers - £10,000,000
- Professional Indemnity - £5,000,000

Sub Consultant Collateral Warranties will be required between the Sub-consultant and the Employer.

9.0 LIMIT OF LIABILITY

Shall be as set out in the Form of Contract Abstract of Particulars

PART 2

PROJECT BRIEF

1.0 INTRODUCTION

1.1 HMS Warrior

HMS Warrior the pride of Queen Victoria's Black Battle fleet. Built-in 1860, HMS Warrior is widely recognised as the world's first iron-hulled, steam-powered, armoured warship.

HMS Warrior was the largest and most powerful warship of her day; now under the guardianship of the National Museum of the Royal Navy, she is docked at Portsmouth's Historic Dockyard where she welcomes thousands of visitors all year-round. As Britain's first iron-hulled, armoured warship, HMS Warrior reflected the Royal Navy's innovative naval architecture and design during the 19th Century. She is interpreted today as if the 706 officers and ratings of 1863 were still onboard with its canons on the gun and upper decks. The ship is also used for unique setting events such as weddings and other celebrations. The National Museum of the Royal Navy is committed to conserving HMS Warrior, ensuring her preservation for decades to come.

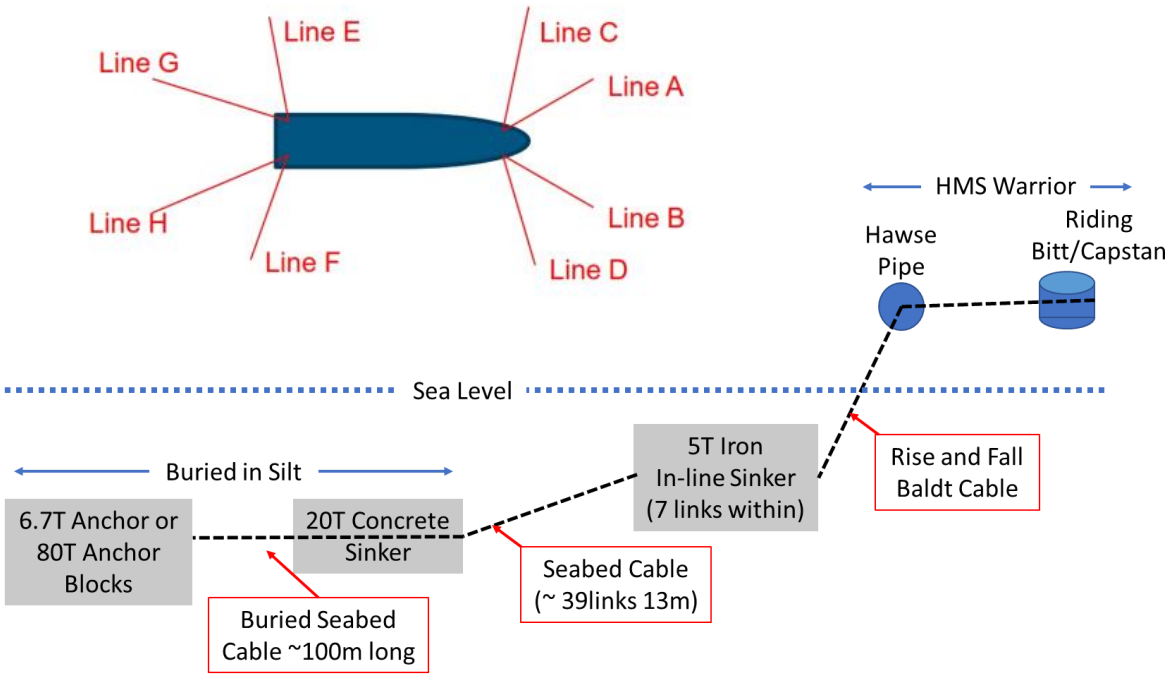
1.2 Drydocking

HMS Warrior has been previously Dry-Docked in 1974 at Milford Haven and then in Portsmouth Naval Base (PNB) in 1994 (C Lock Stern First) and most recently in February/March 2004 in Dock 14. In 2004 she was towed to the Naval Base and docked down in Lock D. She has a Length (L.O.A) of 128m (420ft) and Beam of 17.8m (58ft 4") with a draught of 8.2m (26ft 10") TBC. In 2004 she spent circa two weeks in dry-dock having the hull cleaned and recoated. In the lead up to the dry-docking, consideration was given to how to recoat the hull and there is a report by Burness Corlett and Partners [Jan 2004 ref 5900053]. In that report it noted that the ship had a bitumastic coating that was failing so it recommended a Ultra-High Pressure Water Blast and epoxy system, to provide a medium to long term outer hull protection system.

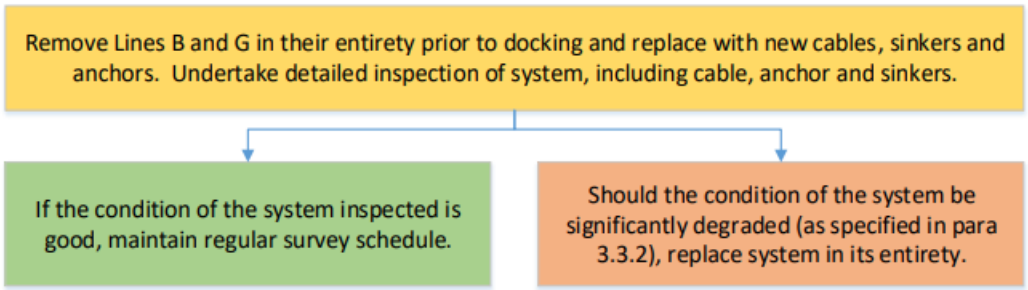
This dry-docking programme will be subject to availability of a suitable dock in the Naval Base, scope of works including hull maintenance, cathodic protection, rigging and onboard mooring adaptions and sufficient funding being available.

1.3 Permanent Moorings

Outboard Moorings. The mooring system has been in place since 1985 and in 2013 and in 2016 there were mooring failures. Between January 2018 and January 2019 BMT Defence Services provided a recommendation, for the survey and maintenance of mooring arrangements. That survey concluded that the sea mooring arrangement were capable of withstanding the expected loads of the system, providing the system was maintained to the original specification. A plan and cross section view of the moorings is as follows:



The BMT survey summaries the actions required as follows:



Inboard Moorings. In early 2020 Houlder Ltd carried out a condition survey of the inboard moorings in four phases. The Phase 4 report concluded that in most cases, the yield stresses could be exceeded resulting in component failure and a schedule of works was proposed. The report specifically proposes reinforcing work to the aft and forward mooring points of the ship. It is intended that this project will address the issues identified, and if appropriate increase the environmental loads by at least a factor of two. The report also proposes that a cost benefit analysis should be undertaken to define the site-specific measures to be adopted.

1.4 Project Phases

The project will be carried out in the following phases:

- **Phase 1 Procurement, Planning and Survey** – Procurement of the professional team, determination of the scope of works, estimated costs, confirmation of funding available and statutory consent applications. Carry out survey works and install load cells in the mooring chains to prove and or inform the structural modelling for the moorings. Note, the scope may have to be re-defined depending on the funding available.
- **Phase 2 Development** – Detailed Design and Planning.
- **Phase 3 Delivery** – Works Phase for Dry-Docking and Mooring Works.

2.0 NATIONAL MUSEUM OF THE ROYAL NAVY – ABOUT THE ORGANISATION

The National Museum of the Royal Navy (NMRN) was formally created in 2008 and fulfils the Navy Board's long held ambition to develop greater coherence and co-ordination in the display of naval heritage and in telling the naval story.

The NMRN became the sole corporate trustee of the Royal Navy Museum in 2010. The MoD transferred HMS Victory into the National Museum in March 2012, thereby releasing endowments in the order of £55,000,000

The main purpose of the NMRN is to promote public understanding of the role, traditions and importance of the Royal Navy and its people. The NMRN's charitable objectives are

- the promotion and education and learning of Naval Service and Auxiliaries personnel and other members of the public about the history, deeds and traditions of the Naval Service and Auxiliaries.
- the promotion and enhancement of military efficiency by assisting recruitment and retention and fostering the esprit de corps of men and women who are serving in the Naval Service or Auxiliaries, and
- the commemoration and remembrance of those members of the Naval Service and Auxiliaries who have died while on active service and the encouragement of public recognition of the sacrifice made by such persons.

As an organisation the NMRN's vision, goal and mission is as follows:

- Their **Vision** is: To be the world's most respected naval museum underpinned by a spirit of enterprise and adventure.
- Their **goal** is: To promote the traditions and public understanding of the Royal Navy and its constituent branches, past, present and future.
- Their **mission** is: To be a beacon of excellence in enabling people to learn, enjoy and engage with the story of the Royal Navy and understand its impact in making the modern world.

3.0 PROJECT AIMS AND OBJECTIVES

The stated aims and objectives of the HMS Warrior Dry-docking and Moorings project are as follows:

- Safe delivery of the project to time, quality and budget.
- Define the budget, seek and confirm associated third party funding.
- Secure Marine Management Organisation (MMO) authority for mooring and dredging works and movement of the HMS Warrior.
- Dry-Dock HMS Warrior in Portsmouth Naval Base as soon as possible. Whilst dry-docked, in summary, carry out the following works within a defined time period:
    - Hull preservation to give a maintenance plan for the next 25years. This includes below and above the waterline.
    - Onboard mooring adaptions to increase the environmental factor of safety for the mooring connections by two.
    - Mast works to the fore and main mast top mast sections and above. Including associated rigging to facilitate the works.
    - Replace heavily decayed wooden sections of the bow.
    - Provide cathodic protection to the ship and outboard moorings.
- Overhaul existing forward and stern brows.
- Dredge the permanent docking area.
- Survey and carry out necessary remediation work to the outboard moorings.
- Return HMS Warrior to her current moorings.

Note: Works to the HMS Warrior Jetty are out of scope for this project.

4.0 TIME, COST, QUALITY

The NMRN wish to complete this project in a timely manner, to the required standards whilst incurring the minimum expense necessary to achieve the project objectives. At this stage the Project Driver has been identified as **Cost**, i.e., decisions will be informed by the cost implications to the project.

- **Cost**

  The NMRN must be able to demonstrate value for money throughout all stages of the project and the final scheme must provide a high degree of cost certainty. At any stage in the project the NMRN may need to submit bids to funding bodies and therefore the design process must follow a logical sequence of development and the input from each discipline must run as concurrently as possible. Cost will need to be considered in terms of initial capital outlay and life cycle and the running costs of the finished installation must be examined in detail.

- **Quality**

  The quality of the finished installation is of great importance to the NMRN particularly in respect of the ships conservation. The ship is of the National Historic Fleet and is listed in the National Historic Ships UK Register. National Historic Ships UK is a government funded, independent organisation which gives objective advice to UK governments and local authorities, funding bodies, and the historic ships sector on all matters relating to historic vessels in the UK. Therefore quality is of the utmost significance to protect the ship and the reputation of the NMRN. Quality is also important with regard to maintenance and attention should be made to facilitating the maintenance process both in terms of frequency, ease and ongoing operational cost. The design team should clearly demonstrate to the NMRN the consequences of changes in design and specification that are necessary to keep within the cost plan.

- **Time**

  Works should progress in a logical sequence without interruption. The Ship is a visitor attraction open to the public virtually 365days of the year and can only be out of operation during the winter months and that period of out of use, must be kept to a minimum. Often with third party funders there are funding deadlines set around the financial year which can also invoke time pressure to compete within the financial year 31st March. This type of project frequently leads to the need for out of hours and weekend working that incurs additional project cost. The design team should seek innovative solutions to address problems of this nature. Working within the RN Naval Base imposes further restrictions on access, working practices, dust, VOC's etc. therefore such issues need to be addressed as far as possible in design proposals rather than restricting works operations.

5.0 SCOPE OF WORKS

The following identifies the outline scope of Works for the HMS Warrior Project:

5.1 Approvals

- Obtain Marine Management Organisation (MMO) consent for initial hull cleaning, dredging and mooring works.
- Obtain authority to dry-dock the ship in Portsmouth Naval Base (PNB)
- Obtain authority to temporarily berth the ship once the dry-dock work have been completed and prior to the outboard mooring works being completed.

5.2 Pre-Dry-Docking Works

- Surveys:
  - Existing Moorings
  - Masts and associated rigging
- Installation of mooring line load cells and apply information to Houlders structural model.
- Installation of a weather monitoring system to inform the design of the mooring arrangements.
- Carry out underwater scrub to the keel section and apply preservative (MMO authority required) just prior to dry-docking.
- Make safe and protect onboard interpretation.

5.3 Ship Movement

- Remove the ships brows and services connections between the jetty and the ship.
- Remove or close up ships outboard fittings e.g. Anchor and close up Gun Ports
- Release the ship from its moorings.
- Tow the ship to the PNB
- Move the ship into the dry dock and dock down.
- Once the dry-dock works are complete move the ship to a berth within the basin
- Manage the ship whilst temporarily berthed awaiting completion of the mooring works.
- Tow the ship back to its normal mooring location alongside the jetty.
- Reconnect the moorings, brows and services.

5.4 Dry-Docking Works

- Design the docking arrangement.
- Below the water line final hull clean, UHPWB TBC
- Survey the ship's hull internally and externally and carry out repairs as necessary. Repairs are likely to be Belzona or ring weld repairs.
- Survey the keel UTS
- Replace all hull blanking plates.
- Preserve and repaint the hull above and below the waterline. Note; above waterline may be localised wire brush and patch paint.
- Internally carry out double bottom preservation works.
- Carpenters walk and lower carpenters walk clean and re-preserve.
- Propeller clean and blast cruciform and prop-well, renew as necessary and re-install.
- Design and build new inboard moorings as set out in the Houlder survey. This will include modelling the weather and installation of load cells to determine strains. Four new Pad Eyes and works to the Hawespipes at stern and similar work to the four bow anchor points.
- Remove the top masts from the fore and main masts and carry out repairs and replace them. Depending on pre-dry dock survey finding the Main and Fore mast trestles and cross trees may be renewed as per the mizzen mast. On the mizzen mast the timber trestles and cross trees was replaced with steel (indicative design concept in the form of CAD drawings are available).
- Remove and return ballast to allow the compartment to be inspected and preserved.
- Re-assess centre of gravity.
- Inspect conserve and repair the bow timberwork.
- Install other ships fittings e.g. ash shoot, transom carvings and guilding
- Review actions to be taken with the figurehead.
- Design and install cathodic protection for the hull and mooring system.
- Survey, testing and refurbishment of the existing brows and re-paint.

5.5 Outboard Mooring and Dredging

- Survey existing system, noting that B mooring which is exposed to tidal fluctuations on the hard is likely to be the worst case scenario as other are buried in silt or permanently under water. A recent visual dive survey report of the exposed mooring cables and a Bathymetric survey report will be available soon.
- Design and build remedial mooring system to bring the system back to its original design and installation status and provide a safety factor of two.
- Dredge the current mooring area noting that previously 8,500m^3 was dredged from that location.

The scope of this element of the project is impossible to determine at this stage, as if the mooring cables need to be exposed and replaced six of the eight cables are buried very deep (4.5m to 12m below chart datum) in the silt.

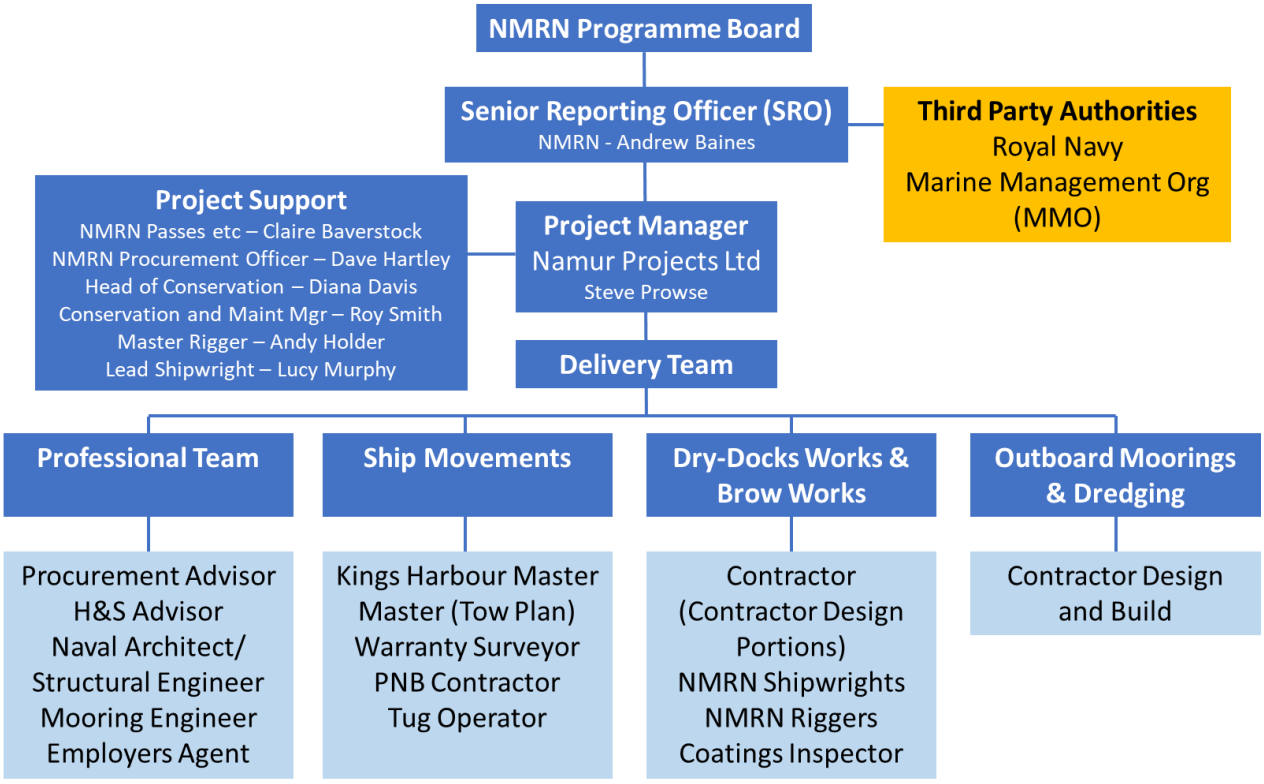
6.0 PROJECT STATUS

The following work has already been completed:

- Visual survey of the eight mooring cables (above the current silt level)
- Bathymetric survey
- Mizzen Mast Trestle and Crosstrees renewed in steel. CAD drawings available.
- Inboard mooring condition report
- CAD Drawings of the Deck plans and sketches of the Mooring System are available.

7.0 TEAM ORGANISATION

The project organogram and reporting structure is as follows:



A detailed procurement strategy will be developed by the Project Manager with the assistance of the Professional Team. The procurement strategy will consider the best structure of the contracts necessary to deliver the project and will be reviewed and amended as the design develops.

Works Package	Contractor	Comments
Tug Operator	Serco	Direct Appointment
Principal Contractor – Ship Move and Dry-Docking	TBC	Restricted Tender
Principal Contractor - Outboard Mooring & Dredging Works. Design and Build Contract, to include the disconnection and re-connection of the moorings, brows and services.	TBC	Open Tender

8.0 PROGRAMME

A copy of the master programme against which progress will be recorded is included in Appendix B. The programme is currently an indicative programme as it cannot be set until funding and dry-dock availability is confirmed. **Suppliers contracted to this project may be required to suspend their service following the detailed design stages and await the availability of Third Party funding, permissions and a dry dock within the Naval Base**. During this potential suspension phase fee drawdown will be suspended and an agreed inflation percentage will be applied to tendered fees and rates. The key milestone programme dates are as follows (approximate):

Phase / Activity	Completion Date	Lead
Phase 1 – Development of Scope, Estimated Costs and Secure Funding		
Procure Professional Team	31st Jul 23	Project Manager
Moorings and Dredging Tender Issued	28th Aug 23	Lead Designer
MMO Application Submitted	11th Sep 23	Lead Designer
Dry-Dock Tender Issued	25th Sep 23	Lead Designer
Moorings and Dredging Contractor Appointed	23rd Oct 23	Project Manager
Dry-Dock Contractor Appointed	20th Nov 23	Project Manager
Phase 2 – Detailed Design		
Moorings Detailed Design	22nd Jan 24	Contractor
Dry-Docking Detailed Design	22nd Jan 24	Contractor
Phase 3 – Delivery – Dry-Docking and Mooring Works (TBC)		
Commence De-rig works	Q3/4 FY24/25	NMRN
Commence Packing up Interpretation	Q3/4 FY24/25	NMRN
Disconnect and Tow to PNB	Q3/4 FY24/25	Contractor
Completed Dry Dock Works (4 Weeks)	Q3/4 FY24/25	Contractor
Complete alongside works	Q3/4 FY24/25	Contractor/NMRN
Complete Mooring Works	Q3/4 FY24/25	Contractor
Tow to permanent moorings	Q3/4 FY24/25	Contractor
Open to Public 18th April 25 (Good Friday)	18th April 25	NMRN

The management of the overall programme will be the responsibility of the PM with input from all members of the Project Team, in its widest sense.

Each member of the Project Team is responsible for ensuring adequate and effective time management and use of resources to ensure completion can be met on time and within the agreed budget.

9.0 BUDGET

The total budget for the works (including contractor preliminaries, overheads and profit and Contingency) is not yet established for the works as this will be a function of the RIBA Stage 2 and 3:

Tenderers should allow for their services to be provided in connection with all works identified in the above scope of works and appendices referred to.

PART 3

SCHEDULE OF PROFESSIONAL SERVICES

1.0 GENERAL

The Lead Consultant (Naval Architect) will be required to liaise with the Statutory Authorities and to make and manage any required consents to facilitate the works e.g. Maritime Management Organisation approvals.

The Employer will sign the design off at each stage and there is no obligation for the Employer to progress the design beyond each sign off.

The Tender must include for professional services through all RIBA Stages 2 to 6 inclusive and schedule fees by each stage.

Noting that the Mooring Engineer consultant will be acting as Employer's Representative from RIBA Stage 4 onwards.

The programme is currently an indicative programme as it cannot be set until third party funding and dry-dock availability is confirmed. **Suppliers contracted to this project may be required to suspend their service following the detailed design stages and await the availability of Third-Party funding, permissions, and a dry dock within the Naval Base.** During this potential suspension phase (Stand Still) fee drawdown will be suspended and an agreed inflation percentage will be applied to tendered fees and rates.

CAD Drawings of the deck plans and sketches of the mooring system are available and will be issued to the successful tenderers.

2.0 THE PROFESSIONAL TEAMS ROLES & RESPONSIBILITIES

2.1 Professional Team Generally

Each member of the professional team will be employed direct by NMRN and will be expected to liaise and work in close co-operation with all of the others with the clear intention of completing the project on time and on budget with best value. The team members will be engaged at the commencement of the project (RIBA Stage 2 Concept Design) and subject to satisfactory ongoing performance will be engaged to final completion. The duties of each discipline at each stage will generally accord with the RIBA Plan of Work for a fully designed project.

The National Museum of the Royal Navy will be the Employer.

The NMRN will fund the design up to RIBA Stage 3 and then NMRN will secure funding and permissions from Third Parties to allow the works to be taken forward. Consultants are to note that the funding will be limited, and the final cost must be contained within those limits.

Once a building contract is entered into with a Principal Contractor, the design, **comprising fully co-ordinated final working drawings and fully co-ordinated and completed schedules shall remain frozen**. No variations will be permitted unless:

- The Employer's prior written agreement is obtained through the PM Project Manager.
- Emergency or safety measures have to be taken;
- A change of Statutory Requirements occurs.

In every event of one or more of the above occurring, the consultants are to advise the Employer immediately of any potential extra costs through the PM.

The Employer reserves the right to modify the design to effect economies should extra costs become unavoidable, and the budget limit is at risk of being exceeded. The cost of implementing such changes in the design will be deemed to be included in the consultants overall fixed lump sum fee agreement which will be agreed before the commissions are made.

Consultants shall allow for all surveys, opening-up works and investigations necessary to enable and inform the preparation of specifications and designs. The consultants are not required to complete an asbestos survey or other surveys to identify the scope of deleterious materials but should allow for the impact that the discovery of this type of material (which is to be expected on a project of this nature and at this location) will have on the provision of the consultants services.

All designs are to comply with current statutory requirements and regulations, Codes of Practice etc. and be consistent with the standards that would be provided by a professional designer submitting himself as competent to take on work for such design.

No design shall be sub-let to any other professional party, contractor or sub-contractor without the Employer's permission.

The design is to include submissions of applications to the necessary authority for all statutory consents and approvals. Application fees due to the local authority will be borne by the Employer.

The consultants must make the following considerations when developing the design:

- Functionality.
- Value for Money.
- Maintenance and Servicing Requirements.
- Life-Cycle Costing and Running Costs.
- Improvement to the Work Environment and Avoidance of Sick Building Syndrome.
- Environmental Issues, Sustainability, Green Design, Energy Efficiency.
- Reduction of Dust, Noise and Vibration during Refurbishment works.

2.2 Consultants Services

The Employer is appointing a team of consultants to carry out the scope of professional services. To ensure the professional team is fully aware of their own obligations as well as that of the other professionals the scope of all services as well as the high level role of the Employer is described below.

2.3 Employer/Employer (NMRN)

The Employer will be **generally** responsible for.

- Liaising with NMRN Visitor Services
- Liaising with Portsmouth Naval Base (PNB).
- General liaison with the Portsmouth Naval Base Property Trust (PNBPT)
- Acting as Project Board and Project Director.

3.0 PROJECT MANAGER

The Project Manager is responsible for the overall management and coordination of all other members of the professional team, who will be report directly to the Project Manager and Employer. The Project Manager will the role to the requirements of the Employer and will be responsible for providing the services in accordance with:

- The scope of professional services as set out in the NEC Professional Services Contract Conditions of Engagement RIBA Stages 2 to 6 for Project Manager and Contract Administrator Services.
- and such necessary additional services arising as a result of this brief and the general and specific services below.

The Project Manager will be **generally** responsible for.

a) Assisting NMRN Procurement in placing Procurement advertisements, and, in conjunction with the Employer assess applications, invite and assess Tenders and appoint the project team.

b) Prepare Project Execution Plan.

c) Prepare and maintain Programme.

d) Prepare and maintain Risk Register.

e) With NMRN manage budgets and report

f) Co-ordinate Value Engineering meetings which will be organised chaired and minuted by the Lead Consultant.

g) Prepare and maintain Issues Log.

h) Manage applications for Maritime Management Organisation (MMO) which will be developed and monitored by the Lead Consultant.

i) Manage and assist in the preparation of the Tender documents, including contract conditions for project team. The NMRN Procurement will lead on the preparation of Tender and contract documents for contractors.

j) Co-ordinate and liaise with the wider project team.

k) Convene, chair and minute pre and post contract project team meetings. Design team meetings and value engineering meetings will chaired and minuted by the PM.

l) Issue notices, certificates etc. and administer the contract conditions as required by the various contracts with other team members and contractors.

m) Prepare and /or collate reports to the Employer and third parties as required.

n) Act as Contract Administrator for the construction works.

4.0 NAVAL ARCHITECT AND LEAD CONSULTANT

The Naval Architect and Lead Consultant is responsible for the overall management and coordination of all other members of the professional team excluding the PM who will report directly to NMRN Senior Reporting Officer/Project Director. The Lead Consultant is also responsible for ensuring the works are fully and substantially coordinated with the requirements of the Employer and will be responsible for providing the services in accordance with:

- the scope of professional services as set out in the NEC Professional Services Conditions of Engagement RIBA Stages 2 to 6 for Designer, Design Leader and Lead Consultant (but not Contract Administrator) Services.
- the scope of professional and design services as set out in the Contract Schedule of Services and Appendix 2 “Roles and Responsibilities Matrix.
- The scope of works described in this document.
- and such necessary additional services arising as a result of this brief and the general and specific services below.

The Naval Architect will contribute the development of the Outboard Mooring specifications in liaison with the Mooring Engineer. Noting that a detailed performance specification will be developed in accordance with the findings of further mooring surveys to RIBA Stage 3. Using that information and specification a Design and Build Contractor will be appointed to develop the detailed design for the outboard mooring system. The Naval Architect will be responsible for fully designing the onboard mooring connections/assemblies.

The Naval Architect and Lead Consultant will be **generally** responsible for:

Naval Architect Service Generally

a) The design, specification and detailing of the Dry-Docking Works as set out in the RIBA Plan of Work and this document. The design duties work includes structural designing.

b) Specify additional surveys and assist in the procurement of such surveys. Interpret survey findings and develop designs accordingly.

c) Attend pre and post contract project team meetings.

d) Liaise and Co-ordinate the designs of other members of the Design Team.

e) Liaison, coordination and design works as necessary for the Dry-Docking Requirements.

f) Provide drawn and / or written material relative enable the employer to obtain MMO approval for the mooring and dredging works and ship movements.

g) Provision of drawn and written material detailing the designs to the PM for inclusion in Tender documents.

h) Inspection of the Naval Architects works in progress.

i) Provide Employer Agent Services whilst the ship is in dry dock and moored alongside being de/re-rigged if required. The fees for this part of the service are separate to the Naval

Architects Fees and will be determined once the dry-docking and alongside durations have been determined.

j) Contribute to the Risk Register.

k) Contribute to the Issues Log.

l) Lead and contribute to Value Engineering exercises.

m) Provide as built drawings and revised specification information for the Health and Safety File.

The Naval Architect and Lead Consultant will be **specifically** responsible for:

n) The consultant shall be required to liaise and work in close collaboration with the Employer and his representatives, and the wider professional team to maximise the project's success.

o) Together with other consultants, where appointed, prepare drawings, schedules of work and specifications of materials and workmanship and provide all information necessary for the preparation of Tender and contract documentation for the works.

p) Prepare a schedule of design and production information together with a programme of production for your service, monitor progress monthly against the programme and if delayed take action to remedy. The Lead Consultant will be responsible for monitoring the schedules and programmes of all consultants and for producing a combined monthly report.

q) Prepare and monitor against a schedule of necessary applications for all statutory consents and ensure they are submitted by the respective parties in accordance with the Master Programme.

r) Amend the drawings, if necessary, to incorporate revisions necessary to reduce costs within the budget limit. Any such revisions are only to be made after consultation and agreement with the Employer.

s) Prepare fully co-ordinated working drawings to enable the Contractor to undertake and complete the works together with complete and co-ordinated schedules of finishes, fittings, materials and equipment. It is a specific requirement that these are to be complete by Tender stage. The Lead Consultant will be required to provide a written undertaking that the designs are fully co-ordinated and complete and ready to be issued for tender. Provision shall also be made in the Tender Document for the Contractor to confirm his ability to complete the works from the drawings available with the Tender.

t) If necessary, assist with the amendment of the Tender documents and negotiate any such economies with the two lowest Tenderers to reduce the Tender sum to within the budget limit.

u) Where necessitated by unforeseen circumstances provide additional drawings and information as required by the works contract.

v) Provide general guidance to the Employer on the maintenance of the completed works.

w) Provide the Employer with 2 sets of As Built architectural drawings.

x) Provide all necessary copies of drawings, and other documentation to all interested parties to enable the works to be effectively co-ordinated and constructed in a timely manner as defined by the contract.

y) Attend team meetings as set out in the schedule.

z) Attend and contribute to value engineering exercises as necessary to ensure value for money and alignment with the budgetary parameters.

aa) Prepare a Monthly Progress report for the Project/ Design Team Meeting detailing the status of your works under the following headings:

- i Works Undertaken.
- ii Forthcoming Actions.
- iii Information / Decisions / Key Actions Required.
- iv Risk / Issues.
- v Issued Information / Design Status.
- vi The Lead consultant will be responsible for compiling a combined summary monthly report on behalf of consultants.

bb) Assist the Employer in preparing information for funders and primary stakeholders, e.g. grant draw down documentation.

cc) Assist in the appraisal, report (and interview shortlisted Tenderers) and recommendation of the most suitable Principal Construction Contractor, and Sub-Contractor(s) and suppliers with support of Project Team.

dd) Contribute to the development of the project assessment / evaluation and 'close out' report.

ee) Any other service normally carried out by an Naval Architect for works of the type defined in this brief but not specifically set out above.

ff) All design and production information is to be provided to the Employer in both hard copy and electronic format. Drawings are required in AutoCAD format.

5.0 MOORING ENGINEERING SERVICES

The Mooring Engineer will be a member of the Design Team, in the charge of the Lead Consultant and will be responsible for providing the services in accordance with:

- the scope of professional services as set out in the NEC Professional Services Conditions of Engagement RIBA Stages 2 to 6 for Mooring Engineering services (but not Contract Administrator) Services.
- the scope of professional and design services as set out in the Contract Schedule of Services and Appendix 2 “Roles and Responsibilities Matrix.
- The Mooring Engineer is responsible for arranging for the surveying of the existing outboard moorings and design remedial works or a new system which includes all mooring cables/chains, blocks, sinkers and all associated mooring fixings.
- The Naval Architect will contribute the development of the Outboard Mooring specifications in liaison with the Mooring Engineer. Noting that a detailed performance specification will be developed in accordance with the findings of further mooring surveys to RIBA Stage 3. Using that information and specification a Design and Build Contractor will be appointed to develop the detailed design for the outboard mooring system. With the assistance of the Mooring Engineer, The Naval Architect will be responsible for fully designing the onboard mooring connections/assemblies.
- The Mooring Engineer is responsible for determining what surveys are required and interpreting those findings to either ratify the existing outboard mooring system or develop a scheme to bring the system up to the required factor of safety. This will either developing or utilising existing models. The resulting information will be used to provide a performance specification for the tender document to procure a Design and Build Mooring Contractor.
- The Mooring Contractor will be responsible for both moorings and dredging the dock prior to HMS Warriors return to her permanent berth.
- and such necessary additional services arising as a result of this brief and the general and specific services below.

The Structural Engineer will be **generally** responsible for:

a) Attend pre and post contract project team meetings until no longer required by PM.

b) Investigation of existing mooring arrangements.

c) Specifying and interpreting any additional surveys that may be required. With the assistance of the Mooring Engineer, NMRN propose fitting stain gauges to the existing mooring cables and installing a weather station on the Jetty to inform the existing models or inform a revised design.

d) Design and specify repairs, if any, to structural elements of the mooring arrangements.

e) Liaising with the Naval Architect for the design, specification and detailing of the structural elements of the moorings arrangements that may be designed by the Naval Architect.

f) Provide drawn and / or written material relative to the structural elements of the mooring arrangements to enable the NMRN to obtain MMO authority to proceed.

g) Update the condition survey of the structural elements of the mooring arrangement as part of Stage 3 and 4 works.

h) Provision of drawn and written material detailing the designs to the PM for inclusion in Tender documents.

i) Contribute to the Risk Register.

j) Contribute to the Issues Log.

k) Contribute to Value Engineering exercises.

l) Provide as built drawings and revised specification information for the Health and Safety File.

The Mooring Engineer will be **specifically** responsible for

m) The consultant shall be required to liaise and work in close collaboration with the Employer, and the wider professional team to maximise the project's success.

n) carry out surveys in respect of the development of the outboard mooring arrangements.

o) with other consultants, where appointed, prepare fully co-ordinated final working schedules and specifications of materials and workmanship and provide all information necessary for the preparation of Tender and contract documentation for the structural component of the mooring. The Employer requires these documents to contain full designs so that they can be incorporated in the Tender and contract documentation by the NMRN Procurement to obviate the need for nominated sub-contractors.

p) where structural steelwork is included in the design of the works, to approve the specialist's shop and fabrication drawings.

q) advise the Employer concerning the Contractors method statement to ensure the works are carried out in a safe and acceptable manner.

r) obtain any necessary statutory approvals necessary in connection with the mooring works.

s) provide the Employer with two sets of As Built Civil & Structural drawings.

t) visit the site as specified for the to inspect the mooring and dredging works.

u) Prepare a Monthly Progress report for the Project/ Design Team Meeting detailing the status of your works under the following headings:

- Works Undertaken.
- Forthcoming Actions.
- Information / Decisions / Key Actions Required.
- Risk / Issues.
- Issued Information / Design Status.

v) Prepare a schedule of design and production information together with a programme of production for your service, monitor progress monthly against the programme and if delayed take action to remedy. The Lead consultant will be responsible for monitoring the schedules and programmes of all consultants and for producing a combined monthly report.

w) Assist the Employer as necessary in preparing information for funders and primary stakeholders, e.g. grant draw down documentation.

x) Assist in the appraisal, report and interview shortlisted Tenderers and recommendation of the most suitable Principal Construction Contractor and Sub-Contractor(s) and suppliers with support of Project Team.

y) Contribute to the development of the project assessment / evaluation and 'close out' report.

z) any other service normally carried out by a structural engineer for works of the type covered by this commission but not specifically set out above.

6.0 HEALTH AND SAFETY ADVISOR - PRINCIPAL DESIGNER

The services which are summarised below are derived from the duties laid on the Employer by the Regulations and other related requirements of the Regulations. Reference should be made to the Regulations for their precise scope and this schedule must be read within the context of the Regulations as a whole.

Part 1

1. Co-operate with any other person working on or in relation to a project at the same or an adjoining construction site to the extent necessary to enable any person with a duty or function to fulfil that duty or function. [Regulation 8(4)]

2. Report to the Employer anything the Principal Designer is aware of in relation to the Project which is likely to endanger their own health or safety or that of others. [Regulation 8(5)]

3. Provide any information or instructions as soon as is practicable and in a comprehensible form. [Regulation 8(6)]

4. Plan, manage and monitor the pre-construction phase and co-ordinate matters relating to health and safety during the pre-construction phase to ensure that, so far as is reasonably practicable, the Project is carried out without risks to health or safety. [Regulation 11(1)]

5. When:

a. design, technical and organisational aspects are being decided in order to plan the various items or stages of work which are to take place simultaneously or in succession; and

b. estimating the period of time required to complete such work or work stages, take into account the general principles of prevention and, where relevant, the content of any Construction Phase Plan and any Health and Safety File. [Regulation 11(2)]

6. Identify and eliminate or control, so far as is reasonably practicable, foreseeable risks to the health and safety of any person:

a. carrying out or liable to be affected by construction work;

b. maintaining or cleaning a structure; or

c. using a structure designed as a workplace. [Regulation 11(3)]

7. Ensure all designers comply with their duties in Regulation 9. [Regulation 11(4)]

8. Co-operate with and ensure that all persons working in relation to the pre-construction phase co-operate with the Employer, the Principal Designer and each other. [Regulation 11(5)]

9. a. Assist the Employer in provision of the pre-construction information required by Regulation 4(4); and b. So far as it is within the Principal Designer's control, provide pre-construction information, promptly and in a convenient form, to every designer and contractor appointed, or being considered for appointment, to the Project. [Regulation 11(6)]

10. Liaise with the Principal Contractor for the duration of the Principal Designer's appointment and share with the Principal Contractor information relevant to the planning, management and

monitoring of the construction phase and the co-ordination of health and safety matters during the construction phase. [Regulation 11(7)]

11. Assist the Principal Contractor in preparing the Construction Phase Plan by providing to the Principal Contractor all information the Principal Designer holds that is relevant to the Construction Phase Plan including pre-construction information obtained from the Employer and any information obtained from designers under Regulation 9(3)(b). [Regulation 12(3)]

12. During the pre-construction phase prepare a Health and Safety File appropriate to the characteristics of the Project which must contain information relating to the Project which is likely to be needed during any subsequent project to ensure the health and safety of any person. [Regulation 12(5)]

13. Ensure that the Health and Safety File is appropriately reviewed, updated and revised from time to time, up to the date the Principal Designer's appointment has ended to take account of the work and any changes that have occurred. [Regulation 12(6)]

14. If the Principal Designer's appointment concludes before the end of the Project, pass the draft health and safety file to the Principal Contractor. [Regulation 12(8)]

15. Deliver 1 **hard** copy of the Health and Safety File at the end of the Project to the Employer. [Regulation 12(10)]. This to include as-built drawings and other associated information. Also 1 no soft copy in a combined PDF format and 1 no soft copy of "as built" drawings. H&S file to be issued to the Employer at the time of Practical Completion of the work. Conditions to be included in the Construction Contract for the provision of the Contractors O&M manual as a condition of awarding Practical Completion.

Part 2 - Additional related services

~~16. Provide advice to the Employer on the health and safety skills, knowledge and experience and, if they are an organisation, the organisational capability and resources of up to [ ] proposed designers prior to arrangements being made for design work to begin*.~~ NOT REQUIRED

17. a. Provide advice to the Employer on the health and safety skills, knowledge and experience and, if they are an organisation, the organisational capability and resources of up to [6] proposed contractors before an approved list of tenderers is agreed*.

b. Provide advice to the Employer on the health and safety skills, knowledge and experience and, if they are an organisation, the organisational capability and resources of the lowest or preferred tendering/negotiating prospective Principal Contractor before arrangements are made for the work to be carried out or managed.

18. Advising the Employer on the suitability or otherwise of the Construction Phase Plan and the provision of the proposed welfare facilities, prior to construction work starting on site.

19. Prepare [0] additional copies of the Health and Safety File. For additional requirements please refer to clause 15 above.

A Principal Designer (PD) will be a member of the Design Team, in the charge of the Lead Consultant and will be responsible for providing the services in accordance with:

a) the scope of professional services as set out in the Association for Project Safety Form of Appointment as Principal Designer, all services identified in Schedule 1 plus additional services from Schedule 1 as follows, 11, 12a (of up to 8 contractors), 12b, and 17.

b) and such necessary additional services arising as a result of this brief and the general and specific services below.

The PD will be **generally** responsible for:

c) Advise all parties of their duties and responsibilities under the CDM Regulations for both the Dry-Docking and Mooring works

d) Fulfil the role of PD as required by the CDM Regulations for both the Dry-Docking and Mooring works

e) Attend pre and post contract project team meetings for both the Dry-Docking and Mooring works

f) Contribute to the Risk Register

g) Contribute to the Issues Log

h) Supervise the production of the Health and Safety File for both the Building Works and the Exhibition Fit Out works

The PD will be **specifically** responsible

i) The consultant shall be required to liaise and work in close collaboration with the Employer, the wider professional team and Principal Contractor to maximise the project's success.

j) The PD shall be responsible for all safety matters and satisfy the requirements of the CDM regulations.

k) This will include but not be limited to the preparation of a Health and Safety Plan for Tender purposes, checking and approving the contractors' Method Statements including Health and Safety Plan and co-ordinating all documentation for the Employer's final Health and Safety file.

l) If necessary, assist with the amendment of the Tender documents and negotiate any such economies with the two lowest Tenderers to reduce the Tender sum to within the budget limit.

m) The PD shall liaise with the Health and Safety Executive and submit all necessary statutory notices (F10 etc).

n) Prepare a Monthly Progress report for the Project/ Design Team Meeting detailing the status of your works under the following headings:

aa) Works Undertaken.

bb) Forthcoming Actions.

cc) Information / Decisions / Key Actions Required.

dd) Risk Issues.

ee) Issued Information / Design Status.

o) Instigate, hold and chair meetings to ensure communication of residual hazards and risks at least at the following times / stages:

i At the beginning of the project in relation to residual and existing hazards in the existing building.

ii On appointment of the Principal Contractor.

iii On handover to the Employer's operational staff.

p) Prepare a schedule of production information together with a programme of production for your service, monitor progress monthly against the programme and if delayed take action to remedy. The Lead Consultant will be responsible for monitoring the schedules and programmes of all consultants and for producing a combined monthly report.

q) Assist the Employer in preparing information for funders and primary stakeholders, e.g. grant draw down documentation.

r) Assist in the appraisal, report and interview shortlisted Tenderers and recommendation of the most suitable Principal Construction Contractor, and Sub-Contractor(s) and suppliers with support of Project Team.

s) Contribute to the development of the project assessment and 'close out' report.

t) All design and production information is to be provided to the Employer in both hard copy and electronic format. Drawings are required in AutoCAD format.

7.0 MODIFICATION OF THE SCOPE OF CONSULTANTS SERVICES

The consultants are to confirm that the services set out in this document cover all activities and services they consider will be required in order that this project can be properly and professionally completed within time, cost and quality parameters and to ensure the Employer's interests are fully protected throughout.

Should any such service be excluded this brief will be amended before the consultants submit their offer of fees as required.

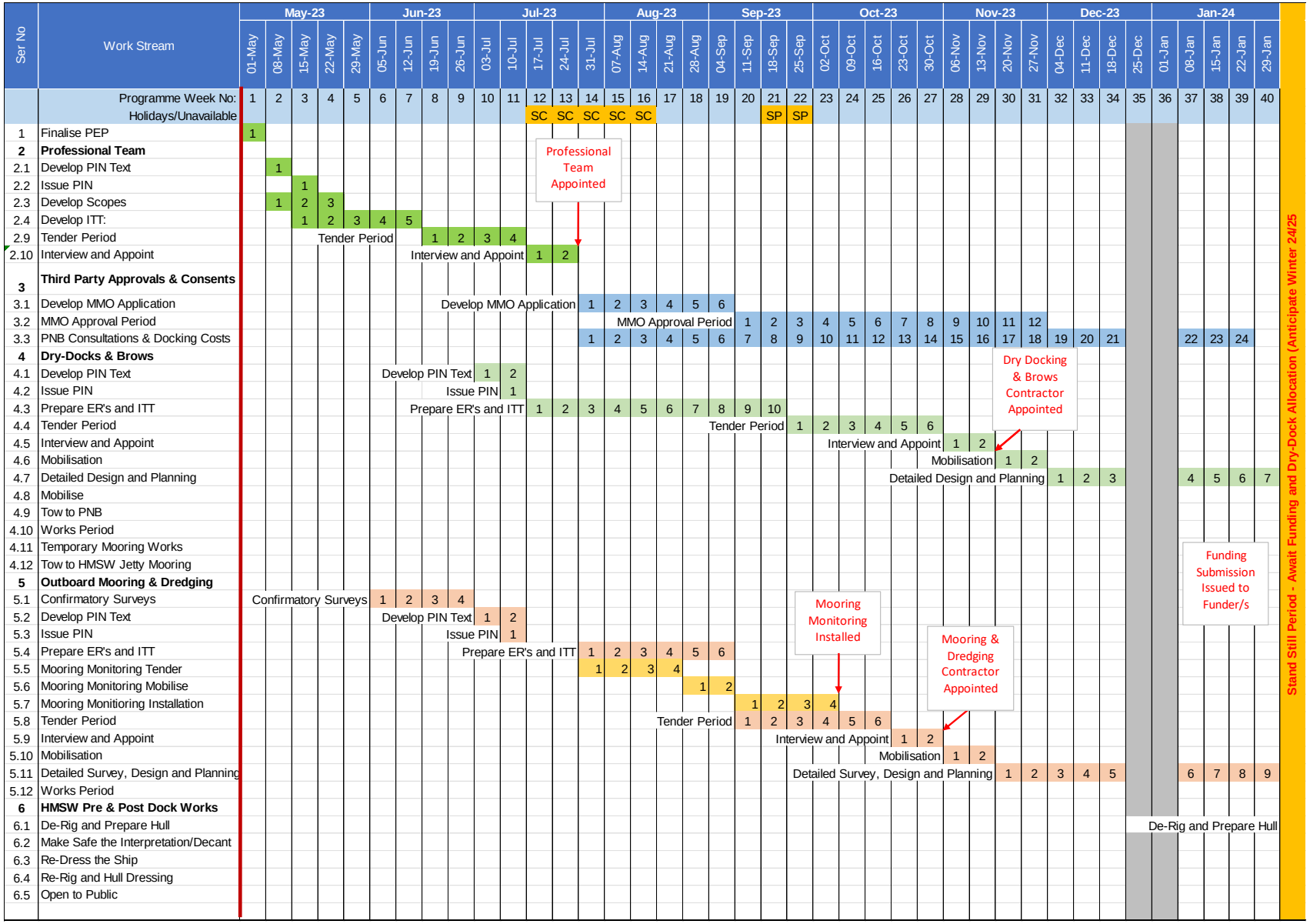
Once appointed the Employer will not pay any consultant any additional fee over and above that set out in their accepted fee bid for any reason whatsoever, with the exception of approved design changes which represent significant modifications to the brief and which the Employer has approved before-hand.

APPENDIX 1

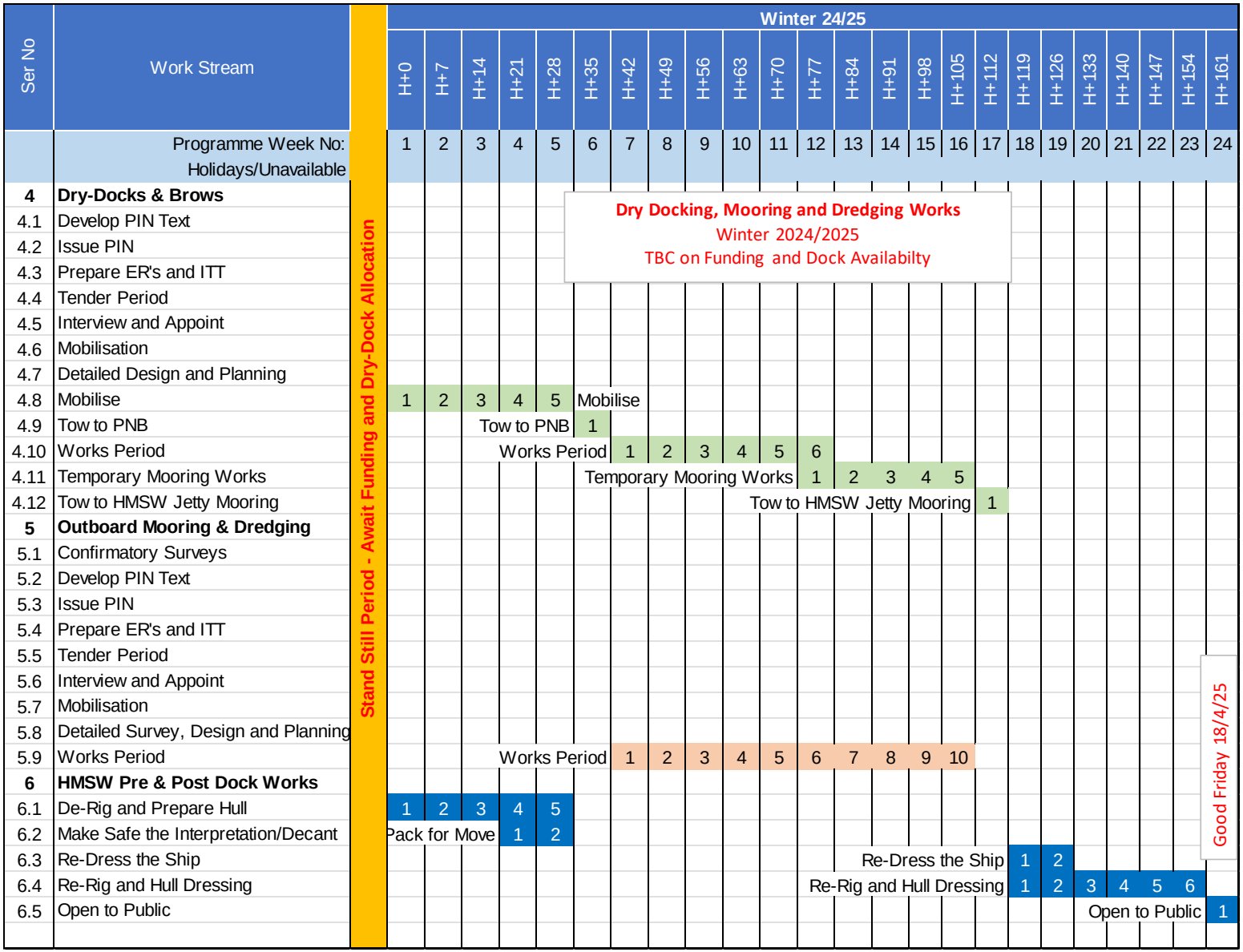
PLAN OF WORKS

Annex A

Specification / Scope of Requirement



Ser No	Work Stream	01-May	08-May	15-May	22-May	29-May	05-Jun	12-Jun	19-Jun	26-Jun	03-Jul	10-Jul	17-Jul	24-Jul	31-Jul	07-Aug	14-Aug	21-Aug	28-Aug	04-Sep	11-Sep	18-Sep	25-Sep	02-Oct	09-Oct	16-Oct	23-Oct	30-Oct	06-Nov	13-Nov	20-Nov	27-Nov	04-Dec	11-Dec	18-Dec	25-Dec	01-Jan	08-Jan	15-Jan	22-Jan	29-Jan
	Programme Week No:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
	Holidays/Unavailable												SC	SC	SC	SC	SC					SP	SP																	
1	Finalise PEP	1																																							
2	**Professional Team**																																								
2.1	Develop PIN Text		1																																						
2.2	Issue PIN			1																																					
2.3	Develop Scopes		1	2	3																																				
2.4	Develop ITT:			1	2	3	4	5																																	
2.9	Tender Period				Tender Period				1	2	3	4																														
2.10	Interview and Appoint								Interview and Appoint				1	2																													
3	**Third Party Approvals & Consents**																																								
3.1	Develop MMO Application									Develop MMO Application					1	2	3	4	5	6																						
3.2	MMO Approval Period															MMO Approval Period				1	2	3	4	5	6	7	8	9	10	11	12										
3.3	PNB Consultations & Docking Costs														1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21		22	23	24		
4	**Dry-Docks & Brows**																																								
4.1	Develop PIN Text						Develop PIN Text				1	2																													
4.2	Issue PIN								Issue PIN		1																														
4.3	Prepare ER's and ITT								Prepare ER's and ITT				1	2	3	4	5	6	7	8	9	10																			
4.4	Tender Period																			Tender Period			1	2	3	4	5	6												
4.5	Interview and Appoint																							Interview and Appoint					1	2										
4.6	Mobilisation																												Mobilisation		1	2								
4.7	Detailed Design and Planning																																Detailed Design and Planning			1	2	3	4	5	6	7
4.8	Mobilise																																								
4.9	Tow to PNB																																								
4.10	Works Period																																								
4.11	Temporary Mooring Works																																								
4.12	Tow to HMSW Jetty Mooring																																								
5	**Outboard Mooring & Dredging**																																								
5.1	Confirmatory Surveys		Confirmatory Surveys				1	2	3	4																														
5.2	Develop PIN Text						Develop PIN Text				1	2																													
5.3	Issue PIN								Issue PIN		1																														
5.4	Prepare ER's and ITT									Prepare ER's and ITT					1	2	3	4	5	6																					
5.5	Mooring Monitoring Tender														1	2	3	4																						
5.6	Mooring Monitoring Mobilise																		1	2																				
5.7	Mooring Monitioring Installation																				1	2	3	4																
5.8	Tender Period																	Tender Period		1	2	3	4	5	6														
5.9	Interview and Appoint																					Interview and Appoint					1	2											
5.10	Mobilisation																										Mobilisation		1	2										
5.11	Detailed Survey, Design and Planning																						Detailed Survey, Design and Planning							1	2	3	4	5		6	7	8	9
5.12	Works Period																																								
6	**HMSW Pre & Post Dock Works**																																								
6.1	De-Rig and Prepare Hull																																			De-Rig and Prepare Hull					
6.2	Make Safe the Interpretation/Decant																																								
6.3	Re-Dress the Ship																																								
6.4	Re-Rig and Hull Dressing																																								
6.5	Open to Public																																								


Winter 24/25
Ser No
Work Stream
H+0 H+7 H+14 H+21 H+28 H+35 H+42 H+49 H+56 H+63 H+70 H+77 H+84 H+91 H+98 H+105 H+112 H+119 H+126 H+133 H+140 H+147 H+154 H+161
Programme Week No: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
Holidays/Unavailable
Stand Still Period - Await Funding and Dry-Dock Allocation
4 Dry-Docks & Brows
Dry Docking, Mooring and Dredging Works
Winter 2024/2025
TBC on Funding and Dock Availabilty
4.1 Develop PIN Text
4.2 Issue PIN
4.3 Prepare ER's and ITT
4.4 Tender Period
4.5 Interview and Appoint
4.6 Mobilisation
4.7 Detailed Design and Planning
4.8 Mobilise 1 2 3 4 5 Mobilise
4.9 Tow to PNB Tow to PNB 1
4.10 Works Period Works Period 1 2 3 4 5 6
4.11 Temporary Mooring Works Temporary Mooring Works 1 2 3 4 5
4.12 Tow to HMSW Jetty Mooring Tow to HMSW Jetty Mooring 1
5 Outboard Mooring & Dredging
5.1 Confirmatory Surveys
5.2 Develop PIN Text
5.3 Issue PIN
5.4 Prepare ER's and ITT
5.5 Tender Period
5.6 Interview and Appoint
5.7 Mobilisation
5.8 Detailed Survey, Design and Planning
5.9 Works Period Works Period 1 2 3 4 5 6 7 8 9 10
6 HMSW Pre & Post Dock Works
6.1 De-Rig and Prepare Hull 1 2 3 4 5
6.2 Make Safe the Interpretation/Decant Pack for Move 1 2
6.3 Re-Dress the Ship Re-Dress the Ship 1 2
6.4 Re-Rig and Hull Dressing Re-Rig and Hull Dressing 1 2 3 4 5 6
6.5 Open to Public Open to Public 1
Good Friday 18/4/25

APPENDIX 2

PROFESSIONAL TEAM ROLES AND RESPONSIBILITIES

MATRIX

The purpose this matrix is to assist in setting out and defining the responsible suppliers for the project works. The matrix is not exhaustive, and suppliers will be deemed to have included all associated work to deliver the scope of works. There will be works that required the Naval Architect, Mooring Engineer and appointed works contractors to collaborate.

The Health and Safety Advisor will be associated with all the works scope.

Note that Deck Plans of HMS Warrior are available in CAD.

Ser	Work	Naval Architect	Comment	Mooring Engr	Comment
1	**GENERAL**				
1.1	Provide the information required to develop a PIN (Expression of Interest) for the tenders; Dry Docking and Moorings.	✓	Drydocking and Brows works	✓	Outboard Moorings
1.2	Design, specify and draw arrangements and requirements to implement a monitoring regime to prove the existing mooring model. This monitoring arrangement is to be put in place as soon as possible to inform the mooring designs. Assist with the procurement of a contractor to carry out the works. Store and model the monitoring output information over a six month period.			✓	It is envisaged that strain gauges will be inserted into the mooring cables and a weather station erected on the HMS Warrior jetty. A contractor will be appointed to carry out the installation works. The Mooring Engr will interpret the monitoring output information.
1.3	Provide specifications, drawings and tender information for the procurement of the Dry-Docking Contractor.	✓			Liaise with Naval Architect

Ser	Work	Naval Architect	Comment	Mooring Engr	Comment
1.4	Provide specifications, drawings and tender information for the procurement of the Mooring and Dredging Contractor		Liaise with Mooring Engr to determine how the mooring model may influence the onboard mooring arrangements.	✓	The Mooring Contractor will be procured on the basis of a Design and Build contract. Prior to the appointment of the Mooring Contractor, the Mooring Engr will interpret survey information and ratify the mooring model to set out a performance specification for the Mooring Contractor.
1.5	Lead and development of the MMO Application for both Mooring Works and Tow to and from the Dry-Dock	✓	Lead	✓	Liaise and provide mooring and dredging information to the Naval Architect
1.6	Assist with developing a project budget for your principal works scopes	✓	Generally, provide and update budget advise to the PM	✓	Generally, provide and update budget advise to the PM

Ser	Work	Naval Architect	Comment	Mooring Engr	Comment
2	**DRY-DOCKING**				
2.1	Design the dry-docking arrangements, including necessary de-rigging, dock blocks and support arrangements.	✓	Liaise with PNB to develop the docking plans. It is likely but not certain, that previous dock block plans will be available. The Naval Architect will work with the NMRN Conservation Officers, Riggers and Shipwrights to develop the specifications.		
2.2	Specify the below the water line hull cleaning process and oversee	✓	Work with NMRN Conservation Officers to determine the system to be implemented.		
2.3	Following the hull clean. Survey the ships hull internally and externally and specify and schedule repairs as necessary and affordable	✓	Repairs are likely to be Belzona or ring weld repairs. When tendering the Dry-Dock Contractor, the Architect will provide a listing of possible repair solutions to the contractor to price provisional sums and provide rates		

Ser	Work	Naval Architect	Comment	Mooring Engr	Comment
2.4	Interpret and report on the findings of the survey of the keel UTS and specify remedial works as necessary.	✓			
2.5	Inspect and specify the replacement of all hull blanking plates	✓	Work with NMRN Conservation Officers to determine the system to be implemented.		
2.6	Inspect and specify the works to preserve and repaint the hull above and below the waterline	✓	Above waterline may be localised wire brush and patch paint. Existing paint specifications are available		
2.7	Inspect and specify internal double bottom preservation works	✓	Work with NMRN Conservation Officers to determine the system to be implemented.		
2.8	Inspect and specify Carpenters Walk and Lower Carpenters walk clean and re-preserve works	✓	Work with NMRN Conservation Officers to determine the system to be implemented.		
2.9	Inspect and specify Propeller clean and blast cruciform and prop-well, Design, specify and draw renewal works as necessary.	✓			

Ser	Work	Naval Architect	Comment	Mooring Engr	Comment
2.10	Inspect, design and specify new inboard moorings as set out in the Houlder survey if required.	✓	This will include modelling the weather and installation of load cells to determine strains. Four new Pad Eyes and works to the Hawespipes at stern and similar work to the four bow anchor points		
2.11	Work with NMRN Riggers to determine a plan of works for the works to the Masts which will include the Bow Sprit.	✓	Define the plan of works		
2.12	Remove the top masts from the fore and main masts and carry out repairs and replace them	✓	Depending on pre-dry dock survey finding the Main and Fore mast trestles and cross trees may be renewed as per the mizzen mast. On the mizzen mast the timber trestles and cross trees was replaced with steel (indicative design concept in the form of CAD drawings are available		

Ser	Work	Naval Architect	Comment	Mooring Engr	Comment
2.13	Specify the removal and if necessary return of ballast to allow the compartment to be inspected and preserved. Inspect and specify remedial works to the compartment	✓			
2.14	Re-assess the centre of gravity and propose ballast solutions to allow hull to be accessed for periodic inspection and maintenance.	✓			
2.15	Design, specify, draw and schedule the Inspection, conservation and repair to the bow timberwork	✓	NMRN Shipwrights and Conservation Officer input.		
2.16	Design, specify, draw and schedule the Install other ships fittings e.g. ash shoot, transom carvings and guilding	✓	NMRN Shipwrights and Conservation Officer input.		
2.17	Design, specify, draw and schedule the actions to be taken with the figurehead	✓			
2.18	Design and install cathodic protection for the hull and mooring system.	✓	Liaise with the Mooring Engineer	✓	Mooring Engr to engage specialist designer if not within its own resources
2.19	Survey, design, specify, draw and schedule the actions to be taken, for the testing and refurbishment of the existing brows and re-paint.	✓			

Ser	Work	Naval Architect	Comment	Mooring Engr	Comment
2.20	Act as Employers agent to review Contractors' proposals	✓	Associated works only		
2.21	Whilst in Dry Dock provide Employers Agent Services to ensure contract works are carried out in accordance with the specifications and Contractors Proposals. Act as Employers agent to review Contractors' proposals and whilst on site visit, inspect and report on works progress and quality on a daily basis.	✓	Separate price based on six weeks in Dry Dock		

Ser	Work	Naval Architect	Comment	Mooring Engr	Comment
3	**MOORINGS**				
3.1	Survey existing system, noting that B mooring which is exposed to tidal fluctuations on the hard is likely to be the worst-case scenario as other are buried in silt or permanently under water			✓	A recent visual dive survey report of the exposed mooring cables and a Bathymetric survey report will be available soon.
3.2	Design and build remedial mooring system to bring the system back to its original design and installation status and provide a safety factor of two.	✓	Design and specify inboard mooring arrangements in liaison with the Mooring Engineer and the mooring report	✓	Note in General Section of the Matrix the Supplier will interpret weather and stain gauge monitoring information to inform the designs.
3.3	Provide specifications, drawings and tender information to allow the Mooring Contractor to develop the plans for the disconnection and reconnection of the mooring lines, prior and post Dry-docking respectively.			✓	Performance specification to allow the Mooring Contractor to complete the final design solutions
3.4	Provide specifications, drawings and tender information to allow for the dredging of the current mooring area noting that previously 8,500m^3 was dredged from that location. It is envisaged that the Mooring Contractor will sub-contract the dredging works so that the mooring and dredging works are coordinated.			✓	The scope of this element of the project is impossible to determine at this stage, as if the mooring cables need to be exposed and replaced six of the eight cables are buried very deep (4.5m to 12m below chart datum) in the silt.

Ser	Work	Naval Architect	Comment	Mooring Engr	Comment
3.5	Act as Employers agent to review Contractors' proposals and whilst on site visit, inspect and report on works progress and quality on a weekly basis.			✓	Associated works only

APPENDIX 3

NOT USED

APPENDIX 4

FEE SCHEDULE

THE CONSULTANT IS TO COMPLETE THE EXCEL SHEET AS INCLUDED WITH THIS TENDER

Example of Excel Sheer to be completed by the Consultant

Fill in Green Cells remainder are auto calculated

Consultants Name:

Professional Service:

Hours per day 7.5

RIBA Stage	Rates	Duration (Weeks)	Director Partner		Senior Consultant		Consultant		Assistant / Technician		Totals	
	Hourly Rate		£0.00		£0.00		£0.00		£0.00			
	Day Rate											
RIBA Stage	Stage Description	Weeks	Days	Cost	Days	Cost	Days	Cost	Days	Cost	Days	Cost
0	Strategic Definition	N/A		£ -		£ -		£ -		£ -	0	£ -
1	Prep and Brefing	N/A		£ -		£ -		£ -		£ -	0	£ -
2	Concept Design	4		£ -		£ -		£ -		£ -	0	£ -
3	Spatial Coord	4		£ -		£ -		£ -		£ -	0	£ -
4A	Technical Design	9		£ -		£ -		£ -		£ -	0	£ -
4B	Contractor Procurement	8		£ -		£ -		£ -		£ -	0	£ -
5	Construction	24		£ -		£ -		£ -		£ -	0	£ -
6	Handover inc Defects	4		£ -		£ -		£ -		£ -	0	£ -
7	In Use	N/A		£ -		£ -		£ -		£ -	0	£ -
		53.0	**0.0**	**£ -**	**0.0**	**£ -**	**0.0**	**£ -**	**0.0**	**£ -**	**0.0**	**£ -**