



VOLUME A

WORK REQUIREMENTS

**Refurbishment of BAR Locker Room and Associated Works,
Collins Barracks, Cork**

for

THE MINISTER FOR DEFENCE

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Section A

General Information and Conditions

General Information and Conditions

WORK TO BE EXECUTED:

The proposed works include the Refurbishment of BAR Locker Room and Associated Works, Collins Barracks, Cork. Please refer to Drawing Index No. 1S/20/54/(1 to 10) in accordance with this Specification. The relevant rooms in the building will be vacant for the duration of the Works and the Contractor given possession of the site. Works will include:

- Demolition and removal
- Internal alterations
- Builders Work
- New floors and coverings
- Upgrade of ceilings
- New Wall linings
- Mechanical Installation
- Electrical Installation
- Carpentry & Roofing
- New external windows and doors
- New internal doors
- Painting
- External Works

LOCATION:

Collins Barracks, Cork

DOCUMENTS FORMING BASIS OF TENDER:

Drawing numbers:	Index No. 1S/20/54/(1 to 10)	
Specification provided:	Yes ☐	No ☐
Contractor to be appointed as PSCS:	Yes ☐	No ☐
Contractor to have vacant possession of site	Yes ☐	No ☐
OR		
Contractor required to work around personnel in occupation of location where work carried out	Yes ☐	

PSDP APPOINTED

Name	Commandant. Tim O’ Connor
Address	I&U Company 1 Brigade Engineer Group Collins Barracks Cork

TIME ALLOWED FOR COMMENCEMENT AFTER CONTRACT COMES INTO EFFECT

Reference PW CF6 Clause 2.1. The Contractor will be allowed to occupy and use the site within 10 days from the date that the Contract comes into effect and, in accordance with PW CF6 Clause 2.3, shall commence work on site within 5 working days of being allowed access and complete within the time stated for Completion.

SITE VISITS

To arrange visit to inspect the site of the Works contact

Name	Phone number
1 Commandant Tim O' Connor	086 8355857
2 Mr. Sean Fahy	086 8128574

WORKING HOURS RESTRICTIONS

Except with prior approval, the Contractor will only be allowed to carry out work on site between the hours of:

Mon to Fri 0800hrs to 1700hrs

Work will not be permitted on Public Holidays nor on Sundays

WATER AND ELECTRIC POWER

When available, water and electric power may be taken from:

Water: Existing Building
Electric power: Existing Building

3 Phase available No Yes ✓

TENDER COMPETITION

1.1 Parties referred to in the Contract

<u>Employer:</u>	Minister for Defence
<u>Employer's Representative:</u>	Director of Engineering McKee Barracks Dublin 7.
<u>Contractor:</u>	The party appointed to carry out the Works

Safety - Design and Construction

Project Supervisor – Design Process The party named on the cover sheet of the Works Requirements

Project Supervisor -Construction Stage The Contractor appointed to carry out the Works (unless section on Form of Tender relating to matter states otherwise).

1.2 Tender documents

The following shall be deemed to form the tender documents.

- (1) Volume A, Works Requirements
- (2) Volume B, Form of Tender & Schedule and ancillary documents included in Volume B to be submitted with Tender
- (3) Volume C, Pricing Document and any tender summary provided to tenderers for completion and submission with their tender documents.
- (4) Suitability Assessment Questionnaire
- (5) Specification, drawings and any other documents referred to in the Works Requirements

Tender documents are intended for the specific party to whom they are addressed. The Employer will only consider tenders received from parties specifically invited to submit a tender and unsolicited tenders will not be taken into consideration in the tender assessment process.

1.3 Errors in tenders

In the event of errors being found in a tender the tenderer shall be informed of the errors and asked to formally confirm or withdraw the tender. If the tender content is confirmed, a signed endorsement shall be attached to the tender stating that all rates or prices (except Preliminary Items) are to be regarded as having been reduced or increased appropriately. Where the tenderer refuses to confirm the tender content the Employer may treat the tender as being invalid.

No liability shall attach to the Employer for failing to discover errors in any tender and the tenderer shall be solely responsible for the accuracy and comprehensiveness of their tender

1.4 Lowest or any other tender

The Employer shall not be bound to accept the lowest or any other tender and reserves the right to cancel the tender competition at any time.

In the event of the Employer deciding to accept a tender, the Contract shall be awarded on the basis of the lowest priced suitable tender (suitability refers to such items as capacity, organisation, experience, performance on previous contracts, financial standing relative to the Contract and compliance with any specifications or quality standards laid down for the Contract).

Tenderers shall not be reimbursed for the costs incurred in tendering nor, in the event of the cancellation of the competition, in preparing qualification and tender submissions.

Tenders deemed to be abnormally low may be excluded from consideration for award of the Contract.

Where a tenderer, or any member of the tendering Group or Consortium, has supplied information that is inaccurate or false in relation to their submission, their tender will not be considered.

Where a tenderer, or any member of the tendering Group or Consortium, is the subject of any of the 'insolvency events' listed below before a Contract award is made, their tender shall be deemed to have been withdrawn and will be excluded from consideration when the decision on the award of the Contract is made.

A petition being presented to wind the tenderer up and not being dismissed within 14 days after presentation.

A meeting of the tenderer's creditors or members being held for the purpose of considering a resolution to wind it up.

The tenderer entering or proposing to enter an arrangement with or for the benefit of its creditors.

A petition being presented to appoint an examiner to the tenderer.

A liquidator, examiner, supervisor, receiver, administrative receiver, trustee, encumbrancer, or similar being appointed for the tenderer or any of its assets.

The tenderer ceasing or threatening to cease its business.

The tenderer becoming insolvent or unable to pay its debts as they fall due.

The tenderer, being an individual, becoming bankrupt or dying or becoming incapable of performing this Contract.

Furthermore, tenders will not be considered where the tenderer, or any member of the tendering Group or Consortium, has been the subject of a conviction by final judgement for one of the following:

Participation in a criminal organisation, as defined in Article 2 of Council Joint Action 2008/841/JHA.

Corruption, as defined in Article 3 of the Council Act of 26 May 1997 and Article 2(1) and Article 2(1) of Council Joint Action 2008/841/JHA.

Fraud within the meaning of Article 1 of the Convention relating to the protection of the financial interests of the European Communities.

Money laundering, as defined in Article 1 of Council Directive 2005/60/EC of 26 October 2005 on prevention of the use of the financial system for the purpose of money laundering.

1.5 **Conditions of Contract**

The Conditions of Contract will be the SHORT PUBLIC WORKS CONTRACT, as published by the Dept. of Public Expenditure and Reform. The applicable version shall be that posted on the www.constructionprocurement.gov.ie website ten days prior to the return date for tenders.

1.6 **Scope of the work, adequacy of tender and conflicts between documents**

The tenderer shall be responsible for assessing the extent of the work required after visiting the site, examining the tender documents and being briefed on the extent of the Works (where such a briefing is provided). The tender sum submitted shall be deemed to cover the cost of carrying out all work either shown or described or which might a competent contractor carrying out work of the type required should reasonably be expected to infer as being intended for execution. All associated costs, including temporary works, shall be deemed to be included.

The Contractor shall be deemed to have visited and inspected the site and the buildings to be worked on and to have assessed all local circumstances likely to affect the execution of the Works before preparing his tender. The nature of the soil shall be deemed to have been taken into account.

Attention is drawn to the provision of PW CF6 Clause 1.4, dealing with discrepancies between Contract documents. Tenderers will be deemed to have fully assessed all documents provided and, in the event of there being discrepancies between them resulting in alternative specifications or requirements being called for, then the Contract Sum will be deemed to include for the most expensive of the alternatives required. The discrepancies will be resolved by the Employer's Representative in accordance with PW CF6 Clause 1.4. All apparent discrepancies shall be raised with the Employer's Representative before the Contractor orders materials or commences work.

1.9 **Tax clearance certification**

The award of the Contract will be conditional on the selected tenderer being in a position to produce a valid 'Subcontractor's Notification of Determination' issued by the Revenue Commissioners' eRCT system. The Notice shall be not more than 30 days old on the date that the tenderer provides it to the Employer.

Where the 'Notice' states that tax is to be deducted from the tenderer at the rate of 35% then the tenderer shall be deemed unacceptable for the award of the Contract and his tender shall be deemed invalid.

A tenderer asked to produce a 'Notice' shall be allowed ten working days to do so after which, should he have failed to do so, he may be deemed to have withdrawn his tender.

The tenderer shall be responsible for all costs incurred by him in obtaining a 'Subcontractor's Notice of Determination'.

The Employer is obliged to withhold tax from the Contractor in accordance with the instructions of the Revenue Commissioners at the rate determined by them as appropriate for the Contractor at the time any payment is due to be made.

In addition to the Notice referred to above, a copy of the tenderer's Tax Clearance Certificate will also be required.

1.10 **Pay and Conditions of Employment**

In order to be considered for the award of the Contract, a tenderer must confirm that their firm complies with its obligations under sectoral employment orders, employment regulation orders, registered employment agreements, where applicable, registered under the Industrial Relations Acts 1946 – 2015 and is also in compliance with the National Minimum Wage Act by completing the declaration included with the Tender Documents.

The tenderer must show that their firm is a fully paid-up member of the Construction Workers' Pension Scheme and Construction Industry Sick Pay schemes where employees of the firm are required to be members of them in accordance with the legal requirements covering workers employed in the relevant areas of the construction industry. A tenderer asked to do so shall promptly submit contribution receipts or other evidence of membership acceptable to the Employer. Any tenderer unable to provide evidence of being in compliance with their obligations may be deemed to have withdrawn his tender. A Contractor required to be a member of the Pension and Sick Pay Schemes shall remain in membership of them for the duration of the Contract.

A tenderer claiming exemption from the requirement to be a member of the Construction Industry schemes on the basis of not directly employing persons eligible for membership of them shall be obliged to provide a detailed proposal of how they intend to have the Works carried out, including how the required labour is to be sourced. Any tenderer proposing to subcontract the entirety of the Works shall be excluded from further consideration and their tender shall be deemed to have been withdrawn. A tenderer proposing to subcontract some elements of the work shall provide details of the planned extent of the subcontract arrangements and, where the arrangements are broadly acceptable to the Employer, commit to the intended subcontractors being in membership of the Construction Industry pension and sick pay schemes where the work to be so subcontracted falls within the scope of the sectoral employment orders, employment regulation orders, registered employment agreements, where applicable, registered under the Industrial Relations Acts 1946 – 2015.

1.11 **Evidence of insurances**

Any tenderer asked to provide evidence of having, or being able to get, the required insurances shall be required, as a minimum, to provide a statement undertaking to procure the insurances immediately upon entering into a Contract together with a further statement from a licensed insurer or bona-fide insurance broker that such insurances will be available to the Contractor. A tenderer failing to meet this requirement shall be excluded from further consideration and their tender deemed to have been withdrawn.

Tenderers shall be required to have Employer's Liability insurance cover regardless of whether they directly employ labour or not.

1.12 **Schedule of Rates / Pricing Document**

A fully priced and quantified Pricing Document shall be provided by the Tenderer. The total of the quantities shown multiplied by the rates tendered shall equal the tender sum offered. Failure to provide this information with the tender submission, or at latest within 5 working days of it being requested, may result in the tender being deemed invalid.

1.13 **Publication of tender information**

Tenderers are advised that the Employer is obliged to circulate the name and address of the Contractor awarded the work, the type of work involved and the address of the site to a nominee of the Irish Congress of Trade Unions (ICTU).

Submission of a tender shall be deemed to confirm the tenderer's acceptance that he agrees to the circulation by the Department of the above information. Any tender which is accompanied by a statement stating or implying that the tenderer does not agree to the release of the above information shall be deemed to have been qualified and may be treated as an invalid tender.

1.14 **Pricing**

Unpriced items

Any item left unpriced shall be deemed to be included for in the tender and the cost of the item shall be deemed to be spread across, and included in, the rates generally.

Currency

All prices and rates shall be deemed to be denominated in Euros.

1.15 **Value Added Tax**

The tender shall include for Value Added Tax liability at the Standard (23%) rate only.

No amount shall be included for the VAT liability at the special building rate (13.5%). Where the work is liable at various rates, the Contractor shall provide a detailed breakdown of the items of work liable at 23% and or 0% / exempt to facilitate the valuation of Change Orders. Where the cost of any items are zero rated / exempt for VAT purposes, the relevant items shall be itemised and the amount of the liability at this rate shall be clearly identified on the tender summary, with the amount carrying the zero rated / exempt liability kept separate in the compilation of the total tender price.

Adjustments to the V.A.T content of the Contract Sum will only be made in accordance with PW CF6 Clause 4.

1.16 **Freedom of Information Legislation**

The Department undertakes to use its best endeavours to hold confidential any information provided by the tenderer subject to the Department's obligations under law, including the Freedom of Information Act, 1997 and its amendments. If the tenderer wishes any of the information supplied by him with the tender submission not to be disclosed because of its sensitivity, he should, when providing the information, identify same and specify the reasons for its sensitivity. The Department will consult with the tenderer about this sensitive information before making a decision on any Freedom of Information request received.

2. **GENERAL INFORMATION**

2.1 **Security**

The Contractor will be required to submit completed Garda Central Vetting Unit application forms in respect of all personnel that are intended to attend site on a regular basis. Completed forms for Contractor's personnel shall be submitted to the Officer identified to the Contractor by the Employer ('designated Officer'). Clearance and issue of passes for persons resident in the State will take a minimum of six working weeks and may be considerably longer for those resident outside the State. Personnel may be allowed access to the site during the clearance process at the discretion of the military authorities responsible for the installation but will be denied access in the event of the vetting process leading to any person being deemed unsuitable to be allowed admission to Defence Forces establishments.

The application forms must be completed in full with all requested information requested, including an email address, and must be signed by the person seeking Vetting. Each application must be accompanied by photographic evidence of the identity of the applicant for whom clearance is being sought that complies with the '100 points' requirement set out in the application form guidance notes. At least two distinct types of photographic evidence identity will be needed to achieve the '100 points' requirement.

No reasons will be given in the event of refusal of clearance.

The details of the personnel required on site by the Contractor during the first six weeks of the Contract shall be submitted to the designated Officer within TEN WORKING DAYS from the date of a letter requesting the details. Details shall be submitted on the special application forms that will be issued to the Contractor and shall be fully completed and signed by the person for whom clearance is being sought.

Denial of security clearance will not form grounds for claims for a Delay Event or a Compensation Event.

Personnel and materials entering and leaving the site may be searched.

No photographs shall be taken within the confines of a military installation.

The Contractor will be deemed to have included in his tender for all costs involved in complying with security requirements as described above and for taking all steps necessary, should access to the establishment where the work is to be carried out be denied to any person or firm.

Notwithstanding the fact that the work is to be carried out in a security aware area, the Contractor will have sole responsibility for protecting plant, materials, equipment and work executed against damage and theft.

The Minister or any of his officers shall have the right without condition to refuse admission to the site of the works of any person whatsoever. Should an employee of the Contractor be refused admission the Contractor shall provide a substitute employee, acceptable to the Employer and fully cleared for security purposes, in lieu thereof.

The requirement for the exclusion of employee(s) shall be deemed to result from an 'act or omission of the Contractor' in accordance with the terms of Clauses 2.7 and 4.5.

2.2 Photographs for passes

Three passport sized photographs (with the person's name and address on the reverse) shall be submitted to the Employer's Representative to allow for the issue of Security Passes if required. Three signed photocopies of each person's Safepass card shall also be submitted.

2.3 Insurances

The Contractor shall indemnify the Minister for Defence against all claims arising from the execution of the Works that are the subject of the Contract and shall maintain all necessary insurances for the duration of the Contract in accordance with the requirements of PW CF6 Clause 10. The Contractor shall provide evidence to the Employer that all insurances required by the Conditions of Contract are in place prior to the commencement of the Works. The insurances shall be kept in place for the periods required by the Conditions of Contract.

The Employer's Liability and Public Liability levels of cover and excess shall provide the minimum levels of cover and excesses set out in the proposed Schedule to the Contract.

The policy required by PW CF6 Clause 10.1 (hereafter referred to as the 'All – Risks' policy) shall provide insurance cover of an amount not less than the total contract amount plus a minimum of 30% to allow for Value Added Tax, fees and site clearance costs. The 'All Risks' policy shall name the Minister for Defence as a 'co-insured'.

Particular attention is drawn to the provisions requiring the All-Risks and the Public Liability policies to name the Employer as 'co-insured' (ref Clauses 10.1 and 10.3) and for the Contractor's policy providing Employer's Liability cover to indemnify the Employer against the same liability that is provided by the policy for the Contractor.

2.4 Changes in the Contract Sum

Contractors are advised to make themselves aware of the provisions of PW CF6 Clause 4 and particularly its notice requirements.

2.5 Dayworks

Where the Contractor proposes that work arising from an instruction should be valued on a 'Dayworks' basis he shall only be entitled to payment on this basis where:

- a) it is not possible to value the work at, or on the basis of, rates and prices in the Contract and the Employer's Representative and the Contractor agree that it is not practicable to agree a price for the work in advance of its execution

b) the Employer's Representative's approval is obtained in advance of the carrying out of the works, arrangements agreed for its execution and its supervision by his representative and notification issued to him of the intended starting date of the work to allow him to arrange its supervision

c) record sheets specifying the names and trades of the workers involved and their individual hours worked per day, the materials incorporated, the plant used and the period of its use on a daily basis and details (and durations of use) of any scaffolding, hoardings or other temporary work required are submitted to the Employer's Representative for verification no later than five working days from the completion of the work where the work is completed within a five day period of time. Where the work continues for a longer period the record sheets shall be submitted for signature at weekly periods and no later than one week in arrears. All claims for materials shall be accompanied by invoices for the materials used

d) where the Employer's Representative is represented on the site by a Resident Engineer, Clerk of Works or other party, daily record sheets - listing the materials and plant used and the names of workers and the duration of their involvement - shall be submitted to the site representative for examination and signing (as a record only) no later than 48 hours in arrears of the execution of the days work

The Contractor shall at all times use every endeavour to ensure the most efficient completion of work authorised for execution on a 'Dayworks' basis. Failure to do so shall entitle the Employer's Representative to retrospectively withdraw his approval and revert to valuing the work on his assessment of the effect of the change on the Contractor's cost of constructing the Work.

2.6 Materials, workmanship and equivalent items

All materials used in the work shall be new and unused unless specifically required to be salvaged or re-used by the Contract documents.

Materials and workmanship shall be of the best quality and shall comply with all relevant European Community Standards or, in the absence of such a standard for a product or material, relevant Irish Standards and Codes of Practice.

Materials shall comply with the requirements of the European Communities (Construction Products) Regulations, 2011. Declarations of Performance and CE Certs shall be provided for the materials used in advance to the materials being delivered to site.

Only fully qualified and competent tradesmen and helpers shall be employed on the Works. Work shall not be sub-let or done by sub-contractors without the Employer's Representative's permission.

All work shall be carried out within the tolerances specified in BS 5606. No work shall be covered up prior to inspection and approval by the Employer's Representative.

Wherever a proprietary name is used to specify a material or process it shall be deemed to have the term 'or equivalent' appended to it.

Where a material or process is described by reference to its proprietary name, the name is used to indicate the standard of construction, appearance, ease of maintenance and durability acceptable to the Employer's Representative. The Employer's Representative will approve the use of alternatives where such alternatives are shown to equal or surpass the qualities of the product or process specified. Accordingly proprietary names wherever mentioned in the Specification, Schedule of Rates or on the drawings shall be deemed to mean the provision of the named product or process or an approved alternative.

2.7 Working hours

The Contractor shall only carry out work within the hours stated on the cover sheet of the tender document or elsewhere in the document. Work shall only be carried on outside the stated times with the prior approval of

the Employer's Representative and the personnel in charge of the military establishment. Approval to work outside the hours allowed shall be applied for in writing to the Employer's Representative at least three working days prior to the day for which additional hours are proposed.

2.8 Water and Electric Power

Water may be available from the location identified on the cover sheet of the Works Requirements. The Contractor shall be responsible for supplying temporary storage and distribution equipment and for removing it on completion of the Works.

Electricity may be available from the location identified on the cover sheet of the Works Requirements. The supply shall be 230 Volt single phase unless noted to the contrary. The Contractor shall be responsible for supplying all transformers and distribution equipment required and for removing them on completion. He shall ensure that the temporary installation complies with all appropriate electrical regulations and is electrically isolated from the Employer's supply in a manner that prevents any interference with the Employer's supply as a result of incidents on the site

No warranty is given about the amount of power and water available.

2.9 Site access and parking

Site access for the Contractor shall be by the access route shown on the drawing. There will be no facility for Contractor parking elsewhere in the Barracks.

2.10 Condition of site and of the Works

All rubble and waste shall be removed as it arises. The Contractor shall at all times maintain on site a waste skip, or skips, appropriate to the work being undertaken from time to time. Skips shall be properly protected against wind dispersal of materials therein, clearly marked to avoid creation of a hazard either by day or night, removed and replaced whenever filled.

The Contractor shall be deemed to have included in his tender for thoroughly cleaning the site of the Works and any other areas affected by it on completion of the Work. All rubble, plant and materials shall be removed and any areas damaged shall be reinstated at the Contractor's expense.

Where relevant to the specific project, all mortar and paint splashes shall be carefully removed and backgrounds left perfect, glass and mirrors cleaned and polished, carpets thoroughly vacuum cleaned and vinyl and linoleum coverings washed, cleaned, polished and sealed in accordance with the manufacturer's instructions.

In the event of the Contractor failing to comply with the above requirements, the Employer shall retain a specialist company to carry out this work in accordance with the procedures set out in the Conditions of Contract. The cost shall be charged to the Contractor and shall be deducted in the calculation of the amount owed by the Employer to the Contractor.

2.11 Protection

The Contractor shall be deemed to have included in his tender for the provision of temporary coverings and weatherproofing wherever the building is opened to the weather.

All work completed shall be protected against damage.

2.12 Pay and Conditions – Spot Checking

Contractors may be subject to spot checking throughout the course of the Contract to ensure ongoing compliance with the requirements of the 'Pay and Conditions of Employment of Workers' PW CF6 Clause for all 'Contractor's Personnel', which shall include all persons employed on the delivery of the Works by the

Contractor and their subcontractors. The Contractor shall be obliged to submit written confirmation with every payment application submitted of being in compliance with the requirements of the Contract Clause.

2.13 **Prompt Payment of Accounts Requirements**

The provisions of the European Communities (Late Payment in Commercial Transactions) Regulations 2012 concerning the prompt payment of amounts due in commercial transactions shall apply to all sums payable to or by the Contractor or any subcontractors or suppliers for work or items supplied for this project. Attention is also drawn to the requirements of the Construction Contracts Act 2013.

2.14 **Invoicing**

In the event of a Payment Certificate including work carrying a VAT liability at both 13.5% and another rate then the Contractor shall be obliged to submit two invoices – one covering the payment amount liable to VAT at 13.5% and the other for the balance of the amount certified, including VAT.

3 **SAFETY**

3.1 **Safety, Health and Welfare at Work**

The Contractor shall be deemed to have included in his tender sum for complying with the terms of all relevant legislation and regulations. The Contractor shall be deemed to have included for the preparation of Safety Statements and for taking all steps necessary to ensure the safety of all persons likely to be affected by the execution of the Works.

The Contractor shall submit Safety Statements / Health and Safety Plans at the times shown in Appendix A. They shall identify hazards and risks arising during the course of the Works and specify how it is intended to safeguard the safety, health and welfare of parties likely to be affected.

The Contractor shall incorporate in his Safety Statement / Health and Safety Plans measures to deal with any hazards identified in the Safety Statement of the Defence Forces Establishment within which the work is to be executed, a copy of which shall be made available on request.

The Safety Statement shall be updated during the course of the Works to include any further hazards that may arise and reflect changing circumstances on site.

3.2. **Safety File**

On completion of the Works, the Contractor shall hand over to the Employer's Representative, for transmission to the PSDP, three copies of all information developed or obtained by the Contractor (except for Contract documentation issued to him) that is relevant to the preparation of the Safety File for the project – refer to Appendix B for further information on required contents of the Safety File. The Contractor will be required to co-operate in the compilation of the Safety File by providing relevant information about the Works including the materials used and processes adopted as well as the requirements for the operation, maintenance and future demolition of the Works.

3.3 **Notification of the Health and Safety Authority (Commencement Notice)**

The notification of the commencement of project to the HSA shall be the responsibility of the Project Supervisor for the Construction Stage.

3.4 **Refurbishment/alterations Work - Asbestos Products**

Where asbestos is known to be present in an area on which work is to be carried out as part of this project, the procedures for dealing with it are set out in the tender documentation.

Where the tender documents do not provide for the presence of asbestos and the Contractor encounters any

material suspected of containing it - or where asbestos is found or suspected to be present in areas not identified in the tender documents - work shall be immediately suspended in its vicinity and no other work shall be carried out which might expose either the Contractor's personnel or third parties to contact with the suspect material or of releasing it into the environment. The Employer's Representative shall be informed immediately and his instructions awaited. If any of the material has been disturbed, the area possibly contaminated shall be sealed off, all personnel excluded from the area and the Employer's instructions sought.

Work on asbestos containing materials shall be carried out in accordance with the appropriate legislation and regulations and with the published guidance of the Health and Safety Authority.

3.5 Electrical Subsystems Certification

All electrical sub-systems shall be certified as having been carried out in compliance with the requirements of the ETCI Wiring Regulations.

Copies of the ETCI Subsystems certificates, accompanied by the relevant test results, shall be included with the ETCI Completion Certificate required for the Health and Safety File for the project, which shall be included with the project information handed over by the Contractor to the PSDP.

In the event of the Contractor failing to secure Subsystem certificates for all items of equipment then the Contractor shall be liable for the cost of having the systems tested, remedied as necessary and certified. The tender figure shall be deemed to include for all costs incurred by the Contractor in providing the appropriate documentation.

4.0 COVID-19 Measures

The Contractor shall comply in full with relevant legislation and regulations made thereunder, Government published guidance and Public Health Measures related to the COVID-19 pandemic and current at the Designated Date for the project. 'Government published guidance' shall include relevant material published by its agencies and in particular the Health and Safety Authority and the Health Services Executive.

The Contractor is advised to take into account the Construction Industry Federation's Standard Operating Procedures issued with respect to the COVID-19 Pandemic.

The Designated Date shall be the date 10 days before the last day for receipt of the Contractor's tender for the Works.

The Contract Sum will be deemed to include for the implementation of all measures - including hygiene, access management, materials procurement and delivery, work sequencing and work practices - required to construct the work safely and to minimise the risk of disease contagion for the Contractor's Personnel, the Employer's Representative, Employer's Personnel and third parties visiting the site.

Section B

Detailed Requirements

DETAILED REQUIREMENTS & SPECIFICATIONS

Specification

Location of works

The works are located at Collins Barracks, Cork as identified on the drawings.

Summary of Works

The proposed works include the refurbishment of existing BAR Locker Room and Associated Works at Collins Barracks, Cork. Please refer to 1S/20/54/(1 to 10) in accordance with this Specification. The relevant rooms in the building will be vacant for the duration of the Works and the Contractor given possession of the site. Works will include:

- Demolition and removal
- Internal alterations
- Builders Work
- New floors and coverings
- Upgrade of ceilings
- New Wall linings
- Mechanical Installation
- Electrical Installation
- Carpentry & Roofing
- New external windows and doors
- New internal doors
- Painting
- External Works

Overlap with the Employer's Undertaking

The site is located in Collins Barracks which shall continue in use by the Employer and others for the duration of the works including weekends.

The Barracks is used for military purposes and due notice and care shall be taken by the Contractor, recognising that the area may be used 24 hours a day.

Vehicular access to the site and manoeuvre space within Barracks is limited so the Contractor shall liaise with the Employer's Representative in relation to activities on the site that may in any way affect the operation of the Camp or the safety of personnel.

Documentation required upon completion

The contractor shall supply the following documentation no later than at Substantial Completion of the project:

- As-built drawings (including electrical and mechanical layouts)
- O&M Manuals for all equipment and plant
- Ancillary Certificates (BCMS approved) for all elements of the project.

DEMOLITION and ALTERATION

NOTE:

Demolition work shall be carried out in accordance with BS 6187:2011

All materials arising from the Demolitions and Alterations shall, unless otherwise specified, be cleared away and removed off site as they arise.

Materials on site, both arising from Demolitions and whether in skips or temporary mounds, and new materials stored pending incorporation shall be fully protected to ensure that they are contained and that no loose material leaves the site compound.

All areas are to be kept clean of dust and any dry works are to be dampened to prevent dust blowing around.

Materials shall be disposed of in accordance with relevant statutory requirements. Safe disposal certificates for all hazardous materials removed from the site shall be provided to the Employer's Representative.

The Works shall be shored / supported temporarily as necessary and the Contractor shall have sole responsibility for ensuring the adequacy of such shores / supports. Details of shores and supports shall be provided to the Employer's Representative but such provision shall not mitigate the Contractor's responsibility for their adequacy.

All floor, wall and ceiling surfaces adjoining, or arising from, demolitions and alterations work shall be made good to match the existing adjacent surfaces and left ready to receive redecoration / new works.

Removal of items listed includes all associated fixings, attachments and ancillary items.

All items requiring work to be removed shall be deemed to include associated making good to surfaces damaged during removal.

The extent of the proposed demolition works for the building is depicted on the drawings and includes:

ROOF & CEILING OVER PLANT ROOM, TOILETS AND SHOWERS

The roof over the plant room, toilets and showers was previously covered with a bitumen flat roof covering. A pitched, slated roof was subsequently constructed over the flat roof. Both the flat roof covering and pitched roof covering contain ACMs (asbestos containing materials).

Remove:

- All existing slates, slating battens and felt
- All existing flat roof covering and deck
- Any debris and remnants of flat roof covering in the attic space
- All insulation and all other items in the attic space
- All fascias, soffits, gutters and downpipes
- All plasterboard and other ceiling linings
- 2 No. existing redundant steel beams
- **Note the presence of ACMs in the slates and flat roof covering (including contaminated ACM debris in the attic space)**

EXISTING RAINWATER GOODS ON LOCKER ROOM ROOF

Remove:

- Existing gutters taking water from main locker room roof
- Existing downpipes serving main locker room roof

EXISTING WALL LININGS

Remove:

- All existing tiles, trims, etc. in the toilet & shower room
- All adhesives and attachments
- All existing plasterboard linings and insulations on internal faces of external walls
- All existing tiles, adhesives, grouting and trims

FLOORS

Remove all existing floor finishes in the toilet & shower rooms including:

- All vinyl and lino floor coverings
- All adhesives and attachments
- All existing tiles, adhesives, grouting and trims

SANITARY WARE AND MECHANICAL ITEMS

Remove:

- All existing central heating pipes and radiators (include removal of brackets and other ancillary items)
- All redundant pipework and insulation
- All floor gulleys and underfloor waste pipes
- Radiators and pipework
- All sanitary ware
- All cylinders
- All cold water storage tanks in attic space over plant room, toilets and showers. **Note the presence of ACMs in the attic space around these tanks.**
- All redundant pipework and fittings

ELECTRICAL ITEMS (INCLUDING MECHANICAL EXTRACTION)

Remove:

- All existing mechanical extract fans
- existing inlet grilles
- existing presence sensors
- all existing light fittings
- existing redundant sockets, switches, wiring and conduits

FIRE DETECTION AND ALARM SYSTEM

The existing fire detection and alarm system shall remain but shall be altered to suit the new arrangement. The contractor shall permanently remove existing detector heads currently fitted on the underside of the roof covering.

Include for the removal and disposal of all above-mentioned items to a licenced facility.

ASBESTOS

NOTE: The Asbestos Report is included as background information. There are asbestos/ACMs within the rooms where works are proposed in the building. The contractor must make all personnel working on the site aware of the contents of the Asbestos Report.

All of the ACMs identified in the report must be removed by the Contractor under controlled conditions and disposed of off-site in accordance with all legislative requirements.

As a condition for the award of the Contract, the Contractor must be in possession of appropriate insurances for the removal of ACMs or have arrangements acceptable to the Employer in place for ensuring that the insurance and indemnity requirements of the Contract are observed.

The Contractor shall be deemed to have included in his tender for complying with all relevant legislation and regulations and with the guidance of the Health and Safety Authority. This includes the preparation of Safety Statements and taking all steps necessary to ensure the safety of persons likely to be affected by the Works.

The work will be carried out by a competent sub-contractor, who shall provide, in advance, evidence of their ability to carry out the work in accordance with the provisions of the Asbestos Regulations. The Contractor shall notify the H.S.A. of asbestos work activities, including the plan of work, 14 days in advance of the work starting and a copy shall be submitted to the Employer. The Contractor will

also prepare a method statement detailing the plan of work. This document must be prepared in advance of the work commencing;

- a. it must be notified in advance to the Employers Representative
- b. must be available at the worksite

Where asbestos sealing, encapsulation or removal work is being carried out, the Contractor shall be required to retain an independent occupational hygienist to:

- a. Liaise with the Employer Representative.
- b. Carry out air monitoring during the execution of internal asbestos related work to make sure that the control measures employed are keeping the concentration of asbestos in the air as low as is reasonably practicable outside the enclosure within which the asbestos work is taking place;
 - c. Carry out a visual check after removal is complete to ensure that all visible traces of asbestos have, so far as is reasonably practicable, been removed, and;
 - d. Carry out air monitoring after the visual check is complete to ensure that the area is safe to be returned to normal use.

Asbestos sealing and encapsulation is only to be resorted to on the instruction of the ER – removal is the specified requirement.

The hygienist shall be required to provide formal written certification of the final air monitoring tests stating the concentration of asbestos in the air.

A certificate confirming the total removal of the ACMs or, where removal in full was not possible or deemed necessary, the locations of material remaining. Where material is still present and has been sealed or encapsulated, the techniques used shall be recorded on the certificate along with any measures needed to protect it.

It will be the responsibility of the Contractor to ensure that all regulations governing the disposal of asbestos waste are fully complied with, waste transported by a waste collection permit holder authorized by the Environmental Protection Agency (EPA), sent to an appropriate EPA authorised facility and that disposal certificates are supplied to the Employer Representatives on completion. The disposal certificates shall be issued by a facility licensed to accept asbestos material and shall confirm the nature and volume of the material accepted and the date(s) of receipt.

Below is a summary of the ACMs identified in in Block 54 (of which the BAR Locker Room is part - see also Asbestos Report):

Block 54 (BAR Locker Building):

Location and Use of Material	Quantity (Approx.)	Asbestos Type	Condition	Material Assessment	Action
Ground Floor Medics stores 021 - Water tank seals: Gaskets (rope/woven) - Presumed	Non quantifiable	Chrysotile	Low Damage	5	NO ACTION AT THIS TIME
Ground Floor Locker room attic 024 - Old flat roof felt: Bituminous Product - S008	Non quantifiable	Chrysotile	High Damage	6	Remove under controlled conditions
External Locker room and toilets roof 025 - Slates: Cement Product - S009	150m ²	Chrysotile	Low Damage	4	Remove under controlled conditions

A specialist contractor will remove the asbestos-containing materials, outlined in the table above, under controlled conditions. A management system/plan including routine re-inspections of control measures must be adopted to monitor the removal works. Site and task specific risk assessments must be carried out ahead of any work in proximity to the asbestos-containing materials.

The contractor will include for the removal and disposal of all of the above-identified asbestos-containing materials at an appropriately authorised facility.

Following the removal of the asbestos-containing materials, a certificate of re-occupation must be obtained from an independent analytical consultancy company prior to re-occupancy of the area in accordance with section 15 of the Safety, Health and Welfare at Work (Exposure to Asbestos) Regulations. The contractor will include for employing the consultancy company and providing the relevant certification.

All work involving materials containing asbestos requires a written risk assessment and a plan of work to be prepared by a competent person as per the Safety, Health and Welfare at Work (exposure to asbestos) Regulations 2006/2010. The contractor shall include for the preparation of the risk assessment and plan of work. Please see the preliminary health and safety plan drawn up by the PSDP. Asbestos removal must only be undertaken by competent persons, following notification of the works to the Health and Safety Authority. A detailed site-specific method statement must be developed by the competent person, and forwarded as part of the notification process to the Health and Safety Authority.

INTERNAL WALLS & CEILINGS

NOTE:

Surfaces shall be prepared in accordance with the recommendations issued by the manufacturers of the finish for the surface involved. All materials used in preparing surfaces shall be compatible with the finish specified.

All materials to be fitted in strict accordance with the manufacturer's instructions.

The Contractor is to provide colour samples for selection by the Employers Representative.

All new and existing service gaps/openings in walls to be sealed with sand and cement mortar and make good all necessary works. All openings in stud walls, ceilings and intermediate floors to be fire-stopped using Corofil (or equivalent approved) firestop compound.

UPGRADE WALL LININGS OF BUILDING

Around the entire perimeter of the locker room AND on the external walls of the shower room, toilets and plant room the contractor shall dry line all external walls using the “Isover Optima Dry lining System” to the following requirements:

- The entire installation shall be installed strictly as per the “Installation Guide” in respect of the “Isover Optima Dry Lining System”.
 - Include Ceiling, floor and perimeter channels
 - Include Horizontal mid-height Optima C-Channel and support pins
 - Cut and install Isover Comfort Panel 32 (60 mm thickness) with no visible gaps between insulation sheets.
 - Install vertical Optim C-Channels and Optima Support Clios as per “Isover Optima Dry Lining System” written instructions.

- Apply Isover Vario DoubleTwin tape to the vertical face of the vertical C-Channel linings
- Apply Isover Vario KM Duplex Membrane across the entire Optima Metal Framework overlapping by 100mm.
- Use Isover KB1 tape to seal all overlapping sections of membrane and dead around perimeter as per instructions.
- In the shower room, toilets and plant room, apply 1 No. layer of 15mm Gyproc Moisture Resistant Board fixed in accordance with manufacturer's instructions. Taping and jointing to Gyproc requirements.
- In the locker room, apply 1 No. layer of 15mm Gyproc Wall Board fixed in accordance with manufacturer's instructions.
- Apply a 2mm pinnacle skim coat finish to all plasterboard in the locker room and plant room.
- The “*Isover Optima Dry Lining System*” shall be installed around the reveals of all windows and doors.
- All corner details shall be strictly as per “*Isover Optima Dry Lining System*” written instructions.
- Include for studding out alcoves between locker room and stores as indicated on the drawings.
- All penetrations shall be sealed as per “*Isover Optima Dry Lining System*” written instructions.
- Grounds for services shall be as per “*Isover Optima Dry Lining System*” written instructions.
- Wall finish in Shower Room and Toilets shall be PVC Hygienic Wall Cladding as per specification below.
- Include for the coring of 1 no. core diameter 160mm in the external wall of the toilets. Include for external cast aluminium vent grille.
- Include for external cast aluminium vent grilles for extractor fan and vent in shower room.

NEW CEILINGS TO LOCKER ROOM

In the locker room, fit new suspended ceiling to the following requirements:

- Proprietary corrosion resistant suspended ceiling grid-system, Armstrong Prelude 24 or equivalent approved.
- Moisture resistant ceiling tiles, 600x600mm profiled edged, Armstrong Bioguard 2224M or equivalent approved.
- Corrosive resistant perimeter angle to the perimeter.
- Suspension wire hangers.
- Ceiling to be hung from existing metal roof trusses.
- Hold down clips.
- Trims to Access ops, light fixings, etc. for services and the like included in M and E Builders Works.
- Contractor to supply the ER with 20 No. Armstrong Prelude 24, (or equivalent) spare ceiling tiles.
- Include for laying 2 no. 200mm layers (400mm total depth) of glass fibre quilt insulation (LAMBDA VALUE = 0.04 W/mK) over the entire footprint of the locker room ceiling.

UPGRADE CEILINGS OF PLANT ROOM, TOILETS AND SHOWER ROOM

In the plant room, toilets and shower room, fit new ceiling linings to the following requirements:

- Fix 12.5mm Gyproc Moisture Resistant Board to existing ceiling joists with Gyproc drywall screws in accordance with manufacturers written instructions.
- Apply a 2mm pinnacle skim coat finish to all plasterboard ceilings.

- Include for access hatch to attic space in plant room (1200x600 Manual Stira Insulated Trapdoor) attic hatch trap door with ladder, strictly in accordance with manufacturer's written instructions).
- Include for laying 2 no. 200mm layers (400mm total depth) of glass fibre quilt insulation (LAMBDA VALUE = 0.04 W/mK) over the entire footprint of the new ceilings.

UPGRADE EXISTING FLOOR DECK

In the toilets and showers, the contractor shall include to upgrade the floor deck to the following requirements:

- Sheet out the entire floor of the shower room using *12mm BAL Board* (or equivalent approved) glued and screwed securely to the existing concrete floor deck.
- Apply an initial layer of fresh *Ardex A46 Repair Mortar* (or equivalent approved) across the entire floor surface (including the upstand) over the 12mm BAL Board. The initial layer should always be 'fresh' to ensure a fully bonded system.
- Build up the floor to create the falls and upstand with a mix of *Ardex A46 Repair Mortar* (or equivalent approved) mixed with sharp sand to provide the falls required. The falls should run from 50mm at the room edges towards floor gulleys
- The contractor shall refer to the ARDEX published instructions on the exact methods of mixing and applying the products.

RESIN FLOORING

Resin flooring system to be fitted throughout the toilets and shower rooms to the following requirements:

- 5 mm thick 'Degafloor - FB System' or equivalent, as indicated on the drawings.
- Laid to falls and cross falls towards floor gulleys.
- Proprietary aluminium nosings and trims at change in floor levels and surface finishes.
- 'Degafloor Coving System' using 'Degafloor CP 200', or approved equivalent, to be used around the room perimeter and at the upstand between the dressing area and shower area.
- Continuous finish to form skirting upstand; 150mm minimum height with horizontal top edge; cove former at bottom and capping trim to top edge, fixed to wall.
- Slip Resistance Method described in BS EN 16165 with a PVT rating of 36+ or equivalent R11. Impact Resistance ISO6272: 1 kg weight: >1.8m, 2 kg weight >1.5m
- Abrasion Resistance BS 8204-2 Class AR1 – Heavy duty industrial and commercial
- Water Permeability Nil – Karsten test (impermeable)
- Chemical Resistance Strong resistance to heavy duty cleaning chemicals
- Speed Full traffic and chemical cure within 2 hours between applications
- Cure Temperature Range -10 C to +30 C
- Temperature resistance -5 C to +80 C
- Life Expectancy guarantee: minimum 10 Years
- UV resistance Totally UV resistant
- The existing surfaces are to be prepared to a condition that will accept and assist in the adhesion and correct functioning of the specified floor finish in accordance with the manufacturer's recommendations. Any materials used in preparing surfaces shall be compatible with the floor finish specified.
- All flooring works shall be as per manufacturer's published instructions.
- The Degafloor System MUST be installed by installers approved by Degafloor Ltd (email: laura.kay@degafloor.com; phone: 00447908196257)

PVC HYGENIC WALL CLADDING

Heavy duty PVC Hygienic wall cladding shall be fitted to all walls in the toilets and shower room to the following requirements:

- Cladding to be Enviroclad 725 EU Grade or equivalent approved
- All internal corners to be moulded, not jointed, including window reveals and window ledge
- Proprietary H-Profile joiners, complete with proprietary seals to be used to join sheets vertically
- NO horizontal joints in cladding
- Minimum cladding thickness 2.5 mm
- Fire rating, EN 13501
- Working temp max 60 degrees Centigrade
- Ensure existing surfaces are prepared to a suitable condition to accept and assist in the adhesion and correct functioning of the specified finish; materials used in preparing surfaces shall be compatible with the wall finish. Include for any necessary preparation works to existing walls in this regard.
- Include for fixing the cladding to the walls using and adhesive recommended by the cladding manufacturer.
- Allow for dressing wall finish over resin floor upstand (minimum 100mm cover) to ensure seamless joints
- Cladding to be fitted to window reveals, cills and heads

INTERNAL DOORS

Provide 3 no. new internal door sets (DT03, DT04 & DT05), complete with frames as per Drawings to the following requirements:

- The doors shall adhere to the layout detailed in the drawings, with vision panels as depicted
- All door sets (frames and door leaves) shall be hardwood with ironmongery as outlined on the Door Schedule.
- All internal doors shall be fitted with overhead automatic door closers.
- All doors shall be supplied pre-finished.
- Each internal door shall be hung on its frame with 3 No. 100 mm stainless steel hinges.
- Door frames shall be fixed by Hilti HRD-H or equivalent 10mm frame anchors of a suitable length, countersunk & pelleted, 2 No bolts to the head of each single door, 4 to head of double doors and 3 no bolts each side.
- Fit new 75mm architraves (material and finish to match door leaf and frame) to all internal doors.

EXTERNAL WINDOWS AND DOORS

Supply and fit the following units:

- 1 No. hardwood external door set (DT01) which shall have a maximum U-value of 1.4 W/m²K. See door schedule.
- 2 No. hardwood external door set (DT02) which shall have a maximum U-value of 1.4 W/m²K. See door schedule.
- 1 No. hardwood external door set (DT06) which shall have a maximum U-value of 1.4 W/m²K. See door schedule.
- Include for a detailed service and maintenance of ALL existing windows to include the following:
 - Adjust ironmongery and hinges such that all windows open and close properly

- Lubricate all ironmongery, hinges and other mechanisms to ensure that windows open and close properly
- Include for the replacement of 10 No. glazing units
- Include for the replacement of rubber seals in 10 No. windows
- Include for the replacement of all hinges and ironmongery in 8 No. windows (to include all windows on the western end of the building – showers, toilets and plant room windows).

ENCASING OF SURFACE WATER PIPE

Include for the encasing of the horizontal surface water pipe, at the rear of the building in concrete. Finish and style to match that of the adjoining building.

HANDRAILS AND GUARDING

Handrails and guarding shall be supplied and fitted to the plant room steps, as depicted on the drawings, to the following requirements:

- Galvanised 50mm tubular steel handrails to be installed at sides of external steps to a height of 1100mm top rail and fixed to the concrete by 4 No. galvanised steel bolts and galvanised steel base plate.
- Maximum width between vertical supports is to be 1200mm.
- Intermediate rail to be at 550mm height.
- All handrails to be hot-dip galvanised to BS 729, coating thickness 85 microns.

Roof Coverings

New pitched roof coverings shall be executed to the following requirements where existing roof coverings are removed:

- Dupont Tyvek Supro Breather Membrane (or equivalent approved) to be fixed over rafters
- 50mm X 35mm pressure treated slating battens fixed to rafters using 3.35mm diameter nails, the length of the nails should be such that they run 32- 45mm into the rafters.
- Roof covering shall be blue-black 'Siga Smooth Square Edge' fibre-cement slates or equivalent approved.
- Slates to be fixed in place using manufacturer approved nails and copper crampions.
- Include for the fitting of 5 No. in-line slate vents at high level.
- Include for UV resistant eaves felt and uPVC eaves skirts at eaves level.
- Use vent rafter roll to maintain ventilation gap between felt and insulation at eaves.
- Include for the fitting of ventilator (10mm) at eaves level.

Fascia, Soffits, Gutters & Downpipes

On the main building (roof over locker room), include for replacement of all existing gutters and downpipes to the following requirements:.

- Include for new gutters and downpipes.
- Gutter brackets fixed to fascia at maximum 1000mm centres by stainless or sherardized wood screws.
- Sealing joints in gutters must be by applying "Alusil" low modulus translucent silicone sealant or similar approved.
- Gutters shall be 180mm X 153mm Kingspan Highline Gutter or equivalent approved.

- Downpipes shall be 110mm round profile.
- Gutters, downpipes, fittings, fascia and soffits to be installed to manufacturers recommendations.
- A shoe is to be fitted at the bottom of each downpipe and a grate will be fitted in each gulley trap.
- All Colours to match existing.

Fascia, soffits, gutters and downpipes shall be high quality uPVC to the following requirements on the lean-to section (over showers, toilets and plant room):

- Include for new fascia, soffits, gutters and downpipes.
- Gutter brackets fixed to fascia at maximum 1000mm centres by stainless or sherardized wood screws.
- Sealing joints in gutters must be by applying “Alusil” low modulus translucent silicone sealant or similar approved.
- Gutters shall be 125mm half round profile
- Downpipes shall be 75mm round profile
- Gutters, downpipes, fittings, fascia and soffits to be installed to manufacturers recommendations
- A shoe is to be fitted at the bottom of each downpipe and a grate will be fitted in each gulley trap.
- Fascia Board: High quality uPVC, 175 mm – black in colour
- Soffit Board: High quality uPVC, 200 mm – black in colour

Wall Vents – Locker Rooms

There are existing wall vent grilles fitted on the external walls of the locker room, under the windows. The contractor shall include for the following work associated with these vents:

- Clean down and paint all cast iron vent grilles externally
- Open up any ventilation passages that were previously blocked
- Line ventilation passages with 110mm uPVC ducts
- Include for running the ventilation ducts and terminating on the internal face of the proposed drylining system
- Install uPVC square vent grilles internally

WC Cubicle Doors, Shower Screen & Vanity Units

Supply and fit new Postformed Systems (or equivalent approved) WC doors, Shower Room Privacy screen and vanity units in the toilets as indicated on the drawings to the following requirements:

- All visible surfaces covered in selected compact Laminate
- Pilasters post formed with all fixing concealed
- Vandal resistant hardware and screws
- Hardware in anodised aluminium
- Lift off hinges, buffered coat hooks & slotted indicators on each door
- Colour to be agreed with Engineer Officer on-site
- 150mm vinyl spalshback over each vanity unit

Benches & Coat Hooks

Benching to be installed in shower room as indicated on the drawings to the following requirements:

- Benching to be constructed from 70mm x 44mm red deal timber.

- Timber benching to be bolted to 50mm x 50mm hot-dip galvanised steel framing at 600mm centres.
- Steel framing to be fixed to walls using Rawlplug Rawlbolts M10 X 115mm or equivalent approved.
- **No fixings shall be made through the resin floor** – Wall fixings only.
- At a height of 1.7m, fit coat hook backing board to wall over all benching.
- Coat hook backing board to be 120mm x 44mm red deal timber with chamfered edges.
- Backing board to be mechanically fixed to the wall.
- Fit coat hooks at 600mm centres along the full length of backing boards.
- Coat hooks shall be brushed stainless steel.
- Include for sealing all fixings to prevent moisture penetration to the wall.
- Include to clean down, sand and varnish (3 No. coats) the bench and coat hook backing board.
- Varnish shall be matt finish, polyurethane

MECHANICAL AND ELECTRICAL SPECIALISTS' WORK

Mechanical Specification

General

The Contractor is referred to the Specification contained in the tender documentation. The Contract Sum shall be deemed to include for both the builder's work in connection with the mechanical installation and for the required co-ordination.

Scope of Work

The extent of the work consists briefly of:

- All mains water and wastewater services to the buildings
- Installation of all hot and cold water pipework, fixtures and fittings to complete the project to an acceptable standard
- Installation of all wastewater drainage pipework, fixtures and fittings
- Installation of WCs
- Installation of WHBs
- Installation of Showers
- Foul pipework network
- All necessary pipework and fittings.
- Removal of existing heating system radiators, pipework and any associated work
- Surface Water pipe network

Plumbing Works generally

The mechanical installation shall be installed to the following requirements:

- All waste piping shall be in uPVC piping & shall be Wavin or Equivalent.
- All trapped outlets from basins, sinks etc. shall be anti-syphon bottle traps.
- All pipe work & fittings shall be adequately supported by pipe clips & brackets. Snap action or saddle type clips shall not be used & brackets shall be fitted to pipework at not more than 400mm horizontally & 1200mm vertically.

- The Contractor will allow for adequately-sized hot and cold supplies and wastes to all WCs, WHBs, showers, etc. at the locations indicated on the drawings.
- All ring seal sockets shall be supported beneath the ring seal housing.
- The Contractor shall set out the Works to the correct positions, levels, dimensions, gradients and alignments and shall provide all necessary facilities and equipment for this purpose.
- Immediately prior to handover the Contractor shall clean and flush out the drainage systems and ensure they are free of all debris
- On completion of the Works and immediately prior to handover the Contractor shall thoroughly cleanse the whole of the system and ensure that it is functioning correctly

Wastes

- New floor gulley channel with traps, shall be fitted in the showers as shown on the drawings.
- Floor gulleys to be minimum 150mm wide and along the full length of the shower area.
- Floor gulley shall have minimum 150mm wide stainless steel cover grate.
- Floor Gulley selected shall be suitable for use with the proposed Degafloor system. This shall be approved for use by the sub-contractor responsible for the installation of the Degafloor system.
- Deglafloor finish shall seal into the floor gulley.
- Floor gulleys shall have a minimum 100mm diameter outlets.
- All waste piping shall be in minimum 100mm uPVC piping & shall be Wavin or Equivalent.
- All pipe work & fittings shall be adequately supported by pipe clips & brackets. Snap action or saddle type clips shall not be used & brackets shall be fitted to pipework at not more than 400mm horizontally & 1200mm vertically.
- Include for connection of all new wastes into existing wastewater pipework in the existing manholes outside the building.
- Include for new Armstrong Junctions at any changes in direction.
- Include for new manhole (C250) and gulleys to accommodate shower wastes.
- Include for reinstating ground surface to match existing where excavations are necessary.
- The Contractor shall set out the Works to the correct positions, levels, dimensions, gradients and alignments and shall provide all necessary facilities and equipment for this purpose.
- Immediately prior to handover the Contractor shall clean and flush out the drainage systems and ensure they are free of all debris.

Existing Space Heating Radiators & Pipework

- Existing radiators and pipework to be removed as per demolition section.
- Remove all redundant heating pipework, radiators and fittings.
- Include for blanking off the flow and return pipework serving the existing heating system in the adjoining stores.

Schedule of Sanitary fittings {All Armitage shanks or Equivalent, colour white}

In the toilets, supply and fit sanitary fittings to the following requirements:

- Sanitary fittings to be laid out as per drawings
- 2 No. Armitage Shanks Sandringham 21 (or equivalent) close couple pan and cistern
- Cisterns shall be dual flush push button valve cistern

- Pans shall be c/w soft-close toilet seat
- Each WC cubicle is to be supplied and fitted with a toilet roll holder
- 2 No. Armitage Shanks Sanura Bowl Urinal 40cm (or equivalent) complete with:
 - 1 No. 9 litre Mura Auto Cistern (or equivalent) with auto syphon, petcock and supports
 - 1 No. Mura auto cistern with access lid
 - Flush pipes exposed for urinals
 - 2 No. Waste 1.25" plastic strainer, 50mm unslotted tail
 - 2 No. Trap 1.25" plastic bottle, 75 mm seal, multi-purpose outlet
 - 2 No. sets of steel urinal concealed hangers
 - 2 No. Spreader top inlet for urinal, exposed
- 2 No. Armitage Shanks Orbit 21 55cm Countertop Washbasin (1 tap hole with overflow) complete with:
 - 2 No. Trap 1.25" plastic bottle, 75 mm seal, multi-purpose outlet
 - 2 No. Waste 1.25" brass anti-theft swivel plug waste, 80mm slotted tail
 - 2 No. Avon 21 washbasin 1 hole, self-closing push button, variable temperature control with 15mm female connector hoses on inlets
- 450 x 650mm mirror over each basin, 25mm bevelled edge all round, recessed, 3mm polystyrene backing bored for and plugged with 4 no. chrome cupped countersunk screws with rubber washers to background
- Sanitary fittings shall be thoroughly cleaned prior to handover of the Works to the Employer and shall be fully tested in the presence of the Engineer Officer to ensure their correct operation

The following shall be supplied and fitted as part of the installation in the shower room:

- All pipework and fittings for showers to be contained in the attic void above the new ceilings.
- Take minimum 32mm hot and cold feed from hot and cold water services in the plant room to the shower room.
- Take minimum 25mm hot and cold feed from hot and cold water services in the plant room to the toilets.
- In the shower room, supply and fit 6 No. Delabie Sporting 2 time shower panel units (Ref. 714700), or equivalent approved, fixed to wall as shown on the drawings. Each shower to be fed by its associated mixing valve in the ceiling void
- Immediately above each shower, tee off with 12mm branches to each individual shower
- Above each shower unit, supply and fit 1 No. Delabie Premix Nano thermostatic mixing valve (Ref. 732116) or equivalent approved.
- Provide all pipework, fittings, etc. required for fitting of new showers.
- All pipe work & fittings shall be adequately supported by pipe clips & brackets. Snap action or saddle type clips shall not be used & brackets shall be fitted to pipework at not more than 400mm horizontally & 1200mm vertically.
- All showers to be fed from proposed new cold water storage tanks, new hot water cylinders and new pumps in plant rooms.
- All hot water pipework to be insulated.
- Include for the supply and fitting of stainless steel soap trays at each shower unit.
- based, suitable for use in wet areas.

Cold Water Storage & Pump

The following shall be supplied and fitted in the plant room to feed the outlets in the showers and toilets:

- 1 X 500 litre proprietary (fully enclosed) cold water storage tank complete to be fitted in the Plant Room
- All fixtures and fittings to connect cold water storage tank to mains water feed and to pump
- 1 X 3-phase electric motor coupled to centrifugal pump to pressurise hot and cold water services in the building.
- The pump and motor shall be capable of delivering 12 litres per minute at each showerhead simultaneously (at all levels) at a pressure of 2.0 bar at the showerhead.
- Pump and motor shall be Grundfos inline single stage pump c/w motor and controller (model No. TPE 32-380/2 A-F-BQQU-JDB) or equivalent approved
- Include for all connections between the pump and the hot and cold water services for each system.

Mechanical Extraction

In the toilets, the contractor shall include for the following:

- Include for all builders work associated with preparing wall openings to accommodate the new extractor fans.
- All wall openings to be lined with 150mm uPVC pipe.
- Include for all electrical work associated with fitting new extractor fans
- In the toilets, the contractor shall supply and fit a mechanical extractor fan capable of extracting 60 litres of air per second.
- Include for the coring of 1 no. core diameter 160mm in the external wall of the toilets. Include for external cast aluminium vent grille.
- Fit humidity sensor (Ref No. 563532A) and PIR sensor to the extractor fan along with the associated fan controller, to control the operation of the fan.

In the shower room, the contractor shall include for the following:

- The 2 No. existing wall opes in the shower room shall be utilised for a proposed extract fan and passive vent.
- Include for all builders work associated with adjusting, enlarging and preparing the current wall openings to accommodate the new extractor fan and vent.
- Supply and fit 1 No. Vent Axia T-Series In-Line Fan (Model TX12WL – Ref No. W164510)
- Fit external louvred grille to suit fan. Supply matching louvred grilles (internal and external) to the proposed passive vent in the shower room.
- Fit humidity sensor (Ref No. 563532A) and presence sensor along with the associated fan controllers, to control the operation of each fan.

Heat Pump

The contractor shall provide 1 No. new air-to-water heat pump systems to provide hot water in the building. The heat pump specification shall be as follows:

- The new heat pump will comply with Standard Recommendation S.R. 50-4:2021 Building Services – Part 4: Heat pump systems in dwellings.

- The heat pump will take electrical power from the existing distribution boards indicated on the drawings.
- Provisional locations for heat pumps is shown on drawings. This is to be confirmed with the Engineer Officer on-site.
- The heat pump shall be “Panasonic Aquarea 12 kW HT 3-Phase Air Source Heat Pump” or equivalent approved. Where an alternative Heat Pump is proposed, it must have the following minimum criteria:
 - Heat Output of between 11kW and 14kW
 - SCOP of 3.5 or greater
 - Use R-32 refrigerant gas
 - Be capable of heating water to 65 degrees Celsius
- Contractor to provide electrical energy monitoring equipment to monitor the energy use of the heat pump (one monitor and one display interface). Monitoring equipment to consist of single phase clamp meter, digital display unit, data logger with data export capacity.
 - This equipment shall be capable of connecting with existing BMS system fitted in the Barracks.
- Include for a condensate drip tray for the Heat Pump external unit. All condensate to be routed into stormwater drainage network.
- The heat pump shall be controlled by Aquarea Manager with Touchscreen (PAW-HPMED) fitted in the Plant Room including cylinder thermostats and timeclock (located in plant room).
- The contractor shall include in the installation for the full integration of the new heat pump to the Aquarea Service Cloud for Installers/Maintenance.
- The contractor shall include for the installation of a 5G GSM data router in the Plant Room to communicate between the Heat Pump and the Aquarea Service Cloud for Installers/Maintenance. The contractor shall provide SIM card and maintain a mobile data subscription with the Internet Service Provider for a period of 5 years after completion of the project.
- The contractor shall supply and fit 1 No. Joule 500 litre WELLMASTER IND Cylinders (TCIWVI-0500LFC) complete with all fixtures and fittings (Smart Plumb Pre-Plumbed) in the plant room.
- Include for connecting the heat pump hot water circuit to the ‘boiler’ coil in the cylinder.
- Include for the supply and installation of 2 No. 3.0 kW electric immersion heaters in the cylinder.
- Include for the fitting of a minimum 32mm thermostatic mixing valve at the hot water outlet from the cylinder.
- Include for the excavation of a services trench between the External Heat Pump Unit and the Plant Room for services associated with the Heat Pump Installation. All services to be run in proprietary ducting.
- Include to reinstate all finishes to match existing.

Electrical Specification

General

The work in this section includes the complete Electrical Installation including fire detection and alarm system, lighting, emergency lighting, fixtures, fittings, outlets, etc. All electrical works to be

carried out by a specialist electrical firm together with all associated builders work and attendances. All works to be completed in strict compliance with current requirements. Where the contractor proposes to utilise the existing wiring circuits in the building, the existing conduits and cable can remain in place and be brought out to new surface-mounted fittings on the proposed new wall finishes.

Scope of Work

Please see services layout on the drawings. The extent of the works consists briefly of:

- Disconnect and remove all existing redundant electrical equipment and wiring.
- New lighting fittings internally throughout
- Light switches & PIRs for all new light fittings
- Extractor fans & Hand Dryers in showers & toilets
- 3kW immersion heaters in hot water cylinder
- Heat Pump Installation including all associated controls
- Sockets and Spur Outlets throughout
- Radiant Heat Panels and associated Controls
- Emergency lighting services
- Fire detection and alarm system
- Testing and commissioning of the entire installation

Disconnect and remove existing electrical equipment.

Safely disconnect and remove all existing redundant electrical equipment, fitting and fixtures.

Fixtures and Fittings

Supply and fit the following fixtures and fittings in the locations as shown on the Drawing:

- In the shower room, supply and fit 6 No. *Ansell Lighting 29W LED Light Fitting (Part No. AERMLE3/60/CW)*, or equivalent approved, IP44 ceiling-mounted light fittings.
- In the plant room, supply and fit 4 No. *Ansell Lighting 29W LED Light Fitting (Part No. AERMLE3/60/CW)*, or equivalent approved, IP44 ceiling-mounted light fittings.
- In the toilets, supply and fit 5 No. *Ansell Lighting 29W LED Light Fitting (Part No. AERMLE3/60/CW)*, or equivalent approved, IP44 ceiling-mounted light fittings.
- In the locker room, supply and fit 24 No. *Ansell Lighting 29W LED Light Fitting (Part No. AERMLE3/60/CW)*, or equivalent approved, IP44 ceiling-grid light fittings.
- In the toilets, supply and fit 2 No. *Ansell Lighting 8W LED Over-Mirror Light Fitting*, or equivalent approved.
- Include for 1 No. emergency lighting packs to the above fittings in the toilets.
- Include for 1 No. emergency lighting packs to the above fittings in the shower room.
- Include for 1 No. emergency lighting packs to the above fittings in the plant room.
- Include for 12 No. emergency lighting packs to the above fittings in the locker room.
- Include for 2 No. presence sensors in the shower room to operate lighting.
- Include for 1 No. presence sensors in the plant room to operate lighting.
- Include for 3 No. presence sensors in the toilets to operate lighting.
- Include for 8 No. presence sensors in the locker room to operate lighting.
- Mechanical extraction and controls shall be as per mechanical specification.

- Fit humidity sensor (Ref No. 563532A) and presence sensor to each extractor fan along with the associated fan controllers, to control the operation of each fan
- Supply and fit 2 No. hand dryer “*World dryer Vmax*” or equivalent approved in the toilets.
- Supply and fit 2 No. metal-clad double sockets in the plant room
- Supply and fit 10 No. metal-clad double sockets in the locker room
- Supply and fit 18 No. radiant heat panels (600W 1200mmX600mm) in the Locker Room
- Supply and fit Timeclock, 3 No. room thermostats, 3 No. Boost Switches with BMS control as outlined below

Radiant Heat Panels & Controls

The contractor shall supply and fit a heating system and controls as per drawings. The heating system for the building shall be by way of radiant heat panel 1200x600mm mounted into the suspended ceiling controlled by a 7-day programmable time clock, room thermostats and boost buttons located as outlined in the drawings. Each panel shall have a nominal maximum output of 600W.

Proposed BMS shall provide control through a display interface the following minimum functions;

- Setting of max/min control to room thermostats
- 7-day programmer with minimum 3 periods per day

Emergency Lighting

- **Emergency Exit Signs - Running man**

Throughout the building, maintained emergency exit signs will be provided in all areas as depicted on the drawing. Emergency exit signs will comply with the requirements of IS 3217 - Emergency Lighting. All emergency exit signs shall be CE marked and certified for use in accordance with IS 3217. Emergency exit sign fittings shall be Robus LED Exit Box and Robus Blade LED (or equivalent). All light fittings shall be CE marked and certified for use in accordance with IS 3217.

- **Emergency Luminaires**

Emergency luminaries shall be installed as described in IS 3217 – Emergency as outlined under “Fixtures & Fittings” above.

Fire Detection & Alarm System

General

There is an existing functional Fire Detection & Alarm System in the building. The existing panel, wiring and outlets may be utilised for the proposed installation. The fire detection system shall comply with the standards IS 3218. The installation shall be an **ANALOGUE ADDRESSABLE FIRE DETECTION and ALARM SYSTEM** in compliance with IS 3218 for a Category L2/L4 system. Include for all work, cabling etc. to install and commission the system. The Contractor shall include for location of fire alarm panel, detectors, break glass units, sounders etc. This shall be submitted to the Engineer for approval prior to any work commencing. On installation, ownership of the alarm system shall pass to the Minister for Defence. After the end of the defects liability period, the Department of Defence reserves the right to appoint any company to maintain the system.

In addition, the company chosen to install it shall withdraw any condition in their tender that allows it to retain ownership of the installed equipment or gives it the exclusive right to maintain it in the future (after completion of the defects liability period). The Contractor shall include for the provision by the fire alarm supplier of full 'as- installed' drawings. A zone identification diagram shall be provided in a glass fronted framed wall mounted unit, which clearly identifies the fire alarm zones. The drawings shall be A3 size. The Contractor shall include for final testing and commissioning of the entire system by a competent person. All handover documentation shall be provided in strict accordance with IS 3218.

Smoke Detectors

Smoke sensors shall meet the following requirements:

- Be analogue addressable low profile type using the photoelectric principle to measure smoke density.
- The sensors shall on command from the Control Panel, send data to the Panel representing the analogue level of smoke density.
- The detectors shall provide a test means whereby they will simulate an alarm condition and report that condition to the Control Panel.
- The sensors shall have two integral tri-colour LEDs for 360° viewing.
- The two LEDs shall flash 'green' during normal operation, red in a Fire condition and amber must a fault develop in the sensor. E
- Each sensor shall have a built-in loop isolator.
- Smoke detectors shall be white in colour.
- All detectors/sensors shall be LPCB approved.

Heat Detectors

Heat sensors shall meet the following requirements:

- Be analogue addressable and shall be software configured to work as a Rate of Rise and/or a fixed 58°C or fixed 78°C.
- The sensing element of the sensor shall be panel controllable to customise the device for the area it is protecting.
- The sensor shall have two integral tri-colour LEDs that will provide 360° local visual indication of the device status.
- The LEDS shall be programmable with static blinking red, amber and green status indications as required.
- All detectors/sensors shall be LPCB approved.
- The two LEDs shall flash 'green' during normal operation, red in a Fire condition and amber light when a fault develop in the sensor.
- Each sensor shall have a built-in loop isolator.
- Heat detectors shall be white in colour.

Manual Call Points

The call points shall meet the following requirements:

- Be constructed of flame retardant plastic with clearly visible operating Legend provided on the glass.

- Be suitable for surface or semi-flush mounting.
- Provide a dipswitch at the rear of each unit for address setting.
- Visual indication of operation shall be by LED indicator.
- Units shall be LPCB approved and fixed at a height of approx 1100mm above floor level.

Isolator Modules

Each smoke and heat sensor shall be fitted with a loop isolator. Its operation shall be totally automatic and shall not be necessary to replace or reset after its normal operation. Location and sitting shall be determined by a pre-commissioning visit by system supplier at an early stage of the project.

Internal Alarm/Visual Units

Provide internal combined alarm/visual units to the following requirements:

- The sounder shall have an output of 95-100dB(A) and the strobe shall flash at 30 flashes /min with an output of 2 Joules.
- Units can be WHITE or RED in colour and shall be mounted at 2100mm above finished floor level and no closer than 150mm to the ceiling.
- Units shall be wired in two separate circuits. Internal alarm/visual units are indicated in the drawing.

External Audio/Visual Units

Provide external alarm/visual unit at the main entrance to the building to the following requirements:

- The external audio visual unit shall be positioned externally to the building in order to guide fire fighting assistance to the correct entrance point.
- To comply with Clause 5.6.1 of IS3218 it shall be marked 'Fire Alarm' and shall automatically silence the sounder after 30 minutes while the visual indicator shall continue to operate.

Cable and Wiring

Detection loops and sounders shall be wired in 2C 1.5mm Fire-rated cable with red PVC sheathing. All inter-panel wiring shall be twisted pairs, enhanced fire-rated and mechanically protected. Suitable conduit boxes shall be used at each device to prevent dust and dirt ingress to the sensor. The cable type shall be approved by this office before installation.

Drawing Approvals and Supervision

The Contractor shall provide full "working" drawings and a pre-installation site visit along with supervision during the installation period. On completion he shall provide as installed drawings showing equipment locations, cable routes and location of power sources.

Testing and Commissioning

Certification of installation to IS3218 is required on the Electrical Sub-Contractor's own HEADED PAPER. The Contractor shall be responsible for system protection during the contract. Include for the provision by the fire alarm supplier of full 'as installed' drawings. A new zone identification diagram shall be provided in a glass fronted framed wall mounted unit, which clearly identifies the fire alarm zones. The drawings shall be A3 size. Provide for supplying and mounting one chart, one

adjacent to the fire alarm panel. Include for final testing and commissioning of the entire system by the specialist and obtain from the specialist a Commissioning Certificate acceptable to the Employer Representative and in accordance with IS 3218.

Painting Specification

General

The works shall consist of the complete painting of the plant room, toilets, showers and locker room to the following requirements:

- Clean down existing surfaces and fill and prepare for new paint finish.
- Colours shall be selected by the Engineer Officer on-site.
- Include for all painting necessary for the completion of the project.
- Include for painting the floor of the locker room
- Ensure that surfaces are in a proper condition to accept the coating specified.
- Surfaces shall be prepared in accordance with the recommendations issued by the manufacturers of the paint to be used on the surface.
- Include for painting all plasterboard and masonry walls, all plasterboard ceilings and all timberwork (including skirtings, architraves, window boards, dado rails, etc.) excluding pre-finished doors.

Materials Used

Any materials used in preparing surfaces shall be compatible with the paint to be used, i.e. stopping and fillers. Stopping for clear finished surfaces shall be of a colour to match the finished colour of the adjoining surfaces. The ER reserves the right to have any work he suspects of not complying with the specification tested by the Manufacturer of the paint. In the event of the test results confirming his suspicion, the Contractor shall:

- Be responsible for paying the cost of the testing.
- Remove all unsatisfactory areas of work and replace them at his own expense.

The Contractor shall obtain approval from the Engineer Officer for the brands of paint he wishes to use. All paints, varnishes, emulsions and other surface coatings shall meet the following requirements:

- All consumables shall be delivered in sound and sealed containers, clearly labelled by the manufacturer to show the type of product, its brand name, the use for which it is intended and the manufacturer's batch number.
 - Materials for the Works may be obtained from different manufacturers but undercoats and finishing coats to be used together must be obtained from the same manufacturer.
 - Materials shall be kept in a clean dry and well-ventilated store and protected from frost.
- Materials shall comply with the following specifications:

Workmanship

Workmanship shall comply with the Code of Practice, Painting of buildings, BSCP 231. Only fully qualified and experienced Tradesmen shall be employed on the work. Apprentices shall only be employed under the supervision of qualified tradesmen. Painting shall not be carried out when:

- Air shade temperature is less than 5 degrees centigrade

- Relative humidity is such that condensation is present, or may be expected on the surfaces or when there is a possibility that it shall affect the application and or drying of the coating.
- The moisture content of the surface to be painted exceeds 19%, or the level specified by the manufacturer is lower, when measured with an electronic meter.
- Heat is likely to cause blistering and other effects.

The following workmanship requirements shall apply:

- All brushes, tools and equipment shall be kept in a clean condition and surfaces shall be clean and free from dust or contaminants such as oil during painting.
- No painting shall be carried out in the vicinity of operations generating dust.
- The Contractor shall provide a mobile receptacle into which all liquids such as brush cleaning fluid, slops from tins etc. are to be placed.
- Under no circumstances may brushes be cleaned or painting materials disposed of into gullies, manholes, sinks, lavatories, WC's or any other sanitary fittings.
- Refuse and flammable residues must be removed from site.

Ironmongery

All surface- fixed ironmongery (except hinges) on doors and windows and similar fittings shall be removed prior to the commencement of painting and shall be re-fixed on completion. Prices for painting shall be deemed to include for removing and re-fixing the ironmongery and fittings. Any items that it is not possible to remove shall be protected to ensure they are not marked with paint and the Contractor shall ensure that the function of any moving parts of components or hardware is not impaired by paint.

Thinning

Paint shall not be thinned or reduced in any way except where specified by the manufacturer. Thinners shall not be added in excess of 5% by volume unless specified by the manufacturer.

Items not to be painted

Unless otherwise specified the following surfaces shall not be painted:

- Acoustic tiles and plaster.
- Naturally finished metalwork such as bronze, brass, anodised aluminium, stainless steel etc.
- Self-finished equipment or fittings such as veneered worktops
- Ceramic and glazed surfaces.
- Floor coverings.
- Valves, sprinkler heads, fusible links, thermostats etc.
- Electrical trunking.
- Pre-finished doors.

Items not to be painted shall be carefully masked or otherwise protected during the course of the work and prices for painting shall be deemed to include for protecting and removing the protection.

Internal Walls & Ceilings

All internal walls and ceilings shall all be painted in emulsion paint as per the methods and preparation listed below.

Skirting Boards, Architraves, Window boards

All timber skirting boards, architraves and window boards shall be prepared and painted with gloss as per the methods and preparation listed below.

Floors

Contractor shall prepare and paint the floor of the locker room and plant room to the following requirements:

- Remove all grease, oil, chemicals and other impurities with Maalipesu detergent.
- Remove old peeling paint layer by grinding or vacuum grit blasting. Choose the method best suited for the premises.
- Clean out pot-holes removing all loose friable material. Open cracks e.g. an abrasive tool. Remove loose material and dust with a vacuum cleaner.
- Prime using Temafloor 400 or Temafloor 220W Primer. Follow the thinning instructions available in the PDS of the chosen primer. Pour the mixture onto the floor and apply as much as is needed to impregnate the concrete surface. If necessary, repeat priming according to the PDS of the used primer.
- Patch pot-holes and cracks with Colofill putty or a solvent-free epoxy primer, e.g. Temafloor 400, dry clean sand or Temafloor Thickener. Mixing ratio e.g. 1 part by volume of epoxy mixture and 1–2 parts by volume of sand of grain size 0.1–0.6 mm. Make sure the patched areas are flat before priming. Sand if needed. Concrete surface should always be primed before patching.
- Topcoating should be done within 4-72 hrs after priming (depending on the used primer) with unthinned Temafloor P300.
- Pour the topcoat mixture onto the floor, apply it with a trowel and level with a roller. Control that the thickness of layer is correct by observing coating consumption and by measuring the film thickness.
- Recommended film thickness is 0.3–0.5 mm.
- If necessary, use spiked roller to finish the surface approx. 10–20 min after application.

Methods and Preparation

The following methods shall be employed for the proposed painting works:

- All surfaces shall receive two coats of paint. Each coat of paint must be allowed to dry and be rubbed down with a fine abrasive paper and dusted off before the subsequent coat is applied.
- Roller application of paint shall be permitted for the application of emulsion paint to internal walls and ceilings. However a brush finish shall be required to paint existing stone work where required.
- Glass shall be neatly cut into and any over painting shall be removed promptly without damage to the glass or any coatings to it. No paint or decoration shall be applied until the surface and its substrate have dried out to a moisture level acceptable to the manufacturers of the specific products being used.
- Paints to be applied at the coverage rates specified by the manufacturer for the particular application. Dry film thickness shall correspond to that specified by the manufacturer. The average of the dry film thickness taken over any square metre of surface shall equal or exceed the specified nominal thickness and in no case shall any reading be less than 75% of the specified nominal thickness.

- All preparatory work shall be deemed to be included in rates for painting. The carrying out of this preparatory work shall not release the Contractor from his obligations to provide a satisfactory painted finish should the paint system applied fail in any way.
- All woodwork is to be sanded down smooth prior to the application of any paint, stain or clear finish.
- All loose material shall be removed back to a firm edge. The edge shall be feathered with sandpaper and defects made good with primer, stopping, filling and undercoat to bring up stripped areas level with adjoining surfaces. Surfaces shall then be rubbed down with abrasive paper, washed and allowed to dry.
- Colours shall be selected by the Engineer Officer from the RAL colour chart. No painting shall be carried out prior to receipt of this information. It shall be the responsibility of the Contractor to apply to the Engineer Officer in sufficient time to ensure that the colour selections are available to suit the Contractor's programme.
- Adequate care must be taken to protect surfaces while still wet by the use of screens and 'wet paint' signs where necessary.