

PART TWO

Section 1 – Contract



CONTRACT

Contract No. IWM/EXH/1427

**IWML Real to Reel
Contract**

Contractor

CONTRACT

This Contract is between:

- **Imperial War Museum Trading Company** (as operated by the **Trustees of the Imperial War Museum**, a charitable corporation established by statute) whose office is situated at: Lambeth Road, London SE1 6HZ, hereby referred to as "**IWM**", and;
- **XXXXX** incorporated and registered in England and Wales with company number xxxx whose registered office is at xxxx, hereby referred to as "**XXXXX**".

To hereby be referred to for the duration of the Contract, individually as "**a Party**" or collectively as "**the Parties**", to undertake the refit of the xxxxx, under the following terms.

1.0 Definitions

- 1.1 In these conditions "**the Contract**" means the agreement concluded between IWM and XXXX including all specifications, plans, drawings and other documents which are relevant to the Contract and also such of these Conditions as are included in these terms and conditions of the Contract. In the event of any discrepancy between these conditions and any other terms, then these conditions will apply.
- 1.2 The following provisions shall have effect with respect to the interpretation of the Contract except where the context otherwise requires:
 - "**Contract Price**" means the price exclusive of Value Added Tax, payable to XXXX by IWM under the Contract for the full and proper performance by XXXX of his part of the Contract as determined under the provision of the Contract;
 - "**Days**" means calendar days unless otherwise indicated;
 - "**Employees of IWM**" includes persons (and the personal representative of any person) who are employees of IWM when any relevant Personal Injury or Loss of Property occurred, even if he has ceased to be such before any payment in respect of the Personal Injury or Loss of Property is made, and where they have ceased to be such by reason of their deaths, include their personal representatives;
 - "**Loss**" means destruction;
 - "**Loss of Property**" includes damage to property, loss of profits and loss of use;
 - "**Month**" means calendar month unless otherwise defined;
 - "**Personal Injury**" includes sickness and death;
 - "**Premises**" or "**XXXX**" refers to xxxxxxxxxx;
 - "**Services/Works**" mean all services/works which XXXX is required under the Contract to supply;
 - "**Specification**" means the description and specification attached to the tender, and;
 - "**Sub-Contractor**" means any person, firm or company under contract to XXXX to perform work or provide professional services and/or supply goods and includes any other person or persons taken as a partner or director by such person, firm or company during the currency of the

Contract and the surviving member or members of any such firm or company.

- 1.3 The headings to these Conditions shall not affect the interpretation thereof.
- 1.4 Any notice or other communication whatsoever which either Party is required or authorised by the Contract to give or make to the other Party shall be seen to be given if sent by post in a prepaid letter addressed to the last known address of the other Party and that the letter is not returned undelivered by the Royal Mail shall be deemed for the purposes of the Contract to have given or made at the time at which the letter would in the ordinary course of post be delivered.
- 1.5 The masculine includes the feminine.
- 1.6 The singular includes the plural and vice versa.
- 1.7 Reference to any enactment, order, regulation or similar instrument, shall be construed as a reference to the enactment, order, regulation or instrument as amended by any subsequent enactment, order, regulation or instrument.

2.0 **Service**

Subject to the provisions of the Contract, XXXX agrees to provide the Services set out in the Specification in consideration of the Contract Price.

3.0 **Recovery of Sums Due**

Whenever under the Contract any sums of money shall be recoverable from or payable by XXXX, the same may be deducted from any sum then due, or which at any time thereafter may become due, to XXXX under the Contract.

4.0 **Value Added Tax**

IWM shall pay to XXXX, in addition to the Contract Price, a sum equal to the Value Added Tax chargeable on the value of the supply of services provided in accordance with the Contract.

5.0 **Bankruptcy**

- 5.1 IWM may terminate the Contract by written notice having immediate effect if:
 - (a) XXXX undergoes a change of control, within the meaning of Section 416 of the Income and Corporation Taxes Act 1988, impacting adversely and materially on the performance of the Contract; or
 - (b) where XXXX is an individual or a firm, any partner in the firm becomes bankrupt or has a receiving order or administration order made against him; or makes any compromise or arrangement with or for the benefit of his creditors; or appears unable to pay a debt within the meaning of Section 268 of the Insolvency Act 1986; or any similar event occurs under the law of any jurisdiction within the United Kingdom; or
 - (c) where XXXX is a company, and shall pass a resolution or the Court makes an order that XXXX shall be wound up otherwise than for the purpose of solvent reconstruction or amalgamation; or a receiver, manager or administrator is appointed on behalf of a creditor in respect of XXXX's business or any part of it; or XXXX is unable to pay its debts

within the meaning of Section 123 of the Insolvency Act 1986; or any similar event occurs under the law of any other jurisdiction within the United Kingdom.

- 5.2 IWM may only exercise its right under clause 5.1(a) within 3 months after a change of control occurs and shall not be permitted to do so where it is agreed in advance to the particular change of control that occurs. XXXX shall notify IWM immediately when any change of control occurs.
- 5.3 The rights and obligations of the parties upon termination under this clause shall be the same as those for termination for default under clause 25 and provisions in clauses 25.6 and 25.7 shall apply.

6.0 **Equal Opportunities Policy**

- 6.1 XXXX shall not unlawfully discriminate within the meaning and scope of the provisions of the Race Relations Act of 1976, Sex Discrimination Acts of 1975 and 1986 and Equal Pay Act of 1970 or any statutory modification or re-enactment thereof relating to discrimination in employment.
- 6.2 XXXX shall take all reasonable steps to secure the observance of the provisions pursuant to clause 6.1, hereof by all employees or agents of XXXX and all sub-contractors employed in the execution of the Contract.

7.0 **Transfer & Sub-Letting**

XXXX shall not give, bargain, sell, assign, sub-let, sub-contract or otherwise dispose of the Contract or any part thereof of the benefit or advantage of the Contract or any part thereof without the prior written consent of IWM.

8.0 **Payment of Sub-Contractors**

Where XXXX enters a sub-contract for the purposes of performing the Contract he shall cause a term to be included in each sub-contract which requires payment to be made to the sub-contractor within a specified period not exceeding 30 days from the receipt of the valid invoice as defined by the sub-contract requirements.

9.0 **Corrupt Gifts and Payment of Commission**

- 9.1 XXXX shall not:
- (a) offer; or give; or agree to give to any person in the service of IWM any gift or consideration of any kind as an inducement or reward for doing or forbearing to do; or for having done or forborne to do any act in relation to the obtaining or execution of this or any other contract for IWM's service or for showing or forbearing to show favour or disfavour to any person in relation to this or any other contract for the service of IWM, or;
 - (b) enter into this Contract in connection with which commission has been paid or agreed to be paid by him or on his behalf or to his knowledge, unless before the Contract is made particulars of any such commission and of the terms and conditions of any agreement for the payment thereof have been disclosed in writing to IWM.

9.2 Any breach of this clause by XXXX or by anyone employed by him or acting on his behalf (whether with or without the knowledge of XXXX) or the commission of any offence by XXXX or by anyone employed by him or acting on his behalf under the Prevention of Corruption Acts, 1889 to 1916, in relation to this Contract shall entitle IWM to determine the Contract and recover from XXXX the amount of any loss resulting from such determination and/or to recover from XXXX the amount or value of any such gift, consideration or commission.

9.3 In any dispute, difference or question arising in respect of:

- (a) the interpretation of this clause (except so far as the same may relate to the amount recoverable from XXXX pursuant to sub-clause 9.2 in respect of any loss resulting from such determination of the Contract); or
- (b) the right of IWM to determine the Contract; or
- (c) the amount or value of any such gift, consideration or commission;

the decision of IWM shall be final and conclusive.

10.0 Drawings, Specifications & Other Data

10.1 Any drawing, specification or other data completed or provided in connection with this Contract shall become or remain the property of IWM and delivered to IWM upon completion or termination of the Contract.

10.2 All drawings must be submitted electronically in CAD .dwg format. All drawings shall be a size appropriate to show the detail to be depicted clearly without magnifying aids and shall conform to British Standards 1192 or 308 or equivalent as appropriate.

11.0 Use of Documents, Information etc.

11.1 Except with the consent in writing of IWM, XXXX shall not disclose the Contract or any provision thereof to any person other than a person employed by XXXX in the carrying out of the Contract or any other person concerned with the same. Such disclosure shall be made in confidence and extend so far as may be necessary for the purposes of the Contract.

11.2 Except with the consent in writing of IWM, XXXX shall not make use of the Contract or any information issued or furnished by or on behalf of IWM otherwise than for the purpose of the Contract.

11.3 Any specification, plans, drawings, or any other documents issued by or on behalf of IWM for the purposes of the Contract remain the property of IWM, and must be returned upon completion of the Contract.

12.0 Disclosure of Information

12.1 XXXX shall take every precaution to ensure that information about the Contract, or arising from or connected with the Contract, is divulged only to the minimum number of employees and then only to the extent essential to each person's action in carrying out the Contract. No information regarding the Services being provided under the Contract or facilities to photograph or film shall be given or permitted by XXXX except with the written permission of IWM to whom any press or other enquiry or other such matter should be referred.

- 12.2 XXXX shall fully indemnify IWM, his employees or agents against the costs of dealing with any claims made in respect of information subject to the Data Protection Act 1998, which claims would not have arisen but for some act, omission or negligence on the part of XXXX, his sub-contractors, agents or staff.

13.0 **English Law**

The Contract shall be considered as a Contract made in England and subject to the law of England.

14.0 **Arbitration**

All disputes, differences or questions between the Parties to the Contract with respect to any matter or thing arising out of or relating to the Contract, other than a matter or thing as to which the decision of IWM is under the Contract to be final and conclusive and except to the extent to which special provision for arbitration is made elsewhere in the Contract, shall be referred to the arbitration of 2 persons, one to be appointed by IWM and one by XXXX, or their Umpire, in accordance with the provisions of the Arbitration Acts 1950, 1975 and 1979, or any statutory modification or re-enactment thereof for the time being in force.

15.0 **Approval for Admission to Premises**

- 15.1 XXXX shall ensure that no unauthorised persons are admitted to the Premises. If IWM gives XXXX notice that any person shall not be admitted to the Premises, XXXX shall ensure that that person shall not be admitted. The decision of IWM as to whether any person is to so be admitted to the Premises shall be final.

- 15.2 All XXXX's employees are required to have an IWM security pass before admission to the Premises. IWM shall, subject to satisfactory completion of approval procedures, arrange for passes to be issued.

All non-photo badged contract staff will be required to be escorted by a photo pass colleague or by a member of IWM staff when working/visiting the Premises.

- 15.3 Anyone who cannot produce a proper pass when required to do so by any appropriate employee or representative of IWM, or who contravenes any conditions on the basis of which a pass was issued, may be refused admission to the Premises or required to vacate the Premises if already on the Premises.
- 15.4 XXXX shall promptly return any pass if at any time IWM so requires or if the person for whom it was issued ceases to be involved in the performance of the Contract. XXXX shall promptly return all passes upon completion of or termination of the Contract.
- 15.5 The decision of IWM upon any matter arising from this clause shall be final and conclusive.

16.0 Safety

- 16.1 XXXX shall be responsible for the observance by himself, his employees and sub-contractors of all safety precautions necessary for the protection of himself, his employees, sub-contractors and any other person including all precautions required to be taken by or under any Act of Parliament including any regulations or bye-law of any local or other authority. He shall co-operate fully with IWM to ensure the proper discharge of these duties.
- 16.2 XXXX must comply and abide with the CDM regulations at all times whilst employed within IWM on the fulfilment of this Contract.

17.0 Accidents to XXXX's Employees or Agents

- 17.1 Accidents to XXXX's employees or agents which ordinarily require to be reported in accordance with the Health & Safety at Work Act 1974, shall be reported at the earliest opportunity to IWM, or his authorised representative at the time.
- 17.2 XXXX will be expected to co-operate with any enquiry undertaken by IWM or any other authority, as a result of an accident.
- 17.3 XXXX will be expected to observe all HSE procedures relating to reporting an accident/incident, occurring on the Premises in their fulfilment of the Contract.

18.0 Liability in Respect of Damage to IWM Property

XXXX shall, except as otherwise provided for within the Contract, make good or, at the option of IWM, pay compensation for all damage occurring to any IWM property occasioned by XXXX or by his employees, agents, suppliers or sub-contractors, arising from his or their presence on IWM Premises in connection with the Contract, provided that this Condition shall not apply to the extent that XXXX is able to show that any such damage was not caused or contributed to by his neglect or default or the neglect or default of his employees, agents or sub-contractors or by any circumstances within his or their control. The total liability of XXXX shall be subject to a limit of £5m.

19.0 Default

- 19.1 Should the Services or any portion thereof not be carried out within the time or times specified within or under the Contract, IWM may without prejudice to any other remedies by notice in writing to XXXX determine the Contract either in respect of the Services which have not been carried out in accordance with the Contract at the time of such determination or as respects all the Services to which the Contract relates other than those carried out in accordance with the Contract before that time hereinafter called a relevant determination, and in such case XXXX shall not be entitled under the Contract to payment of any amount by way of compensation.
- 19.2 Where IWM have determined the Contract under clause 19.1, and without prejudice as aforesaid, IWM may obtain all or any of the Services as respects which the Contract is so determined by arranging for those services to be carried out by alternative means and there shall be recoverable from XXXX the amount by which the aggregate of the cost of obtaining Services in this way exceeds the amount which would have been payable to XXXX in respect of all

the Services so replaced if they had been carried out in accordance with the Contract.

19.3 In the event of XXXX failing to carry out any Services in accordance with the Specification, IWM shall (without prejudice to any other remedy available) be entitled:

- (a) to deduct from any account rendered by XXXX in respect of unsatisfactory Services such sum as IWM considers appropriate, and/or;
- (b) to have such Services carried out satisfactorily by other persons and in the meantime to debar XXXX, his employees and agents from the Premises.

19.4 On the occurrence of a relevant determination XXXX shall notwithstanding such determination co-operate in the transfer of the services to which the relevant determination relates to any alternative organisation under clause 19.2, in accordance with arrangements to be notified to XXXX by IWM.

20.0 **XXXX's Property**

All property of XXXX whilst at the Premises shall remain so at the risk of XXXX and IWM shall accept no liability for any loss or damage howsoever occurring thereto or caused thereby except where any such loss or damage was caused or contributed to by any act, neglect or default of any employee of IWM at the Premises acting in the course of his employment. IWM shall accept liability to the extent to which such loss or damage is so caused or contributed to as aforesaid.

21.0 **Insurance**

21.1 XXXX shall maintain for the duration of the Contract and for a period of 2 years following the expiration of the Contract (inclusive of any warranty period), the following insurance policies:

- Employer's Liability - £2m
- Public Liability - £5m

XXXX is to ensure that all of its sub-contractor(s) have taken out similar insurance for the duration of their appointment.

21.2 XXXX, if requested by IWM, must provide a copy of valid insurance pursuant to clause 21.1.

21.3 If, for whatever reason, XXXX fails to comply with this clause, or without the approval of IWM obtains a different policy of insurance from that which he notified to IWM at the time when he submitted his tender, IWM may make alternative arrangements necessary to protect his interests and recover loss and damages from XXXX.

21.4 The terms of any insurance or the amount of cover shall not relieve XXXX or XXXX's Personnel of any liabilities under the Contract.

22.0 Quality of Fabricated Works

22.1 Inspection

IWM may inspect or arrange for the inspection of the Fabricated Works, and/or the Materials, in course of production, at XXXX's premises, at any reasonable time.

Without prejudice to IWM's right of inspection under this clause, IWM may inspect or arrange for the inspection of the completed Fabricated Works, at XXXX's premises or where the Fabricated Works have been produced, or after delivery, or as otherwise stated within the Contract Specification.

When IWM wish to exercise their right of inspection under this clause, XXXX shall provide to IWM or their representative full and free access to the Fabricated Works.

22.2 Delivery

XXXX shall deliver the Fabricated Works to IWM, at the time or times and at the place or places and in the manner specified within the Contract Specification, or in orders (written or printed) issued under the Contract.

When handing over the Fabricated Works in accordance with this clause, XXXX shall:

- (a) ensure that the Fabricated Works are properly packed and secured as may be stipulated in the Contract and
- (b) comply with any additional instructions which from time to time IWM may give with regard to the transportation of the Fabricated Works, provided that any extra cost necessarily incurred in so doing shall be borne by IWM as an addition to the Contract Price.

If any of the Fabricated Works are rejected under clause 22.4, that item shall for the purposes of the Contract be considered as not having been delivered and the property in that item shall return to XXXX from IWM provided that XXXX has received notice of rejection.

22.3 Loss of or Damage to the Fabricated Works

XXXX is responsible for the Fabricated Works and any materials, equipment fittings or things acquired or allocated by him for incorporation therein until delivery has been effected and Accepted in accordance with clause 22.5, and shall make good any loss of or damage to the Fabricated Works or any such materials, equipment fittings or things however occasioned which may occur before such delivery.

XXXX offer a 12 months defect warranty on the Fabricated Works.

22.4 Rejection

IWM may reject any Fabricated Works which upon inspection in accordance with this clause is found not to conform to the requirements of the Contract.

When under this clause, IWM reject the Fabricated Works following its delivery, XXXX shall at his own expense remove the rejected Fabricated Works from IWM within five working days from receipt of notification of rejection.

If XXXX shall fail to remove the Fabricated Works within the stated time IWM retains the right to return the rejected Fabricated Works to XXXX at XXXX's risk and his expense.

When under this clause, IWM reject any Fabricated Works after delivery, XXXX shall at his own expense deliver in the place of each and every rejected Fabricated Works, Fabricated Works which conforms with the requirements of the Contract and shall do so within the period for delivery stipulated in the Contract or within such further reasonable period as IWM may allow.

22.5 Acceptance

Acceptance of the Fabricated Works shall take place when IWM confirm acceptance of the Fabricated Works following installation.

22.6 Advanced Payment

The following clause is only applicable if IWM have made an advance payment to XXXX, prior to the delivery and installation of the Fabricated Works.

- **Ownership** – upon the receipt of IWM's advance payment, all goods, materials, works-in-progress and/or the finished Fabricated Works ("**the Materials**"), held by XXXX on behalf of IWM, must be clearly labelled as "**The property of Imperial War Museums**", wherever they are stored by XXXX;
- **Location** - XXXX is required to ensure IWM is advised of the location of the Materials at all times prior to their delivery to IWM;
- **Risk** – risk of damage, loss etc. in the Materials rests solely with XXXX at all times, until the Materials have successfully been installed at the Premises;
- **Inspection** – clause 22.1 equally applies to the Materials as identified under this clause. If due to the location of the Materials, IWM or any of its representatives', is unable to view the Materials, XXXX is required to provide photographic evidence of the condition of the Materials.

23.0 Injury to Person: Loss of Property

23.1 XXXX will indemnify and hold IWM harmless from and against any and all legal liabilities for illness or injury or death to any employees of the IWM or XXXX or any third party and for loss of or damage to the property of the IWM or XXXX or the property of their personnel or any third party, and against all claims, costs, demands, proceedings and causes of action resulting directly therefrom, which are due to negligence on the part of XXXX or its employees or agents or any failure by XXXX or its employees or agents to perform any of its obligations under this Contract.

23.2 IWM will indemnify and hold XXXX harmless from and against any and all legal liabilities for illness or injury or death to any employees of XXXX or IWM or any third party and for loss of or damage to the property of XXXX or IWM or the property of their personnel or any third party, and against all claims, costs,

demands, proceedings and causes of action resulting directly therefrom, which are due to negligence on the part of IWM or its employees or agents or any failure by IWM or its employees or agents to perform any of its obligations under this Contract.

23.3 If XXXX shows that any personal injury or loss of property to which this Condition applies was not caused nor contributed to by his neglect or default or by that of his employee, agents or sub-contractors, or by any circumstances within his control, he shall be under no liability under this Condition, and if he shows that the neglect or default of any person (not being his employee, agent or sub-contractor) was in part responsible for any personal injury or loss of property to which this Condition applies, XXXX's liability under this Condition shall not extend to the share in the responsibility attributable to the neglect or default of that person:

- (a) IWM shall notify XXXX of any claim or proceedings made or brought in respect of any personal injury or loss of property to which this Condition applies.
- (b) If XXXX admits that he is liable wholly to indemnify IWM in respect of any such claim or proceedings and the claim or proceeding is not an expected claim, he, or, if he so desires, his insurers, shall be responsible, pursuant to clause 23.3 (c) for dealing with or settling that claim or proceeding.
- (c) If in connection with any such claim or proceeding with which XXXX or his insurers are dealing, any matter or issue shall arise which involves or may involve any privilege or special right of the Crown (including any privilege or right in relation to the discovery or production of documents) XXXX or his insurers shall before taking any action thereon, consult the legal adviser to IWM and act in relation thereto as may be required by IWM, and if either XXXX or his insurers fail to comply with this clause, clause 23.3 (b) shall cease to apply.

23.4 Where any such claim or proceeding pursuant to clause 23.2 (a) or (b), is settled otherwise than by XXXX or his insurers, he shall not be required to pay by way of indemnity any sum greater than that which would be reasonably payable in settlement having regard to the circumstances of the case and in particular to the damages which might be recoverable at law.

24.0 **Observance of Regulations**

24.1 XXXX's representatives, when employed within the boundaries of the Premises, shall comply with such rules, regulations and requirements (including those relating to Security arrangements) as may be in force for the conduct of personnel at the Premises. Details of such rules, regulations and requirements shall be provided, on request, by IWM.

24.2 Except as provided in this Contract neither XXXX nor any of his employees or agents shall carry out any business or trading activity within the confines of the Premises. No advertisement, sign or notice of any description shall be exhibited on the Premises without prior approval, in writing, from IWM.

25.0 **Break**

25.1 If either Party is in breach of the terms of this Contract which is capable of remedy, the Party suffering the breach may at any time give the Party in breach

written notice specifying details of the breach and requiring it to be remedied, or a solution to remedy to be submitted to them within 10 working days of their notification of the breach. If after the specified time given, the breach has not been remedied, or a solution to remedy has not been agreed, this Contract may be terminated by the Party suffering the breach, on giving not less than **one week's written notice** to the other Party.

25.2 In the event of such notice being given, IWM shall at any time before the expiration of the notice be entitled to exercise and shall as soon as may be reasonably practicable within that period exercise such of the following powers as he considers expedient:

- (a) to direct XXXX, where work has not been commenced, to refrain from commencing work;
- (b) to direct XXXX to complete in accordance with the Contract all or any of the Services, or any part or component thereof, which shall be paid for at the agreed Contract Price, or, where no agreement exists, a fair and reasonable Price.

25.3 IWM shall indemnify XXXX against any commitments, liabilities or expenditure which is reasonably and properly chargeable to the extent to which the said commitments, liabilities or expenditure would otherwise represent an unavoidable loss by XXXX by reason of the determination of the Contract.

25.4 IWM shall not in any case be liable to pay under the provisions of this clause any sum which, when taken together with any sums paid or due or becoming due to XXXX under the Contract, shall exceed the Contract Price.

25.5 If XXXX or XXXX's Personnel is convicted under a charge of bribery, then this Contract will be terminated with immediate effect, and XXXX will be required to immediately terminate any works/services under this Contract, to ensure that all paperwork is completed and forwarded to IWM with immediate effect, and payment will only be made for works completed at the time of the termination.

25.6 Following termination of the Contract neither Party shall have any further rights or obligations in relation to the other Party except those stated in this clause, and in the clauses listed in clause 25.7 which shall continue to have full effect. Subject to the other provisions of this clause, termination shall not however affect the rights of action and remedies of the Parties which shall have accrued at the date of termination or shall thereafter accrue.

25.7 Clauses which shall apply under 25.6 shall be:

- Confidentiality
- Insurance
- Governing Law and Jurisdiction
- Freedom of Information Act 2000
- Anti-Bribery Act

26.0 **Duration of Contract**

26.1 The Services shall be provided during the period stated within the Specification subject to IWM rights of earlier termination under the Conditions of Contract.

- 26.2 IWM reserve the right to extend the Contract beyond the period stated in the Specification. Payment for any extension shall be based upon the Contract Price subject to fair and reasonable adjustment to be agreed between IWM and XXXX. IWM must exercise any such extension by giving written notice to XXXX.

27.0 Facilities Provided

- 27.1 The Contract is to ensure that all IWM facilities used by XXXX, and any sub-contractors, is used with reasonable care at all times, to ensure that these facilities are fit for other users at all times.
- 27.2 XXXX shall ensure that all utility services are used with due regard to the need for the efficient use and conservation of supplies. XXXX shall observe any instructions issued by IWM in this connection.
- 27.3 Continuity of electricity, heating, water supplies and sewerage is not guaranteed and no liability will be accepted by IWM for shut-down or restrictions due to any cause whatsoever.
- 27.4 XXXX are not responsible for the maintenance of utility services to the Site, and any failure to provide these services during the installation works, will not be considered as a contract delay, and any impacts will be considered in relation to the contract completion date.

28.0 Variation of Requirement

- 28.1 IWM reserve the right to vary the requirements of the Contract as detailed within the Specification should this at any time become necessary. In the event of any variation of the contractual requirement, payment under the Contract shall be subject to fair and reasonable adjustment to be agreed between IWM and XXXX.
- 28.2 Any variation of any provision of the Contract must be effected in writing by IWM and no purported variation by any other means shall bind IWM.

29.0 XXXX's Organisation

- 29.1 XXXX shall provide and maintain an organisation having the necessary facilities and employees of appropriate qualifications and experience to undertake the tasks identified in the Specification.
- 29.2 All personnel deployed on work relating to the Contract must have appropriate qualifications and competence and in all respects be acceptable to IWM.
- 29.3 XXXX shall take all reasonable steps to avoid changes of personnel assigned to and accepted for the work under the Contract except whenever changes are unavoidable or of a temporary nature caused by sickness etc. XXXX shall give at least one month's notice to IWM of proposals to change key personnel. Clauses 29.1 & 2 apply to the replacement personnel.

30.0 Contract Documents

In any case of discrepancy between these Conditions and other documents forming part of the Contract, these Conditions shall prevail unless the

inconsistent provision of such document is expressed to be, or if the context indicates it to be, an amendment of these Conditions.

31.0 Variations of Contract

Any variation of any provision of this Contract must be effected in writing issued by IWM, and no purported variation by any other means shall bind IWM. All variations to this Contract will be submitted in writing to XXXX using the Variation Notice shown as Appendix 1 to these conditions of contract.

32.0 Monitoring & Liaison Meeting

- 32.1 XXXX shall be responsible for monitoring his performance of the Contract and provide IWM with full particulars of any aspects of his said performance that fail to meet the requirements of the Contract unless otherwise notified in writing by IWM.
- 32.2 XXXX shall taking into account all requirements arising from the Contract issue appropriate operating and procedural instructions in writing to all staff engaged on the Contract and provide copies to IWM by not later than the date of issue of the Certificate of Practical Completion of the Works. XXXX shall provide copies to IWM of any instructions that withdraw, notify or supplement any instructions previously in force within FIVE days of the issue of any such instructions.
- 32.3 XXXX shall maintain such records in respect of the Contract as IWM may reasonably require and shall on request produce them for inspection by IWM.
- 32.4 XXXX shall make available such records for the use of IWM when required. They shall not be released, published or disposed of without the prior written approval of IWM.
- 32.5 XXXX shall as required by IWM make written submissions or oral presentations of the Works delivered under this Contract in aid of any review of policy or of the conduct of business at the Premises. Liaison meetings between IWM and XXXX shall be held as required by IWM and XXXX. IWM will make the necessary arrangements for these meetings that will be held at the offices of IWM. A record of all such meetings shall be made by XXXX and shall be provided to IWM.
- 32.6 XXXX shall arrange for the attendance of such members of his staff and those of his sub-contractors or his agents who may be required by IWM to attend as witnesses any Board of Enquiry or similar proceedings.

33.0 Price

Unless otherwise stated in the Contract, the Price shall be the total price for the Services including the cost of all labour, materials, equipment, holiday relief or substitute as and when necessary, overheads and all other costs of XXXX in connection with the Contract for full and proper performance by XXXX.

34.0 Payment

- 34.1 Payments will be claimed through valuation process. Itemised claims accompanied by all necessary documentation shall be submitted to IWM for scrutiny and approval. Payment shall be made against certification of

satisfactory performance signed by IWM. Payments may be withheld or reduced by IWM in the event of unsatisfactory performance without prejudice to the other rights of IWM under the Contract.

34.2 Retention will be **5%** of the agreed Contract Sum for a period of one calendar year from the date of Practical Completion.

34.3 When it is the opinion of IWM that the works have been practically completed he shall issue a Certificate of Practical Completion stating the date upon which the Works had been so practically completed. IWM shall pay XXXX within 30 days of the date of issue of the Certificate of Practical Completion.

34.4 The defects period begins on the day after the date specified in the Certificate of Practical Completion as the date of Practical Completion.

If no defects appear within the Defects Period, or when all defects specified in the Schedule of Defects prepared by IWM within 14 days of the expiry of the Defects Period have been rectified, IWM shall issue a Final Certificate. IWM shall within 30 days of the date of issue of the said Certificate pay to XXXX such sum as represents the Contract Price plus any additional sums due under the agreement to XXXX less any payments previously made to XXXX and less any liquidated damages due to IWM.

35.0 Completion of Works on the Premises

35.1 XXXX is required to provide a programme of works indicating the sequencing of the operations; the envisaged timescale for the works; and the labour resource levels to be applied to the Contract based upon the Specification.

35.2 XXXX will be expected to provide updated work programmes on a regular basis throughout the Contract.

35.3 XXXX will be expected to commence the Premises works within 2 weeks of notification and upon receipt of the Order for the Works.

35.4 Prior to on the Premises commencing works, XXXX must liaise and agree with IWM the start date; finish date; working hours; the Premises access and any other matters arising.

35.5 XXXX shall inform IWM at least 2 clear working days prior to the intention of commencing works on the Premises.

35.6 There will be a response time of 24 hours during the defects liability period.

36.0 Practical Completion

IWM shall certify the date when in his opinion the works have reached practical completion.

37.0 Defects Liability

37.1 Any defects, excessive shrinkages or other faults to the Works which appear within 12 months of the date of practical completion and are due to materials or workmanship not in accordance with the Contract shall be made good by XXXX entirely at his own cost unless IWM shall otherwise instruct.

- 37.2 IWM shall certify the date when in his opinion XXXX's obligations under this clause have been discharged.

38.0 Defects in Existing Structure

Defects in the existing structure are to be notified to IWM without delay. Instructions are to be obtained from IWM before proceeding with any remedial works that may cover up or otherwise hide defective components/building fabric.

39.0 Proposals for Rectification

- 39.1 As soon as possible after any part(s) of the Works or any products are known not to be in accordance with the Contract or appear that they may not be in accordance, XXXX is to submit proposals to IWM for opening up, inspection, testing, making good, adjustment of the Contract Sum, or removal and re-execution.

- 39.2 Where such proposals may be unacceptable to IWM, IWM will have the authority to issue and have alternative instructions carried out.

40.0 Extensions of Contract Period

If it becomes apparent that the Works will not be completed by the agreed date for completion, or any later date fixed in accordance with the provisions of this clause, for reasons beyond the control of XXXX, including compliance with any instruction of IWM under this Contract whose issue is not due to a default of XXXX then XXXX shall thereupon in writing so notify IWM who shall make, in writing such extension of time for completion as may be reasonable.

Reasons within the control of XXXX include any default of XXXX or of others employed or engaged by or under him for or in connection with the Works and of any supplier of goods or materials for the Works.

41.0 Damages for Non-completion

If the Works are not completed by the completion date inserted in the Contract, or by any later completion date agreed between IWM and XXXX under the terms of this Contract, and such delay can be demonstrated to be caused by XXXX, XXXX shall pay or allow to IWM liquidated damages at the rate of **£1,000 per day** or part thereof between the aforesaid completion date and the date of practical completion. IWM may deduct such liquidated damages from any monies due to XXXX under this Contract or he may recover them from XXXX as a debt. Liquidated damages shall not be payable by XXXX in the event that the programme has been delayed by IWM or their designers.

42.0 The Work

- 42.1 The Work will be the subject of separate schedule(s) and/or Specification(s) and any drawing(s) as the case may be and shall be appended to this document.
- 42.2 Subject to an agreed programme all works shall be completed on a continuous basis.

43.0 Pricing of Schedules

- 43.1 Figures submitted are deemed to include costs for all plant, equipment, scaffolding, materials and labour etc. necessary to complete the Contract.
- 43.2 Any discrepancies in the Specification must be brought to the attention of IWM prior to the submission of figures.
- 43.3 XXXX shall install only those materials and fittings as listed in the Specification.
- 43.4 When XXXX is unable to procure the specified materials/fittings, XXXX must notify IWM advising of an alternative product, along with the appropriate supporting documentation.
- 43.5 If the alternative product is accepted, IWM will issue written authorisation to XXXX. XXXX is not to purchase any alternative product prior to receiving the written authorisation of IWM. If XXXX procures any of the alternative product prior to the approval of the Designated Officer this is at XXXX's risk, as IWM retains the right not to accept the alternative product.

44.0 Hours of Work

- 44.1 IWM may specify the period which XXXX shall carry out his operations and work shall be carried out in such a manner that the business of IWM suffers minimal interference. In the event that XXXX wishes to work outside normal working hours for his own benefit such work shall be subject to IWM's approval and any additional costs arising therefrom shall be borne by XXXX.
- 44.2 XXXX must provide a minimum of 2 days' notice of a request to work outside normal working hours. Even if the request is approved, IWM still retains the right to cancel the arrangement.
- 44.3 XXXX shall ascertain from IWM when the Premises will be closed for public holidays etc. when apart from exceptions set out in clause 44.1, entry will not be permitted.

45.0 Availability of Information

- 45.1 XXXX shall at all times during the course of the Contract and for a period of two years after final payment of all sums due under the Contract maintain in accordance with his normal procedures, a record of the costs incurred by him in the execution of the Contract including, for example, details of times taken and of wage rates paid, and such further particulars reasonably specified by IWM as being necessary for the purpose of determining such costs with reasonable accuracy.
- 45.2 At the time before the expiry of the period pursuant to clause 45.1, XXXX shall, when requested by IWM, furnish a summary of any such costs mentioned in such form and detail as IWM may reasonably require, and afford such facilities as IWM may reasonably require for his representatives to visit XXXX's premises and examine the records under this clause.

46.0 **Transfer of Responsibility**

- 46.1 In the event that a different organisation is required to take on the Service/Works at the expiry or termination of the Contract, XXXX shall co-operate in the transfer under arrangements to be notified to him by the IWM.
- 46.2 The transfer shall be arranged between IWM and XXXX so as to reduce to a minimum any interruption to the Services

47.0 **Quality Assurance**

XXXX shall ensure that all Services carried out under the Contract and performed by suitable qualified persons and that British Standards, or equivalent Specifications where such exist, are used unless otherwise agreed in writing by IWM.

48.0 **Statutory Requirements**

- 48.1 XXXX shall comply with all local and national statutory requirements relating to the Works and shall pay for any and all fees and charges in respect of all such costs.
- 48.2 In this Contract, the term 'Statutory Requirement ' includes any Act of Parliament and Order, Act, Regulation, Instrument, Notice, Byelaw or Requirement made or authorised by or under any Act of Parliament and includes the requirements of any statutory undertaking affected or likely to be affected by the Works or the proposed works.

49.0 **Freedom of Information Act 2000**

- 49.1 IWM is subject to the provisions of the Freedom of Information Act 2000 ("FoIA"). FoIA obliges IWM to release certain information to third parties upon written request, unless subject to one of the exemptions under FoIA.
- 49.2 The Parties agree that all information pertaining to the Contract shall be released to third parties upon request.
- 49.3 Under the terms of FoIA IWM may be ordered by the Information Commissioner to release information to a third party.

50.0 **Occupied Premises**

The Works are to be carried out on occupied premises with the minimum of inconvenience, nuisance and/or danger to the occupants and other users.

51.0 **Materials and Workmanship**

- 51.1 Materials and Workmanship shall be of the highest order.
- 51.2 Only operatives skilled in their respective trades are to be employed on the Premises during the execution of the Works with the exception of apprentices in training and labourer's as required for moving equipment etc.

51.3 All work undertaken will comply with the relevant British Standard Code of Practice and/or the Manufacturer's Fixing and Fitting Instructions.

51.4 Materials may be stored on-the Premises only with the prior agreement of IWM during the progress of the Works. Materials must be stored safely and in accordance with the manufacturer's instructions.

52.0 Temporary Works

52.1 XXXX shall provide ladders, steps, trestles, scaffolding and platforms as necessary for the complete execution of the Work.

52.2 XXXX shall provide covers and dustsheets as necessary to protect floors, carpets, tables, fittings and furnishings, as requested by IWM.

52.3 XXXX shall provide adequate temporary lighting to all work areas during the progress of the works.

52.4 XXXX shall provide all mandatory the Premises safety signage during the progress of the works.

53.0 Protection of IWM Property

53.1 XXXX must protect and maintain all services and make good any damage(s) caused by reason of the Works.

53.2 XXXX must protect existing buildings, fences, gates, walls, internal furniture and fittings etc. and other the Premises features.

53.3 XXXX must ensure that no damage is caused to roads, paved areas, paths, trees, shrubs and lawns, the Premises drainage and covers.

53.4 XXXX must ensure that no unused paint is tipped into the drainage system, and the Premises access routes are to be kept clear of all builders' plant, materials and other debris.

54.0 Fire Precautions

54.1 XXXX is to take all reasonable precautions to prevent loss or damage from fire, and to maintain fire points within the area of the works. Locations and number of units are to be agreed with IWM.

54.2 Any fire fighting equipment provided by XXXX is to be inspected, before deployment, by IWM.

54.3 All flammable paints shall be stored in metal containers and in an approved location.

54.4 The use of naked flames stripping equipment or hot air guns above 450°C air temperature is not permitted.

55.0 Ownership

Materials arising from the alteration works are to become the property of XXXX except where otherwise stated. All such materials arising shall be removed from the Premises as the Works proceed.

56.0 **Cleaning On Completion**

XXXX shall ensure that they clean the works thoroughly, removing all splashes, deposits, rubbish and surplus materials from fittings and glass, and clearance of the Premises.

57.0 **Safety, Health & Welfare**

XXXX, his employees, his sub-contractors and/or his agents, shall comply with current enactments, regulations and working rules relating to safety of employees and the general public, and the health and welfare of all employees and persons visiting the Premises.

58.0 **Waiver**

No whole or partial waiver of any breach of this Contract shall be held to be a waiver of any other or any subsequent breach. The whole or partial failure of either party to enforce at any time the provisions within this Contract shall no way be construed to be a waiver of such provisions nor in any way affect the validity of this Contract or any part of it, or the right of either party to enforce subsequently each and every provision.

59.0 **Force Majeure**

59.1 Neither Party shall be liable to the other Party by reason of any failure or delay in performing its obligations under the Contract which is due to Force Majeure, where there is no practicable means available to the Party concerned to avoid such failure or delay.

59.2 If either Party becomes aware of any circumstances of Force Majeure which give rise to any such failure or delay, or which appear likely to do so, that Party shall promptly give notice of those circumstances as soon as practicable after becoming aware of them and shall inform the other Party of the period for which it estimates that the failure or delay will continue.

59.3 For the purpose of this Contract “**Force Majeure**” means any event or occurrence which is outside the control of the Party concerned and which is not attributable to any act or failure to take preventive action by the Party concerned, but shall not include industrial action occurring within XXXX's organisation or within any sub-XXXX's organisation.

59.4 Any failure or delay by XXXX in performing his obligations under the Contract which results from any failure or delay by an agent, sub-contractor or supplier shall be regarded as due to Force Majeure only if that agent, sub-contractor or supplier is itself impeded in complying with an obligation to XXXX by Force Majeure.

60.0 **Severance**

If any part of this Contract, is found by a court of competent jurisdiction or other competent authority to be invalid, unlawful or unenforceable then such part will

be severed from the remainder of this Contract, which will continue to be valid and enforceable to the fullest extent permitted by law. In the event of a holding of invalidity so fundamental as to prevent the accomplishment of the purpose of the Contract, the Parties shall promptly commence good faith negotiations to remedy such invalidity.

61.0 Assignability and Transferability

Neither Party, may assign any rights under this Contract, without the written consent of the other Party, which is not to be unreasonably withheld, and any attempt to do without that consent shall be void.

62.0 Entire Contract

62.1 This Contract is the complete and exclusive statement of the Contract between the Parties relating to the subject matter of this Contract which supersedes all previous communications, contracts and other arrangements, written or oral.

62.2 The Parties hereto are independent organisations, and nothing herein contained shall constitute to create a partnership, agency or joint venture between the Parties.

63.0 Anti-Bribery

63.1 XXXX is aware of IWM's obligation to comply with the anti-bribery rules relevant to the contracting parties, and represents that it will not use money or other consideration, paid by IWM for unlawful purposes, including purposes violating anti-bribery laws including the Bribery Act 6310, such as make or cause to be made direct or indirect payments to any public official in order to assist IWM or any group member organisation or anyone acting on their behalf in obtaining or retaining business with, or directing business to, any person, or securing any improper advantage.

63.2 XXXX hereby declares that:

- its members, officers, owners or employees are not public officials;
- it does not and will not employ or otherwise compensate any public officials or make or cause another to make any direct or indirect offers of payments to any public officials, for the purpose of influencing or inducing any decision for the benefit of IWM and it will not employ any sub-contractor, consultant, agent or representative in connection with this Contract without a documented examination of his person, reputation and integrity, and;
- it will not employ any sub-contractor, consultant, agent or representative who does not comply with the anti-corruption rules and if such a violation comes to its attention to inform IWM immediately.

63.3 IWM may immediately terminate this Contract if XXXX violates any of the anti-corruption laws and the provisions as defined in this clause.

63.4 XXXX agrees to comply fully with all applicable anti-bribery laws, including those in the jurisdiction where they are registered and the jurisdiction where the relevant contract will be performed (if different), and to comply with IWM's Anti-Bribery Policy.

63.5 XXXX represents that:

- he or she or, as the case may be, the authorised representatives of XXXX presently is/are not, and during the life of the Contract will not become, an official or employee of the relevant country's government or of a political party in the country;
- he/she/they will disclose any such appointment immediately to IWM, and;
- such appointment may result in the termination of the Contract.

63.6 XXXX agrees that all payments made to XXXX will be made only after receipt by IWM of a detailed and accurate invoice supported by detailed records. IWM will make all payments under this Contract in Pounds Sterling, only by bank transfer to the account of XXXX at a financial institution within the United Kingdom.

63.7 XXXX agrees to keep accurate books, accounts, records and invoices and agrees that IWM is entitled, with the help of outside auditors if it deems necessary, to audit all books, accounts, records and invoices and accompanying documentation of XXXX for compliance with any applicable anti-bribery laws and that XXXX will cooperate fully in any such audit.

63.8 XXXX's failure to comply with all applicable anti-bribery laws or IWM's Anti-Bribery Policy will be deemed to be a material breach of the Contract entitling IWM to terminate the Contract. In the event XXXX will surrender any claim for payment under the Contract including payment for savvies previously performed.

63.9 IWM may also terminate the Contract or suspend or withhold payment if it has a good faith belief that XXXX has violated, intends to violate, or has caused a violation of any anti-bribery laws. IWM will not be liable for any claims, losses or damages arising from or related to failure by XXXX of the Contract under this clause, and XXXX will indemnify and hold IWM harmless against any such claims, losses or damages.

Appendix 1 – Variation Notice

VARIATION TO CONTRACT

Contract Title:

Contract Ref: IWM/Ret/

Variation no:

Date:

Between:

The Trustees of the Imperial War Museums(hereinafter called “**IWM**”) and XXXX Limited (hereinafter called the “**XXXX**”)

1. The Contract is varied as follows:

Details of Variation:

1

Variation effective from:

2. Words and expressions in this Variation shall have the meaning given to them in the Contract.
3. The Contract, including any previous Variations, shall remain effective and unaltered except as amended by this Variation.

SIGNED:

For: **IWM**

For: **XXXX**

By:

By:

Full Name:

Full Name:

Position:

Position:

Schedule 1 – Contract Conditions

1.0 Contract Requirements

- 1.1 This Contract covers the appointment of XXXX to construct, and coordinate the installation of the Real to Reel exhibition at Imperial War Museum London, Lambeth Road, London, SE1 6HZ.
- 1.2 The IWM is undertaking the design role, and XXXX will be required to liaise with the IWM Design team in relation to the designs, in addition to the IWM team.
- 1.3 Rawiya Jenkins will undertake the role of Project Manager for IWM on this project, and she is the initial point of contact on all issues.

2.0 Contract Period

- 2.1 XXXX will undertake the installation works at IWML between **XXXXXX**.
- 2.2 Completion of the installation works is time critical. As a result, XXXX will be charged liquidated damages to the sum of **£1,000 per day**, based upon the lost trading revenues. These will be applied as per clause 41 of the Contract.
- 2.3 XXXX will be able to access IWML between 8am and 6pm, Monday to Friday. Working outside of these times, is subject to prior agreement, and the submission of reasonable notice to IWM.
- 2.4 IWML is to remain open to the public for the duration of the installation. Where possible, deliveries and collections should only be undertaken between 7am and 9am Monday – Friday, and all deliveries should be accompanied by two people. Deliveries and collections outside of these hours may require additional security costs to be paid by XXXX.

3.0 Contract Fee

- 3.1 The total fee for the completion of the works is **£###**.
- 3.2 This fee is based upon the following breakdown of costs:
- 3.3 This fee will be paid against valuations:

4.0 Payment & invoicing

- 4.1 Invoices, quoting the IWM PO, are to be raised according to the agreed payment schedule.
- 4.2 All invoices must be forwarded for prompt payment to:

Finance Department
IWM London
Lambeth Road
London
SE1 6HZ

- 4.3 IWM agrees to pay all invoices within 30 days of their receipt. However, should there be a dispute over charges or the work completed in relation to the

contracted agreement, then the payment will be delayed until resolution has been agreed, and the 30 days payment period will commence from the date of resolution.

5.0 Working within IWML

- 5.1 When XXXX is required to work at IWML, they must always access the Premises via the Rear Yard Entrance.
- 5.2 Upon appointment, XXXX is to liaise with IWM to agree a programme of dates when XXXX is to be on the Premises to undertake the installation.
- 5.3 Delivery of materials and components to the building will be through the rear yard. XXXX is responsible for ensuring that they have taken all necessary measurements to ensure that they can access to their works area, XXXX is also to take all appropriate measures to ensure that fabric of the building is not damaged during delivery and assembly.
- 5.5 Power – Electricity from IWM's mains may be used for the Works. XXXX is to arrange for distribution to the point of use in a safe manner. XXXX will be responsible for the consequences of failure or restriction in supply.
- 5.6 Water – IWM's mains may be used for the Works. XXXX is to arrange for distribution to the point of use in a safe manner. XXXX will be responsible for the consequences of failure or restriction in supply.
- 5.7 Sanitation – IWM will provide access to sanitation facilities for XXXX. It is XXXX's responsibility to ensure that these are maintained in the same condition they were handed over.
- 5.8 CDM – XXXX is responsible for supplying all necessary information to Fraser Randall, as Principal Designer, and maintaining appropriate records.
- 5.9 Health and safety – XXXX must ensure that all staff adhere to IWM's Guidelines for Contractors Working on or in IWM Premises (included within the tender pack).

6.0 Management of the Contract

6.1 For IWM

Hannah Daley,
Imperial War Museum London,
Lambeth Road,
London, SE1 6HZ.

6.2 For XXXX

T:
E:

Schedule 2 – Specification & Drawings

Section 1 – Specification

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Section 2 – Drawings

Section 2 – Contract Data

Contract Data	Item	Detail	Notes
Advance Payment			
	Advance Payment Bond	NO	
	Listed items identified	Unique/ General	
Payment Certificate			
	Interim	Yes	Monthly Valuations
	Stage	N/A	
Retention			
	Expiry	Exhibition Closing Date	
	Amount	5%	2.5% payable through valuation after receipt of certificate of practical completion
Collateral Agreements to Third Parties			
Clause 17	Required	Yes/ No	
	Further details		
Public Liability			
Appendix 1 Part J(a)	Amount	£5,000,000.00 (Five Million)	
Employers Liability			
Appendix 1 Part J(b)	Amount	£5,000,000.00 (Five Million)	
Professional Indemnity			
Appendix 1 Part J(c)	Amount	£5,000,000.00 (Five Million)	
	1 claim or aggregate		
	Duration held	6 Years	
Product Liability			
Appendix 1 Part J(c)	Amount	£NA	
Holding Company Guarantee			
(Appendix 4)	Required?	Yes/ No	Can only be provided if the contractor has a parent or holding company and accept the terms in Appendix 4
Performance Bond			
(Appendix 5)	Required?	Yes/ No	If parent or holding company guarantee not available/ applicable and financial surety still desired.

Section 3 – Scope of Works & Specifications

- 3.1 Scope of Works**
- 3.2 Design Specification**
- 3.3 Conservation Specification**
- 3.4 Design Schedule of Works**

Section 3.1 – Scope of Works

Scope of Work

General

- This tender is for the Main Contractor Works comprising the contractor design, fabrication, installation and commissioning for the Imperial War Museum London Real to Reel Exhibition.
- The Contractor shall provide, subject to these conditions, everything necessary for the execution and completion of the works, in accordance with the contract and all drawings, specifications, schedules and/or instructions issued to him and will deliver the Works to the Client complete.
- The Contractor's attention is drawn to the Particular and Special Conditions sections of this Tender Specification.
- Notwithstanding the contents of the following Schedule of Works, the Contractor shall include in his tender for all items necessary to fully complete the Works shown in the Designer's drawings and specifications, irrespective of whether that work is specifically referred to or described in the Schedule. The description attached to each item shall in no way act as a limitation on the full amount of work required. He must allow for all other relevant drawings, specifications, current Building Regulations, statutory body requirements, etc.
- The Contractor must allow for applying for and obtaining all Building Regulation approvals, including providing calculations where necessary.
- All works is to be carried out in accordance with the Building Regulations and to the satisfaction of the Building Inspector.
- All materials must be a minimum of a Euro-class C (Class 1 equivalent) or, preferably, a Euro-class B (Class 0 equivalent) fire rating. The Contractor is to refer to the Design Specification for items that have particular fire-rating standards requirements.
- The Contractor must not scale off drawings and their attention is drawn to the fact that the sizes and measurements in the following sections are not necessarily exact, and the Contractor must verify dimensions on site, reporting any discrepancies to the designer immediately.
- The Contractor is directed to price each item individually.
- Where quantities have been included within the description of work, these shall be deemed to be indicative only and no reliance should be made on same.
- Where the extent of the work cannot be reasonably ascertained, the Contractor shall clearly state what has been included in the Tender Sum. No subsequent details or drawing revisions shall be deemed to be a variation if, in the opinion of the Contract Administrator, it would have been reasonable foreseen or required in the integrity of the works.
- The Contractor shall be deemed to have allowed for ALL labours, temporary works, interfacing, materials, plant, scaffolding etc. to carry out and complete the works described.
- All items shown in the drawings or specification are to be taken to be included in both. The tenderer shall immediately notify the Contract Administrator in writing of any discrepancy which occurs in or between the drawings or the specification or any parts of the tender, or discrepancies with the actual site conditions, in order that a decision may be made before the Date of Submission of Tenders. In the absence of the tenderer submitting such a notification, the tenderer is deemed to have accepted that all information contained in the tender documents, drawings and specifications are complete, thorough, accurate and sufficiently exhaustive for him to carry out the works, and he shall, during the course of the contract, upon the Contract Administrator's Instruction, submit shop drawings or supplementary drawings to elaborate on any part of the works.

- The Contractor shall make due allowance for undefined Provisional Sums work in programming, planning and pricing Preliminaries. No claim for additional allowances will, at any time, be accepted or entertained from the Contractor on the grounds of lack of knowledge or omission from programming, and he shall be deemed to have accepted this restriction as part of his tender submission and obligations.
- All the products and materials described in this specification shall be covered by a full performance guarantee (materials, parts and labour) for the 'life expectancy' duration of the exhibition(s), as set out in the tender programme. The guarantee period shall commence from the date of the Interim Project Completion.
- Definition of the 'life expectancy' is as follows:
 1. Structural elements shall not show symptoms of corrosion, electrolytic interaction and structural stress in materials, fixings or joints such that deterioration threatens the safety, integrity and function of the product as a whole within the minimum life-expectancy period.
 2. Visual elements, including materials – self-coloured and applied colour and graphics shall not show symptoms of colour fade, degradation, embrittlement or substrate interaction as a result of ageing and/or exposure to daylight, artificial light, climatic and local environmental conditions such that the colours change beyond the material manufacturer's expected tolerances within the minimum life expectancy period.
 3. The visual and functional aspects of the installed works, their components and contents shall not suffer as a consequence of condensation or any other aspect of weather or local environmental or climatic conditions within the minimum life expectancy period.
 4. All installed works and associated means for installation shall not suffer mechanically or functionally as a consequence of weather or local environmental and climatic conditions within the minimum life-expectancy period.
 5. Thermal expansion and any other forms of movement, creep, or lack of stress relief in fabricated, applied and finishing materials shall not cause any visual or material deterioration in a product or its sub-components within the minimum life expectancy period. This may require the Contractor to plan returns to site to specifically check for such movement and settling, to then carry out the required making good.
 6. In all other respects, including operational safety, the installed products shall perform throughout the duration of the minimum life-expectancy period as described in this specification.
 7. The Contractor shall ensure that all products, in respect of overall construction, materials, surface finish and applied materials, are resistant to fair and reasonable wear and tear resulting from normal public use and the applied cleaning, product maintenance and landscape maintenance activities normally found in public areas of this type. Special attention shall be given to the durability requirements of such products at skirting or ground level such that these parts of such products are physically and visually resistant to damage from day-to-day impact and abrasion.
- The Contractor shall exercise, in the design, all the skill, care and diligence to be expected of a competent main contractor and, in the execution and completion of the Works, all skill, care and diligence to be expected of a properly qualified and competent Main Contractor experienced in carrying out works of a similar scope, nature and size to the Works.
- The Contractor shall ensure the application of all relevant information, data and standards in the technical specification to the engineering, detail design and manufacture of all the products he is contracted to provide.

- The Contractor shall provide facilities at all reasonable times for the designer for the inspection, testing, accuracy and assessment of the quality of work and materials at the place of manufacture by the designer or its representatives.
- The Designer's comments on the Contractor's production information shall not relieve the Contractor of his responsibility for the adequacy or suitability of the information shown, or of its responsibility for the accuracy of the dimensions shown on its drawings, or for taking and checking dimensions.
- The Contractor shall be responsible for ensuring that all items are packaged and stored in accordance with any special requirements for particular materials. The contractor will be responsible for the general packaging and safe storage of all items such that the items will be adequately protected against damage in both storage and transit.
- The Contractor shall provide all necessary protection devices during storage on site and take all necessary steps to ensure that components are correctly stored and stacked to prevent damaged during storage.
- The Contractor shall provide, maintain, alter and adapt protective devices as necessary to protect the works during construction, assembly and installation up to the time when they have been completed. Materials used for temporary protection must be compatible with and removable from the surfaces and finishes without detriment to the finish and must be in accordance with the finished material supplier's instructions.
- The Contractor shall include in his tender for, and take positive measures to prevent, any possible damage to the work of others. The Contractor shall allow for removing all protective devices and thoroughly cleaning down before the works are presented for final approval.
- All materials shall be installed in strict accordance with the manufacturer's recommendations, relevant Agreement Certificates and British Standards.
- The general standards of practice contained in this section of the specification are the minimum standards required.
- These standards do not necessarily imply an overall suitability in terms of meeting all performance specifications, and it is the responsibility of the contractor to ensure that the standards he applies to the works described in this document will meet the Designer's performance specification set out in this document.
- The Contractor shall identify and provide a person responsible for the coordination, liaison and development of the works who shall efficiently supervise the execution of the works using their best skill and attention. The Contractor shall not remove such person from the works without the prior written approval of the Project Manager (such approval shall not be reasonably withheld) and if such approval is given, the Contractor shall be responsible for replacing such person or persons with a person or persons of equivalent competence who shall have been previously approved by the Project Manager.
- The Contractor shall provide a (named) Project Manager to liaise with Client, Exhibition Designers and Project Manager.
- The Contractor will be expected to provide a detailed programme for the execution of the works within two weeks of being awarded the contract.
- The Contractor shall be responsible for coordinating the works of their sub-contractors with each other and with his own works.
- The Contractor shall be responsible for coordinating their works, and those of their sub-contractors, with other relevant contractors and parties on site, as required, where there is a direct interface.

- Fraser Randall will act as the Contract Administrator and no other instructions or directions by whomsoever they are given shall have any effect or validity for the purposes of the Contracts.

Meetings and Reports

- The Contractor will be expected to attend fortnightly contractor meetings which will take place in London. The Contractor is also expected to attend meetings as necessary though all processes of the work.
- The Contractor is to issue status reports on a monthly basis, or as requested by the Project Manager.

Contractor Design

- The Contractor Design Portion clause in the contract should be referred to for Contractor Design.
- The Contractor Design element of the Contract will require development of IWML Design's tender and technical design drawings into production-ready information. This includes but is not limited to:
 - Finalised exact dimensions for all component parts within the Contractor's scope.
 - Development and verification of all structural support requirements, including for all structural engineering and calculations, ensuring sufficient structural strength while accommodating access space requirements.
 - Identification and resolution of any issues arising from the positions of works being undertaken by other parties, which interface with the Contract works.

Installation on site and hand over

- The conditions of Practical Completion are as follows:
 1. Completion of the Works.
 2. Operations & Maintenance Manuals (as detailed in content).
 3. Agreed snagging list.
 4. Health & Safety Files.
- The Contractor is expected to train up to 5no. IWML staff in the opening and closing of all cases, and any day-to-day maintenance requirements.

Main Contractor Specific Works & Detailed Coordination Responsibilities

- Construction Drawings – The Contractor shall be required to produce fully coordinated construction drawings, incorporating all sub-contractors' elements and interfacing works.
- Contractor Design Portions – The Contractor shall be required to undertake Contractor Design Portions works, including for the following:
 - Showcases.
 - Setworks structures that house integrated showcases.
 - Framework section, including integrated networks, showcases and lighting.
 - Tensile fabric screen structures.
- Principal Contractor – The Main Contractor will be required to take on the role of the Principal Contractor, as stipulated by the CDM Regulations 2015, and carry out the duties of this role for the entirety of the works for this project, i.e. their elements of works and those of any other parties working on the site. This will include preparation and maintaining the Construction Phase Plan.

This role requires close coordination with all those other parties, including (but not exclusively) review and approval of risk assessments and method statements, site inductions for their staff, appropriate frequency of H&S briefing / meetings, and ensuring appropriate health & safety signage and facilities are in place on site.

The Main Contractor's role as Principal Contractor for their own works, and a reasonable level of minor Client-direct works, should be included, as standard, within the Preliminaries costs.

- Setworks – The Main Contractor will be responsible for fabrication, contractor design (where required) and installation of the setworks elements for the Real to Reel exhibition in Galleries D36 and D30 of the IWM London, as per the details of the design specification.
- Showcases – The Contractor is to supply and install all new showcases, as per the details of the showcase schedule and design specification. There are three categories of new showcases:
 - Full Conservation Grade (as per the details of the showcase schedule and the IWML's showcase conservation specification.)
 - Security Grade (as per the details of the showcase schedule and applicable sections of the IWML's showcase conservation specification.)
 - Acrylic Hood (as per the details of the showcase schedule).

In the tender document, all showcases are currently specified to be full conservation grade, to achieve a 0.25 air exchange, with an option of being either produced from glass or acrylic (cases where existing showcase fronts are to be used are excluded). The specification and subsequent categories of showcases may be altered post-tender.

The Contractor is responsible for surveying, re-assembling and installation of the existing showcases to be supplied by the IWML, as detailed in the showcase schedule. Images of these showcases are provided with the tender documents.

The Contractor is expected to install free-issue contacts into showcases before they are brought to site. The Contractor should allow sufficient cableways for cabling to the contact points and liaise with the security contractor with regard to the installation, termination and commissioning of cables.

Locks for all new showcases and acrylic hoods will need to be suited to match. The IWML will provide the Contractor with the security code for the purchase of the locks. These locks will be deemed to be part of the tender price.

The Client's existing showcase fronts, which will be integrated into showcase structures, already have security locks and, therefore, the Contractor will not be required to purchase locks for these showcases.

The Contractor is expected to install free-issue environmental monitors into the showcases on site. The Contractor should allow sufficient cableways for cabling to the monitors and liaise with the environmental monitoring personnel from the IWML with regard to the installation, termination and commissioning of cables.

The Contractor is not expected to provide artsorb gel for the showcases in which it will be required. However, the Contractor should make sufficient provision in the tray for the size of the respective showcase. The artsorb trays are expected to be accessible without opening the case and have sufficient detail for easy add and removal of artsorb.

- Electrics, Power, Data & Lighting – The Contractor will be responsible for supply, installation, connection and testing of all power and data cabling to lighting and AV hardware back to the existing electrical riser, as per the details of the cabling schedule.

High-level lighting will be with existing fittings on existing track, which will be positioned by the Client and Lighting Designer. The electrical sub-contractor will need to include testing / commissioning of these with the wider testing / commissioning for lighting and electrical components. The Contractor will also need to include for the electrical sub-contractor's attendance to assist the lighting designer during the light focus.

Internal showcase lighting will be with existing fibre-optic fittings. The Contractor will be responsible for preparation, integration and installation of these existing fittings, as well as provision and installation of cabling to these locations. The Contractor is to make adequate allowances for both installation and also cabling, based on the tender design information, in lieu of the finalised lighting design and cable information.

The Contractor will be responsible for cabling and connections to the existing large lightboxes within the exhibition. These lightboxes contain existing light fittings.

The Contractor is to supply and install lighting, and associated cabling, for the back-lit graphic panels to be integrated within the frame networks structure.

The tender currently includes a provisional sum for as-yet unspecified lighting and electrical works. Details of these works and new lighting provision are to be confirmed in the lighting design, which is currently ongoing and will be finalised following the Main Contractor appointment. The costs for this portion of the works will be refined post-tender.

- AV Hardware – All AV Hardware equipment will be supplied and installed by the IWML. In instances where AVH components integrate with networks structures, the Contractor will be responsible for all the necessary coordination, i.e. determining support requirements, aperture dimensions, fixing methods / points and cabling routes. The Client will free-issue AVH items that need integration within networks structures to the Contractor for measuring and evaluation, along with the associated data sheets and / or drawings, as available / applicable.

Items that require Contractor involvement for installation are identified within the design specification.

- Graphics – It will be the Contractor's responsibility to supply and install graphics from the artwork supplied by the graphic designer for the Real to Reel exhibition in Galleries 36 and 30 of the IWM London.
- Mannequins – All the mannequins will be procured, dressed and installed by the IWML. However, the Contractor must allow for all necessary coordination and integration of the mannequins with their Contract works, i.e. support for mannequin mounts within/through networks plinths, easy access & removability from networks.
- General Works / Making Good – The Contractor will be responsible for making good all existing walls in Gallery 36, prior to commencement of the on-site works for Real to Reel.
- General Coordination Required – The IWML exhibitions team will act as Project Managers, and manage the Main Contractor and other works contractors, plus the process of liaison and coordination between the Main Contractor and other contractors. However, all contractors are required to act proactively with each other in any coordination required to achieve their works.

The Main Contractor will be responsible for the coordination of, and with, all their sub-contractors on and off-site.

The Main Contractor will be required to coordinate with the IWML facilities management department, AV department, security, workshops and conservation department, as necessary, where their Contract works require it.

Section 3.2 – Design Specification

REAL TO REEL EXHIBITION

Gallery D36
D Floor

IWM London
Lambeth Road
London SE1 6HZ
www.iwm.org.uk

Specification for Set Works
Prepared by: IWM London (Design)

Issued: 15 February 2016

The new temporary exhibition at the IWM London has been designed to display, for the most part, 3D and 2D cased objects drawn from IWM's collections and national and international lenders. The exhibition explores filmic representations of conflict over the last 100 years and therefore incorporates significant AV elements.

It is located in the D36 and D30 (formerly Singer Sargent) Galleries on the 3rd floor of the museum.

Note that IWM London has Grade II listed status.

Scope of Works

The successful set works contractor will provide the services of principal contractor and will appoint, co-ordinate and manage the graphics contractor and liaise and assist IWM Hardware and Software internal team.

The scope of works for the fit-out of the above exhibition as outlined within this specification is:

- The supply, manufacture and installation of: structures, joinery items, partitions, plinths, showcase, display panels and decorations, graphics all as described within each of the works sections of this specification.

This document should be read in conjunction with all other contract documentation and drawings.

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1 DEFINITIONS, ABBREVIATIONS AND INTERPRETATIONS

1.1 ABBREVIATIONS

This specification will use the following abbreviations:

SWC	Set Works Contractor
GC	Graphics Contractor
LD	Lighting Designer

IWML (PM)	IWM London Production Manager
IWML (Des)	IWM London Design
IWML (Con)	IWM London Conservation
IWML (Sec)	IWM London Security
IWML (Fac)	IWM London Facilities
IWML (Tec)	IWM London Technicians
IWML (Ele)	IWM London Electricians – FM
IWML (AVIM)	IWM London AV Interpretation Manager
IWML (AVHW)	IWM London AV Hardware technician
IWML (AVSW)	IWM London AV Software technician
IWML (WS)	IWM London Workshop

1.2 CONTEXT

The proposed installation is a temporary display and it should be assumed that the units will remain in position for 15 months. All fixings and materials used by the SWC in construction should take account of this requirement. Additionally, materials should be able to sustain wear and tear and be finished to the highest possible standard, with due consideration for health and safety.

1.3 INSTRUCTIONS

All instructions will come from IWML (PM). All instructions on the project are to go through IWML (PM).

1.4 ON SITE MEETINGS

The SWC should allow for attendance at regular and not less than fortnightly coordination meetings and on site production meetings.

1.5 CROSS REFERENCES TO THE SPECIFICATION

Where a cross-reference to a specification section is given on drawings or in any other document the SWC must verify its accuracy by checking the remainder of the annotation or item description against the terminology used in the referred to section. The SWC must, before proceeding, obtain clarification or instructions in relation to any discrepancy or ambiguity, which may be discovered.

1.6 FITNESS FOR PURPOSE/DESIGN RESPONSIBILITY

SWC to develop construction drawings based on IWM (Des) design intent. Comment on any problems with the designer's intent and suggest modifications if necessary, in order to achieve required performance and fitness for purpose. This responsibility includes the structural performance for installed items over the life of the exhibition and the SWC should consult with a qualified structural engineer in order to satisfy themselves that fitness for purpose is achieved.

1.7 EQUIVALENT PRODUCTS

Where the specification permits substitution of a product of different manufacture to that specified and such substitution is desired, before ordering the product notify the IWML (PM) / IWML (Des) and, when requested, submit for verification documentary evidence that the alternative product is equivalent in respect of material, safety, reliability, function, compatibility with adjacent construction, availability of compatible accessories and, where relevant, appearance. Submit certified English translations of any foreign language documents. Any proposal for use of an alternative product must also include proposals for substitution of compatible accessory products and variation of details as necessary, with evidence of equivalent durability, function and appearance of the construction as a whole. If such substitution is sanctioned, and before ordering products, provide revised drawings, specification and manufacturer's guarantee. Wherever products are specified by proprietary name and the phrase 'or equivalent' is not included, it is to be deemed included.

1.8 BRITISH STANDARD PRODUCTS

Where any product is specified to comply with a British Standard for which there is no equivalent European Standard it may be substituted by a product complying with a grade or category within a national standard of another Member State of the European Community or an international standard recognised in the UK specifying equivalent requirements and assurances in respect of material, safety, reliability, function, compatibility with adjacent construction, availability of compatible accessories and, where relevant, appearance. In advance of ordering notify the IWML (PM) / IWML (Des) of all such substitutions and, when requested, submit for verification documentary evidence confirming that the products comply with the specified requirements. Any submitted foreign language documents must be accompanied by certified translations into English.

1.9 DIMENSIONS

The accuracy of dimensions scaled from the drawings is not guaranteed. Obtain from the IWML (PM) / IWML (Des) any dimensions required but not given in figures on the drawings nor calculable from figures on the drawings. Figured dimensions on drawings shall be followed in preference to scale. The contractor should check all relevant dimensions on site before commencing any work. Dimensions relating to nominated sub-contractors or others employed direct by the Museum to be checked on site and agreed with them irrespective of comparable dimensions on the drawings. SWC is to inform the IWML (PM) / IWML (Des) of figured dimensions which do not relate to profiles of contractor's drawings at setting out stage and is not to proceed without IWML (PM) / IWML (Des) written approval.

1.10 GLOSSARY OF TERMS

FIX ONLY: means all labours in unloading, handling, storing and fixing in position, including use of all plant.

SUPPLY AND FIX: Unless stated otherwise all items given in the schedule of work and/or on the drawings are to be supplied and fixed complete.

REMOVE: means disconnect, dismantle as necessary and remove the stated element, work or component and all associated accessories, fastenings, supports, linings, and bedding materials, and dispose of unwanted materials. It does not include removing associated pipework, wiring, ductwork or other services.

REPLACE: means remove the stated existing components, features and finishes. Provide and fit new components, features or finishes, which, unless specified otherwise, must match those, which have been removed. Make good as necessary.

REPAIR: means carry out local remedial work to components, features and finishes as found in the existing building. Re-secure or re-fix as necessary and leave in a sound and neat

condition. It does not include replacement of components or parts of components or redecoration.

MAKE GOOD: means carry out local remedial work to components, features and finishes which have been disturbed by other, previous work under this Contract and leave in a sound and neat condition. It does not include replacement of components or parts of component or redecoration. The meaning of the term shall not be limited by this definition where used in connection with the defects liability provisions of the Contract.

EASE: means make minor adjustments to moving parts of the stated component to achieve good fit in both open and closed positions and ensure free movement in relation to fixed surrounds. Make good as necessary.

TO MATCH EXISTING: means use products, materials and methods to match closely all visual characteristics and features of the existing work, with joints between existing and new work as inconspicuous as possible, all to approval of IWML (Des)/IWML (PM).

2 APPROVALS

2.1 APPROVALS

2.1.1 Approval of products

Where approval of a product is specified, the requirement for approval relates to a sample of the product and not to the product as used in the works. Submit a sample or other evidence of suitability. Do not confirm orders or use the product until approval of the sample has been obtained. Retain approved sample in good, clean condition on site. Ensure that the product used in the works matches the approved sample.

2.1.2 Samples of finished work

where a sample of finished work is specified for approval, the requirement for approval relates to the sample itself (if approval of the finished work as a whole is required this is specified separately). Obtain approval of the stated characteristic(s) of the sample before proceeding with the works. Retain approved sample in good, clean condition on site. Ensure that the relevant characteristic(s) of the Works match the approved characteristic(s) of the sample. Remove samples, which are not part of the finished works when no longer required.

2.1.3 Inspection

Inspection or any other action by the IWML (PM) / IWML (Des) must not be taken as approval of products or works unless the IWML (Des) so confirms in writing in express terms referring to: date of inspection, part of the work inspected, respects or characteristics which are approved, extent and purpose of approval and any associated conditions. Most items will be made up in the SWC's factory. Full assembly of composite units will take place under factory-controlled conditions. Where deemed necessary, IWML (Des) and IWML (PM) will inspect the finished modules and approve item(s) for delivery and installation. SWC will then demount the units, pack carefully all components and deliver to site ready for final assembly.

3 CO-ORDINATION & SETTING OUT

3.1 CO-ORDINATION

Co-ordination with the following consultants will be required to ensure the correct procedures are followed and approvals are obtained:

SWC	Set Works Contractor
GC	Graphics Contractor
LD	Lighting Designer
IWML PM	IWM London Project manager
IWML Des	IWM London Design
IWML Con	IWM London Conservation
IWML Sec	IWM London Security
IWML Fac	IWM London Facilities
IWML Tec	IWM London Technicians
IWML Ele	IWM London Electricians – FM
IWML AV	IWM London AV technicians and Interpretation Manager
IWML WS	IWM London Workshop

All co-ordination will be administered by the IWML (PM) / IWML (Des)

Structural Stability: The main purpose of the design drawings is to show the profiles and finishes. The framework shown is notional and alternative methods of construction will be discussed with the successful tenderer. However, it will be deemed that the SWC will not manufacture or fit any part of the contract unless he (the SWC) is satisfied with the structural durability and practicability. All structures must satisfy the requirements of Construction (Design and Management) Regulations (2007).

3.1.1 Existing showcases

It is intended to re-use existing “CLICK” showcase fronts. These will be free issued to the contractor by IWM. There are four sizes proposed for use in the exhibition as indicated on IWM showcase schedule (**15-178_Showcase_Schedule**). See **Sketch 15-0178_SK_23** for an image of the existing case fronts.

The showcase interiors are to be built using ZFMDF and all showcases are to meet conservation quality environmental air exchange standards with adequate sealing undertaken by SWC to achieve an air exchange rate of 0.25, in consultation with IWML (Con). An accessible ProSORB compartment is to be included at the base of showcases. Air circulation slots in the floor of the showcase are to be included.

It is intended to produce new aluminium tray-based caption holders for the inside of showcases. These will be included for as a provisional sum at the tender stage.

Internal showcase lighting will be from existing stock of fibre-optic light sources and heads, which will be free-issued by the Client to the Contractor for integration within the showcase structures.

Click showcases are available to view at IWM London by request to inform tender submissions.

3.1.2 New conservation grade showcases

As per details on showcase schedule it is expected that the SWC will produce, where required, new showcases with fully sealed edges to achieve air exchange requirements of 0.25. An accessible Prosorb compartment is to be included at the base of showcases. Air circulation slots in the floor of the showcase are to be included. These cases should be constructed using 12mm acrylic or glass to match the specification outlined in clause 5.2 of the Design Specification.

3.1.3 New acrylic showcases

IWM is exploring the possibility of using acrylic hood showcases for a small number of prop (i.e. non-collection/ non-loan) objects. The SWC would be advised on appointment of any revisions to the showcase schedule to reflect the introduction of such cases. If used, the SWC would be required to produce a number of these acrylic hood showcases. These would not be required to achieve air exchange standards but must be able to deliver a secure and clean environment for the display of prop objects.

3.1.4 Audio Visual Hardware Technicians (IWML AV)

Co-ordination will be required to ensure all openings sizes, cable runs, access panels, ventilation for equipment etc. are adequate and fit for purpose.

The IWML AV will supply and install all items for AV hardware use (e.g. projectors, monitors). The SWC will be responsible for installation of required bracketry, supports etc. for AVH elements.

The SWC will be required to include for assisting with installation of the following AV items, which have complicated integration with the networks structures:

- AV1.2 Somme Projection Screen.
- AV3.2 Capturing Combat Projection Screen.
- AV5.1 Finale

Items requiring integration within networks structures will be free-issued to the SWC for evaluation and measuring, along with associated supporting information. The SWC will give the IWML AV a min of 4 weeks prior notice formally requesting delivery of required items or templates.

3.1.5 Museum objects

Refer to drawings & museum object schedule for all objects on open display and in showcases. The objects are also identified on the drawings. Some objects will require little or no co-ordination, however others will require inspection and survey by the SWC to ensure the SWC have made suitable provision for objects in terms of size/weight and fixings. Some objects may also require the SWC is present to assist with the installation of the object.

Extreme care should be taken at all times when dealing with museum objects to ensure that no damage occurs to the collection. IWML Con will be required to be present at all times when the SWC is dealing with museum objects. Refer to the museum object schedule for further information.

3.2 SETTING OUT

3.2.1 Generally

Check the levels and dimensions of the site against those shown on the drawings, and record the results on a copy of the drawings. Site dimensions taken should include both plan and vertical elements. Notify the IWML (Des) and IWML (PM) in writing of any discrepancies and obtain instructions before proceeding.

Set out components and fixings at evenly spaced centres, straight, parallel and truly aligned with other features shown on the drawings. There shall be no visible misalignment in the finished work, which shall be square, regular, true to line, level and plane, with a satisfactory fit at all junctions.

Provide setting out information to other trades where their work impacts on the accurate fit and completion of the works.

Footprints of all large structures will be marked out on the floor (without damage to the floor finish) for IWML (Des) and IWML (PM) inspection. All structures relating to other trades should also be taken into consideration at this stage and marked out.

Inform IWML (PM) and IWML (Des) when overall setting out is complete and before commencing construction to allow for a full inspection.

SWC to advise and seek approval for its preferred method of delivery and assembly of component parts prior to executing shop drawings. In general it is preferred that wherever possible components will be delivered to site as large as is practically possible. This is to minimise unnecessary joints.

Any works to the structural fabric of the building should be kept to a minimum. Any required fixings to walls/columns etc. should be first agreed with IWML PM.

3.2.2 Appearance & fit

Arrange the setting out, erection, juxtaposition of components and application of finishes (working within the practical limits of the design and the specification) to ensure that there is satisfactory fit at junctions, that there are no practically or visually unacceptable changes in plane, line or level and that the finished work has a true and regular appearance.

Wherever satisfactory accuracy, fit and/or appearance of the work are likely to be critical or difficult to achieve, obtain approval of proposals or of the appearance of the relevant aspects of the partially finished work as early as possible.

Take all necessary site dimensions to ensure accurate fit of all prefabricated components. Set out accurately with all frame members and panels plumb, true to line, level and free from bowing, undulations and other planar distortions.

3.2.3 Tolerances

Permissible erection tolerances for the work shall not exceed $\pm 2\text{mm}$ from the designed positions in any direction and shall not be accumulative over runs of elements of components.

All components incorporated in the works shall be fabricated with a tolerance on the

designed lengths of +/-1mm and shall not deviate in straightness by more than 1 in 500 up to a maximum of 3mm.

3.2.4 Critical dimensions

Certain dimensions on the drawings are noted as 'critical'; set out and construct the works to ensure compliance with the tolerances stated on the drawings.

3.2.5 Thermal building movement

All elements to be designed, fabricated and installed to withstand all building movements, thermal movement, deflection, creep and similar movement without permanent deformation or other damage.

Fixings shall be capable of providing adequate adjustment without the use of packing shims. Allow for moisture and thermal movement of surrounding construction.

4 GENERAL DESCRIPTION OF PRODUCTS AND WORKMANSHIP

4.1 GOOD PRACTICE & GENERAL QUALITY OF WORKMANSHIP

Where and to the extent that materials, products and workmanship are not fully detailed or specified they are to be of a standard appropriate to the works. They should be suitable for the functions stated in or reasonably to be inferred from the project documents, and in accordance with relevant good building practice.

All materials used in the work should be of good, sound and suitable quality of their respective kinds and to the satisfaction of IWML (Des) and IWML (PM) to whom samples are to be submitted at their request for their approval without extra charge.

Except where otherwise stated and applicable the materials and workmanship are to comply with the latest appropriate recommendations of the British Standards Institution.

A high standard of workmanship and finish is required and all contractors must clearly understand that any work which is not, in the opinion of IWML (Des) and IWML (PM), up to such standards will have to be taken down and made good or replaced with new at the SWC's expense.

Operatives must be appropriately skilled and experienced for the type and quality of work. Take all necessary precautions to prevent damage to the work from frost, rain and other hazards.

Components and products should be inspected carefully before fixing or using and any which are defective should be rejected. Fix or lay components securely, accurately and in alignment. Any fastenings to comply with relevant British Standards. Provide suitable, tight packings at screwed and bolted fixing points to take up tolerances and prevent distortion. Do not overtighten fixings.

Ensure that all moving parts operate properly and freely. Do not cut, grind or plane prefinished components and products to remedy binding or poor fit without approval.

Alternative methods of construction will be considered at the tender stage but, in this case, the SWC should state whether he is offering a reduction in the tendered price for using a method which is more suited to his own plant. The alternative method must be fully described and dry samples may be requested from him.

4.2 PRODUCTS

4.2.1 General quality

All products are to be new unless otherwise specified. The SWC should obtain certificates of compliance from manufacturers when requested by IWML (PM) / IWML (Des), for products which are specified to a British or European Standard.

Where a choice of manufacturer or source of supply is allowed for any particular product, the whole quantity required to complete the work must be of the same type, manufacture and/or source unless otherwise approved. Produce written evidence of sources of supply when requested by IWML (Des) and IWML (PM).

Ensure that the whole quantity of each product required to complete the work is of consistent kind, size, quality and overall appearance.

Where consistency of appearance is desirable ensure consistency of supply from the

same source. Unless otherwise approved do not use different colour batches where they can be seen together.

If products are prone to deterioration or have a limited shelf life, order in suitable quantities to a programme and use in appropriate sequence. Do not use if there are any signs of deterioration, setting or other unsatisfactory condition.

4.2.2 Checking compliance of products

Check all delivery tickets, labels, identification marks and, where appropriate, the products themselves to ensure that all products comply with the project documents. Where different types of any product are specified, check to ensure that the correct type is being used in each location. In particular, check that:

The sources, types, qualities, finishes and colours are correct, and match any approved samples.

All accessories and fixings which should be supplied with the goods have been supplied.

Sizes and dimensions are correct. Where tolerances of components are critical, measure a sufficient quantity to ensure compliance.

The delivered quantities are correct, to ensure that shortages do not cause delays in the work.

The products are clean, undamaged and otherwise in good condition.

Any products which have a limited shelf life are not out of date.

4.3 PROTECTION OF PRODUCTS & COMPONENTS

Prevent over-stressing, distortion and any other type of physical damage. Keep clean and free from contamination. Prevent staining chipping, scratching or other disfigurement, particularly of products exposed to view in the finished work.

Keep dry and in a suitably low humidity atmosphere to prevent premature setting, moisture movement and similar defects. Where appropriate store off the ground and allow free air movement around and between stored products. Prevent excessively high or low temperatures and rapid changes of temperature in the products. Protect adequately from rain, damp, frost, sun and other elements as appropriate. Ensure that products are at a suitable temperature and moisture content at time of use. Ensure that sheds and covers are of ample size, in good weatherproof condition and well secured.

Keep different types and grades of products separately and adequately identified. So far as possible keep products in their original wrappings, packings or containers, until immediately before they are used. Wherever possible retain protective wrappings after fixing and until shortly before Practical Completion. Protective coverings must be resistant to weather conditions.

Ensure that protective measures are fully compatible with and not prejudicial to the products/materials. Do not deliver to site components that cannot immediately be put into suitable dry floored and covered storage. Components shall be packed in an appropriate manner for transportation that eliminates the likelihood of damage in transit and during on site handling. Rectify immediately damage caused during handling and installation.

Sufficient off-gassing time is to be allowed for in programme agreed by IWML (PM)/ IWML (DES) and SWC.

4.4 SUITABILITY OF RELATED WORK AND CONDITIONS

Ensure that all trades are provided with necessary details of related types of work. Before starting each new type or section of work, ensure that all previous, related work is appropriately complete, in accordance with the project documents, to a suitable standard and in a suitable condition to receive the new work. All necessary preparatory work to be carried out, including provision for services, openings, supports, fixings, damp proofing, priming and sealing. Ensure that the environmental conditions are suitable, particularly that the building is suitably weather tight when internal components, services and finishes are installed.

4.5 FIRE REGULATIONS

The materials used within the exhibition must comply with the latest issued Fire Regulations. Full compliance must be achieved for all items manufactured and supplied by the SWC. Test certificates for all materials used must be provided by the SWC at the outset of the contract for presentation to the Fire Officer.

Unless otherwise specified, the Euroclass B material fire-rating standard is to be met throughout for all large, static, wall-fixed items. However, the SWC is required to identify instances where Euroclass C materials are to be used for these types of items, when Euroclass B materials are not practicable.

All movable networks / furniture items / components must comply with the Euroclass C material fire-rating standard as a minimum, but where possible these are required to achieve the Euroclass B standard.

4.6 PESTS

Any hidden void spaces should either be completely sealed or access panels should be provided to allow IWML maintenance to check for the build-up of pests.

5 MATERIALS, FINISHES & FIXINGS

5.1 TIMBER

5.1.1 Preparation of timber All timber shall be seasoned (may be kiln dried) and properly prepared, it should be straight flat and free from torn grain or other blemishes. Except for rough-sawn timber of specified, timber faces which are exposed in the normal course of usage shall have all the machine marks removed and brought to a finely sanded finished surface. This standard of finish shall be applied to all veneered and solid hardwood/softwood finishes.

Panels for graphics' wrapping or application of photo reprographic panels shall be filled and sanded and free of any blemish or raised grain and with smooth edges. All sharp arises to be removed.

Timber on timber-based material must not be less than Euroclass C throughout its total thickness, and should achieve Euroclass B standards, where feasible.

Euroclass B standard is required to be met for timber used for large, static, wall-fixed items. The SWC is required to identify instances where Euroclass C materials are to be used for these types of items, when Euroclass B materials are not practicable.

It may be permissible to treat the timber using an impregnated approved fire retardant. SWC to supply details for the Fire Officer's approval.

5.1.2 Purpose-made joinery: Timber should be sourced from sustainably-managed forests. Fabrication standard: BS-1186-2. Sections should be accurate in profile and length, and free from twist and bowing. Machined surfaces are to be smooth and free from tearing, wooliness, chip bruising and any other machining. Joints should be tight and close-fitting.

Assembled components will be rigid and free from distortion. Provide pilot holes for screws; sink heads of countersink screws at least 2 mm below timber surfaces visible in completed work. Maintain the moisture content of timber and wood based products within the range specified for the component during manufacture and storage.

Finishing to joinery surfaces should be smooth, even and suitable to receive finishes. Arrises should be eased unless shown otherwise on drawings. Seal end grain in external components with primer or sealer and allow to dry before assembly.

5.1.3 Plywood: Where visible, to be best quality birch ply (defect-free, without knots, clean faces). To be selected with no damage to end-grain as possible from cutting. To be sanded smooth and small permitted blemishes filled with proprietary filler, coloured to match wood colour.

Where not visible plywood to be of prime structurally sound quality, free from warping, twisting or movement.

Unless otherwise specified all plywood used should conform to Euroclass B fire resistance, in line with the details stipulated in point 5.1.1, above. SWC to advise on thickness of plywood to suit each application, detail drawings are indicative.

5.1.4 Medium Density Fibreboard: Unless specified otherwise, all MDF boarding shall be fire-rated conforming to Euroclass B, in line with details stipulated in point 5.1.1, above, and used in accordance with the manufacturer's specification. All faces and edges of MDF shall be sealed with paint unless otherwise specified (e.g. requirement for plinth in section 3 to be clad with walnut-veneered MDF, c.f. drawing ref **Sketch 15-0178_SK_21**). No unfinished MDF shall be stored on site. SWC to advise on thickness of MDF to suit each application, detail drawings are indicative. ZF MDF to be used where indicated on drawings and for all showcases and showcase interiors.

5.1.5 Soft wood framing: Framing should be set at suitable centres for each application, SWC to advise, drawings are indicative only. All soft wood framing used should be treated to conform to minimum Euroclass C fire resistance, in line with the details stipulated in point 5.1.1, above,.

5.1.6 Coloured-throughout-fibreboard: Allow for Valchromat or equivalent coloured-throughout-fibreboard. <http://www.valchromatsa.com>

5.1.7 Profiled acoustic foam panels: Allow for fire-rated foam panels e.g. aixFOAM SH003 Pyramid Profiled Acoustic Foam, 1000 x 500 mm, height 30 mm, Orange - Polyester with flame protection fire class UL94HF1, self-adhesive equipped. <http://www.aixfoam.com/absorption-panel-sh003-pyramid-profiled-acoustic-foam>

5.2 GLASS

Unless otherwise specified, glass must be laminated and not less than 11.5mm in overall thickness. Cut outs in laminated glass to be free of blemishes. Edges where visible should be polished. Glazing generally: to BS 6262. Glass generally to BS 952 and BS EN 572, to be free from scratches, bubbles and other defects. Panels to be accurately sized. Ensure that glass, plastics, surround materials, sealers, primers, paints or clear finishes are compatible. Comply with glazing/sealant manufacturers' recommendations. Any glass bonding should be using clear UV bonding system suitable for application.

5.3 ACRYLIC

All edges to be polished. Refer to Showcase_Schedule for specified thickness when used for showcases. Where bonded, joints should be mitred with suitable invisible bonding cement free from bubbles and other defects and ensuring adequate sealing to achieve 0.25 air exchange. IWML (Des), IWML (Con) and IWML (PM) to approve all joints.

5.4 COATINGS

5.4.1 Preparation

Fabrication should be complete, and fixing holes drilled before applying coatings. All paint, grease, flux, rust, burrs and sharp arises are to be removed. Preparation to British Standard.

Preparation materials should be types recommended by their manufacturers and the coating manufacturer for the situation and surfaces being prepared. Substrates will be sufficiently dry in depth to suit the coating.

Abrade surface irregularities to a smooth finish. Dust, particles and residues from abrasion should meet application standard BS 6150, Section 5. Maintain suitable temperature, humidity and air quality during application and drying.

Surfaces to be clean and dry at time of application. Thinning and intermixing of coatings should only be done as recommended by manufacturer. Priming coats should be of a thickness to suit the surface porosity. The finish should be smooth and of uniform colour, free from sags, runs and other defects. Cut in neatly.

5.4.2 Painting

Use only premium quality paints (Dulux Trade or other approved brands) exactly as specified from approved manufacturers. Do not mix paints from different manufacturers. Deliver all paints to site in the manufacturer's labelled and unopened containers. All spare paint must be carefully labelled according to the area used and paint reference number to allow for future touching up, etc.

Fill joints with approved filler and sand down all timber and MDF surfaces. Lightly rub down where directed priming and undercoats with abrasive paper to remove surface nibs. Dust off before applying next coat.

Cut in neatly and cleanly. Do not splash or mark adjacent surfaces.

Painted woodwork: apply 1 no. primer, 1 no. undercoat and 2 no. topcoats when using oil based paints, eggshell.

Spray painting: unless specified otherwise all painting to be undertaken in the SWC's workshop using spray-painting equipment. Hard spray finish 2 pack acid catalyst lacquer where specified.

Brush Painting: unless specified otherwise brush painting only to be used with IWML (Des) and IWML (PM) approval. Lay off all areas evenly and ensure that brush marks have been minimised.

Fine roller painting: apply 1 no. seal coat, 3 no. topcoats when using water based paints. SWC to highlight any areas which will need further coats and cost appropriately. Unless otherwise specified use Vinyl Matt finish. Where paints are used under graphic wallpaper and vinyl the specification **MUST BE CHECKED WITH THE GC** to prevent non-adhesion. Use foamed plastic or short pile sheepskin rollers. Use brushes for cutting in.

All final colour references tbc by IWML (Des) and IWML (PM).

All paint finishes applied to panels for printing by the GC must be checked and agreed with the GC before fabrication.

5.5 METALS

5.5.1 Metalwork generally

Materials and workmanship: grades of metals, section dimensions and properties: To the appropriate British Standard and suitable for the purpose. Fasteners: to appropriate British Standard and, unless specified otherwise, of same metal as component, with matching coating or finish.

Finished components to be rigid and free from distortion, cracks, burrs and sharp arrises. Moving parts to be free moving without binding. Profiles should be accurate, with straight arrises.

Pre-fabricate and pre-assemble items in the workshop wherever possible. Edges and surfaces must be kept clean, neat and free from burrs and indentations. Remove sharp edges without excessive radiusing. Fit joints accurately to a fine hairline.

Provide for thermal movement to joints and fastenings, and in the installation of assemblies such as frames. Make the provision sufficient to prevent harmful effects from stress and fatigue, such as opening of joints, tearing and buckling of sheet metals and thin sections, and the like.

Assembly sealants to be compatible with powder coatings. Obtain approval of colour if sealants are visible after fabrication.

5.5.2 Welding/brazing generally

Surfaces to be joined: Thoroughly cleaned. Tack welds to be used only for temporary attachment. Joints should be made with parent and filler metal fully bonded throughout with no inclusions, holes, porosity or cracks. Surfaces of materials that will be self-finished and visible in completed work should be protected from weld spatter. Traces of flux residue, slag and weld spatter should be removed.

Finishing welded/brazed joints visible in completed work is not permitted on-site. Butt joints should be smooth, and flush with adjacent surfaces. Fillet joints should be neatly executed and ground smooth where specified.

5.5.3 Mild steel/general

Where not visible all mild steel to be treated against rust. Unless otherwise specified all other visible steel to be powder coated.

5.5.4 Powder coating

All metal surfaces both exposed and concealed are to be powder coated finished. Paint to be applied according to manufacturer's specification. Dry samples are to be provided to IWML (Des) to test durability of finish. All materials to comply with: BS 6496 for aluminium alloy backgrounds. Surfaces to receive powder coatings should be free from dust or powder deposits. Performance and appearance of powder coatings to BS 6496/ BS 6497.

5.5.5 Ironmongery

Unless otherwise specified all ironmongery should be agreed with the IWML (Des) and be an approved non-rusting metal. Where the use of pins is permitted, the heads shall be punched below the surface and the holes properly filled with stopping which matches the finished colour of the timber.

5.5.6 Racking system (c.f. drawing ref **Sketch 15-0178_SK_08**):

Allow for good quality galvanised steel racking system: e.g. CS Storage Single Bay Midispan Galvanised Racking 800 Deep/1200 Width mm and Single Bay Midispan Galvanised Racking 1000 Deep/1200 Width mm.

<https://www.csstorage.co.uk/single-bay-midspan-galvanised-racking-800mm-deep-1200-width.html> and <https://www.csstorage.co.uk/single-bay-midspan-galvanised-racking-1000mm-deep1200-width.html>.

5.6 FIXINGS

Anchors, plugs, screws, rivets and the like, shall be of an approved type, appropriate to the work, capable of transmitting the loads and stresses imposed, and sufficient to ensure the rigidity. All bolts, screws, nuts and anchors shall be of adequate strength for their design purpose and installed in accordance with manufacturers recommendations.

All visible screws shall be snake eye security countersunk screws, painted where applicable to match paint finish. All bolt fixings shall use washers and double nuts for locking.

Fixings should not be visible unless identified as such. Where visible fixings are deemed unavoidable these should be identified by the SWC. Fixings should not compromise air exchange requirements in showcases.

6 DESCRIPTION OF WORKS

6.1 WALL TYPE

6.1.1 New double-sided stud walls

18mm Euroclass B MDF wall; filled and sanded down; timber or metal studwork (SWC to advise). Sample for all wall types required for approval.

6.1.2 Existing gallery wall

Made good for either fine roller paint, scenic treatment or to take graphic wall paper.

6.1.3 Plywood stud walls

Structure for stud walls in Section 3 to comprise birch ply and redwood PSE with matte water-based varnish, filled and with no rough edges.

6.2 BARRIERS

6.2.1 Floor Mounted Barrier for timber floors

<http://www.absoluteproduct.com/wooden-floor-mounted-barrier.html>

6.3 SHOWCASE STANDS

6.3.1 The existing floor surface is likely to be slightly out of level therefore plinths and showcase stands will need to be fitted with adjustable levelling devices.

6.4 PROJECTION SCREENS

6.4.1 Projection areas: allow for aluminium frame with tensioned PVC material e.g. Harkness Stagelite Matt White 100: <http://www.harkness-screens.com/projection-surfaces-stagelite.html>

7 GRAPHICS PRELIMINARIES

7.1 GENERAL

This Specification is to be read in conjunction with the Graphics Schedule, Graphics Elevations and Construction Drawings as listed on the Drawing Issue Sheet.

The GC shall provide all labour, materials, equipment, etc., necessary to produce and install all Exhibition Graphics as detailed in the Graphics Schedules, Graphics Elevations and Construction Drawings, and as specified in this document.

The GC shall submit production and finishing specifications and installation instructions for each product.

7.2 GRAPHICS SCHEDULES

The Graphics Schedule (**15-0178_Real_to_Real_graphic_schedule**) gives details to allow for the pricing of graphics. The Graphics Schedules are based on current design, so details provided are not final and may change before final artwork is delivered.

The specific codes for group and individual graphic items are listed at the top of the Graphics Schedule.

Each item in the Graphics Schedule should be priced individually and these costs written against each item. General costs and preliminaries should be listed as separate items. The value of any items not priced in this way will be deemed to be included in the Tender and no subsequent claim in respect of unpriced items will be considered.

The Graphic Schedules and Specifications will form part of the Contract and no alteration or qualification is to be made to the text therein without the prior consent of IWML Des/PM. Any unauthorised alteration, amendment, note or addition will not be recognised.

7.3 INSPECTION

The GC shall allow IWML Des / PM to access their premises to inspect any graphic works throughout the course of exhibition production. IWML Des / PM shall give five working days' notice to the GC prior to any inspection visit.

The GC shall alert IWML Des / PM to any conflicts between dimensions, substrate, fittings and applied graphics prior to production.

7.4 CLEANING

Upon completion of the production and installation of the graphics and when any risk of damage is past, the GC shall inspect and clean all graphics to the satisfaction of IWML (Des).

7.5 MATERIALS

The quality of work and materials used in production shall be of the highest standards and conform to relevant British Standards. All materials shall be used in accordance to their manufacturer's instructions to ensure maximum durability.

The GC is responsible for the supply of all graphic substrates and installation unless otherwise stated, as indicated in the 'Graphics Contractor to supply/install' columns of the Graphic Schedule. The GC should not cost for substrates supplied by the SWC. The GC should quality check and inspect for damage any substrates supplied by the SWC and notify IWML Des/PM of any imperfections.

The GC shall check all panel specifications before graphic production and notify IWML Des/PM of any discrepancies. Dimensions and specifications listed in the Graphic Schedules are provided as a guide only.

8 GRAPHICS CONDITIONS AND REQUIREMENTS

8.1 LIFESPAN OF THE EXHIBITION

All graphics materials and finishes should be chosen and produced to sustain a minimum of 15 months life span. Additionally, materials should be able to sustain wear and tear and be finished to the highest possible standard, with due consideration for health and safety.

8.2 INSTRUCTIONS

All instructions will come from IWML (PM). All instructions on the project are to go through IWML (PM).

8.3 ON SITE MEETINGS

The GC should allow for attendance at regular and not less than fortnightly coordination meetings and on site production meetings.

8.4 DRAWINGS

IWML Des / PM shall issue to the SWC and GC a set of relevant drawings to assist on site installation.

The SWC and GC shall check all dimensions on site as required, prior to construction. The GC shall advise IWML Des/PM of any discrepancies, immediately.

Any enquiries regarding these drawings or other information supplied should be made to IWML Des/PM.

8.5 MATERIALS AND COMPONENTS

The SWC and GC shall ensure that the relevant information for materials and components is available on site while installation work is being carried out.

The SWC and GC shall retain all documentation.

8.5.1 Dibond (Standard Digital): Unless specified otherwise, all Dibond to be used in the 'Standard Digital' range shall be fire-rated conforming to Class B2 (according to DIN 4102-1) and used in accordance with the manufacturer's specification. The GC shall advise on the thickness of Dibond to suit each application – detail drawings are indicative. Machined surfaces must be smooth and free from any machining defects.

8.5.2 Medium Density Fibreboard: Unless specified otherwise, all MDF boards shall be fire-rated conforming to Euroclass C under BS476 Part 7 and used in accordance with the manufacturer's specification. All MDF faces and edges shall be sealed with paint. No unfinished MDF shall be stored on site. The GC shall advise on the thickness of MDF to suit each application - detail drawings are indicative. MDF shall be light resistant to comply with BS1006 and be a Class A board. Machined surfaces must be smooth and free from any machining defects.

8.5.3 Plywood: Where visible to be best quality birch ply (defect-free, without knots, clean faces). To be selected with no damage to end grain as possible from cutting. To

be sanded smooth and small permitted blemishes filled with proprietary filler coloured to match wood colour.

Unless otherwise specified all plywood used should conform to Euroclass B fire resistance. GC to advise on thickness of plywood to suit each application, current drawings are indicative.

8.5.4 Film / Vinyl: An appropriate Film/Vinyl substrate is to be selected following recommendation by GC and review of samples. The GC shall advise on the thickness of material to suit each application – detail drawings are indicative. Machined surfaces must be smooth and free from any machining defects.

Final use of any materials to be used within showcases is to be approved by IWML Cons prior to manufacture. This includes all substrates, fabrics, 3D elements and inks. Samples are to be provided for testing if required or documentation provided if materials have previously been approved for showcase use. Allow for up to four weeks for each test, ten weeks if a retest is required.

All works referred to in the Schedules are to be carried out to a first class standard.

8.6 SAMPLES

Samples are required for each material and process listed in the Graphics Schedule. The GC shall produce and submit two samples to IWML (Des) for approval; IWML (Des) will retain one sample, whilst the GC will retain the second sample for matching.

Test strips may be required at A3 size (minimum). Larger samples may be requested where applicable.

IWML (Des) shall supply all files for testing, specifications and delivery instructions.

IWML (Des) shall specify whether test artwork should be printed actual size or enlarged.

The GC shall make sure that all specified colours will print consistently across a variety of substrates.

Repeat samples may be requested if the GC produces samples that are not to the satisfaction of IWML (Des) – i.e. if the printing method suggested by the GC has not produced the desired effect on the substrate.

Additional samples may be required at a later date to those currently specified in the Graphics Schedules.

Ideally, the GC will deliver samples back to IWML (Des) no later than five working days from the issue of sample artwork. The GC will notify IWML (Des) if delivery of a requested sample will take longer than five working days.

8.7 INSPECTION AND APPROVAL OF WORKS

The GC shall allow for representatives of IWML Des / PM to visit their premises prior to installation for final checking of finished graphics.

8.8 GC TEAM MEMBERS AND SUB-CONTRACTORS

The GC shall state clearly in the Tender the names of the production and installation teams for IWML Des / PM to approve. The GC should state clearly in the Tender any works that may be subcontracted and submit the names of the proposed sub-contractors for approval by IWML Des / PM.

9 GRAPHICS SPECIFICATION

9.1 SITE MEASUREMENTS

All site measurements are to be checked on site by the GC before production of any graphic items. The GC shall notify IWML (Des) and IWML (PM) of any discrepancies.

9.2 SUPPLY OF FINAL ARTWORK

IWML Des shall supply high-resolution Adobe Illustrator EPS and Adobe Professional PDF files created from outlined Creative Suite 6 documents. The GC shall notify IWML Des / PM at Stage F: Tender if they cannot work with CS6 files.

The GC shall allow IWML Des 48 hours console time at the GC's production facility to assemble and manipulate any high-resolution files using Adobe CS software, if required.

IWML Des / IWML PM shall indicate any image crops by For Print Only (FPO) visuals and graphic elevations.

9.3 SCANNING OF HIGH RESOLUTION FILES

The number of high-resolution scans required is currently unknown by IWML Des. For the tender process, the GC shall quote a unit price for scanning files, and a separate cost for retouching, if required. Prior to scanning, the GC shall notify IWML Des/PM of any material that is scratched or damaged in any way that would appear in high-resolution format. If applicable, and only with the consent of IWML Des, the GC will retouch any scratches and imperfections on the scanned image.

For the tender process, the GC shall quote a unit price for drum-scanning.

Original material to be scanned to high resolution will be supplied by IWML Des in the form of transparencies (colour or black and white), negatives, original artwork and prints. All high-resolution scans are to be saved using the Graphics Code number from the Graphics Schedules. All acetate sleeves, covers, envelopes, etc, associated with each original must be kept and returned with it to IWML (Des). Please note that IWM will not allow its collection to leave the building, so this material will be scanned in-house.

9.4 CO-ORDINATION/NOTIFICATION

The GC shall check all artwork issued by IWML Des and notify IWML Des of any missing or additional artwork elements (i.e. fonts, colours, images etc.) before proceeding with production.

The GC shall notify IWML Des if there are any discrepancies between final artwork and the graphic elevations/production proofs.

Due to the close dimensional tolerances required to successfully execute the work, the GC shall carefully coordinate graphic sizes, locations and fixings with all adjoining work. The GC shall check that all artwork is correctly aligned with supplied substrates. The GC shall also check all fittings and features, such as door locks, hinges, push buttons, apertures and CNC routed graphics. The GC shall notify SWC and IWML Des/PM of any discrepancies before proceeding with the work.

9.5 APPROVAL

The GC shall supply IWML Des with a pdf proof of each graphic and a hard copy if requested. The GC should not proceed with the production of any graphic until IWML Des has signed off the supplied proof.

The GC shall make all graphics available to IWML for inspection before installing on site.

The GC shall submit any graphic requested by IWML Des for final production, installation checks and approval.

9.6 PRODUCTION TECHNIQUE

The information provided in the Graphics Schedules is based on the current design. The GC shall advise IWML Des of any suitable alternatives to those proposed. The following are production requirements for types of graphics occurring commonly throughout the exhibition:

9.6.1 MDF panels: the GC shall advise on the best inks/printing methods for printing direct to substrate. Wrap-mounted panels should be matt wrap-sealed with neat edges and corners. IWML Des will require samples for quality checking. The GC shall make sure that all panels are undamaged, smooth with no sharp edges. MDF panels should be matt wrap-sealed (GC shall advise on the best seal for durability, etc.). IWML Des have suggested 5mm aluminium split battens for fixing graphics to walls or strong double-sided tape. The GC/SWC should confirm that this is the best method or suggest an alternative. Samples of split battens should be supplied to IWML Des for approval, if requested.

9.6.2 Film / Vinyl: To be installed onto painted surfaces or onto showcase glass. The GC shall visit and check dimensions on site to identify any potential problems. The GC shall liaise with SWC to agree paint finishes for walls that have any applied vinyl graphics. All vinyl graphics should be resistant to UV damage and should be free from bubbles and defects. The GC shall make sure that all surfaces are cleaned thoroughly before any vinyl graphics are applied. The GC shall advise the best method to achieve a consistent appearance throughout, including exact vertical and horizontal alignment. All edges must be strongly adhered using a heat gun if necessary. Before using a heat gun, the GC must gain permission from SWC and IWML Des to ensure there are no risks to substrate, objects or showcase glass. The GC shall make sure that elements running across multiple vinyls are registered and aligned correctly. The GC shall make sure that any floor vinyl is able to withstand continuous visitor traffic without compromising quality and durability.

9.6.3 Screen-print or direct to media: The GC shall advise on the best printing method based on the limitations of their machines or any other production method issues. The GC shall inform IWML Des/PM of any production requirements or limitations (i.e. uneven walls) at their first co-ordination meeting. Samples will be required to check the sharpness of text and images on every type of substrate used.

9.6.4 Suspended / Entrance graphics: Digital print to banner material. Any entrance graphics specified in the Graphic Schedules should be printed so that the text is clear and sharp. Allow for translucent fabrics with aluminium fittings and steel wire-rope fixings to ceiling e.g. Praxis Mono Screen:

http://www.praxislimited.co.uk/mono_screen.html The GC should allow time to liaise with the SWC to co-ordinate fitting the entrance graphics/banners on site.

9.6.5 Captions: Sizes and production methods for individual captions are specified in the Graphics Schedules. Substrates and inks used in the manufacture of showcase captions are to be submitted to IWML Con for approval before production begins.

9.6.6 Digital print to wallpaper (if used): The GC shall discuss and agree with SWC how walls should be primed to ensure the adhesion of wallpaper. The GC should be aware that in some areas, especially showcases, paint finishes cannot be changed and in these instances a suitable adhesive should be recommended. The GC shall advise the best method to achieve a consistent appearance throughout, including the careful application of adhesive to avoid removing colour if adhesive bleeds out. The GC shall provide IWML Des with samples to check for consistency. The GC should install all wallpaper on site. Where wallpaper is to be wrapped around another substrate such as Forex, MDF or a door, the GC shall make sure that registration and alignment is correct. Wallpaper graphic panels should be wrapped and sealed (the GC to advise on the best seal for durability, etc.).

Access doors (supplied to GC by SWC), graphic panels and caption panels in showcases can all be produced off site. GC shall suggest methods of protecting vulnerable edges, and supply samples to IWML Des for approval, if requested.

9.7 LABELLING AND PROTECTION

The GC shall code and label all substrates using the Graphics Reference Number from the Graphics Schedule (e.g. EXT.01, ENV.01). This should be maintained by the GC to ensure correct artwork is printed onto each substrate and to allow correct installation.

The GC is responsible for making sure that each graphic item they produce is adequately protected for transportation to site (i.e. using corner protector and bubble wrap). Every graphics item should be clearly labelled on the substrate and the wrapping with the Graphics Reference Number. The graphic items continue to be the responsibility of the GC until the GC's own installation has been completed to the satisfaction of IWML Des/PM.

The GC shall ensure that all installed panels are protected on site until such a time as the site is clear.

Section 3.3 – Conservation Specification

IMPERIAL WAR MUSEUM SHOWCASE

SPECIFICATIONS

3/4/14

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INTRODUCTION

1. The following document sets out the performance requirements for the showcases. While the Museum itself has a long-term purpose, many of the exhibits will be temporary, with the content of the cases changing during the life span of the exhibition. Design which offers maximum flexibility of use is therefore essential. All showcases that are to contain or likely to contain (now or in the future) valuable or high security items such as firearms (see the Home Office *Firearms Security Handbook* published March 2000) must be designed to the appropriate level of security. The specification of a case must be retained by the Museum, to identify in the future whether a case can be used for valuable or high security items.

CONSTRUCTION

General

2. Display cases are to be robust, secure, and constructed from materials that will not harm their contents. To ensure this, all materials should be approved for use within the showcase by the Department of Collections Management. This process can take six weeks and will need to be repeated every five years for materials like adhesives, paints etc, where the manufacturer periodically changes the composition.
3. Cases should be designed to provide a significant level of physical resistance to attack in accordance with BS5544 (Glazing resistant to manual attack), which is generally met by the use of 11.5mm five-ply laminated glass. Basic areas used for display, including individual display cases, are to be protected against theft, vandalism, fire, and flood.
4. Cases need to provide sufficient space between the floor and the lowest shelf or pallet to reduce the risk of damage from flooding and to allow for cleaning (minimum of 20cm).
5. Cases must not, during the normal course of their use, or periods of installation of the collection, endanger the safety of staff, visitors, or the collection.
6. All materials used in the construction, finishes, and lining of the cases should either be inert or classified as suitable after testing against the British Museum Standard Materials Test, (the 'Oddy' Test), and proven to be safe for the duration of the exhibition before construction begins. A list of all proposed materials to be used in the construction of the display case should also be provided.
7. All finishes need to be selected to minimise maintenance and should be of a standard that will minimise the emission of harmful substances. Samples of a standard range of finishes are to be provided along with any safety data relating to the proposed materials.

8. The Museum will require suitably detailed drawings from the showcase Contractors to enable them to ensure that the cases comply with the Specification. The contract period must allow for at least seven working days for approval of all drawings by the Museum at appropriate stages.

Stability/Framework

9. The showcase Contractor should advise the Museum as to whether it is necessary to fix the case to the wall or floor, for reasons of stability. Levelling of free standing cases should be achieved by installing integral levelling adjustable legs in the corners of the cases, and ensuring that if the cases are moved, they can be levelled again by the Museum's staff without the use of specialist equipment (or, otherwise, any necessary equipment should be included in the costings). Cases fixed to walls or floors should be levelled at installation. The Museum should be notified if chemical anchoring is required.
10. The case must be robust and sturdy so that it cannot be readily moved. Internally any shelving or display elements are to be fitted to prevent collapse or movement if knocked. Display cases should be rigid, strong, and inherently stable throughout all intended operations. All loads must be adequately transmitted from the display case onto the support structure and thus the building.
11. Glass panels should be retained by the frame on a minimum of two sides to a depth of 25mm to avoid 'springing out' under impact. Deflection test results should be made available to the Museum, by the showcase Contractors.
12. Framework should be capable of taking a reasonable weight, commensurate with display contents and installation methodology/maintenance requirements.
13. All cases should be clearly physically labelled in a discrete location with the maximum weight loading of the whole case.

Glazing

14. Water white glass, with no iron content, should be used for optical purity.
15. Glass should be laminated anti-bandit not less than 11.5mm five-ply laminated glass to BS6206, 6262 and 5544.
16. 150mm x 150mm samples of whole and shattered glass should be submitted by the supplier to the Museum for inspection, in order to establish the actual colour of the glass and its integrity after breakage. Samples should be submitted a minimum of two months prior to finalisation of materials.

Dressing

17. The following criteria need to be considered when selecting lining panels for the display void, including any internal dividing panels:
- Inherently stable in structure and composition;
 - Capable of supporting light imposed loads when used as back panels;
 - Capable of accepting fixing screws to support objects
 - Capable of securing firearms (see 30 - 44 below), in those cases that are to contain, or likely to contain, firearms now or in the future.
 - Capable of supporting padding material to facilitate pinning of objects;
 - Capable of supporting imposed point loads when used as base panels;
 - Easy to fabric wrap and re-cover when necessary;
 - Relatively light-weight and easy to handle;
 - Suitable for applied paint finishes;
 - Withstand surface damage from the handling and placing of objects;
 - Constituted of an inert or appropriately sealed material;
 - Rigid and self-supporting.
18. Testing results of all materials that are to be used (including who performed the tests and the date the testing took place) must be supplied to the Museum along with samples of the materials two months prior to the finalisation of materials. The Museum also reserves the right to perform its own tests on the material. It is the showcase Contractor's responsibility to supply material samples.

SECURITY

22. Casings should be solid, either metal or timber. If timber, a sandwiched layer of Expamet or similar metal mesh has been inserted if the back or sides of the showcase are exposed and unprotected by other adjacent structures. Seals are to be made of non-acetic acid curing silicone rubber e.g. Dow Corning 797 or Silastic alcohol-curing silicone.

23. The fixing or framing system for case glazing must equal and enhance the level of security provided by the glass. Glass-to-glass joints, particularly at mitred corners, must withstand cutting by simple tools. Metal-framed cases should have flanged corners with an overlap of at least 25mm to prevent a levering attack on the case corners.
24. All locking mechanisms must be positive and secure to the highest security standards, yet easy to use e.g. Abloy. It should not be possible to remove the key from the lock unless the case is shut and secured. Any means of access into the case display void must be locked with a minimum of two locks per door or opening panel. The case locks must solely prevent access to the case and must not be used to achieve door security or air-tightness. The case locks should prevent access to a secondary, mechanical, locking system which secures all opening panels into the case and exerts the necessary compression on case seals. This mechanical locking system should be located to prevent horizontal and vertical movement of the door. Locks should be suited, enabling each to be opened with its own individual key, but also providing a master key that opens all locks.
25. Locks, hinges, case reinforcement, and other security devices should be as concealed as is possible. All visible or accessible screws or hinges must be of the approved anti-tamper type. Ideally locks should be concealed and protected from direct attack. Where locks are visible, anti-tamper fittings or heads are provided to deter vandalism. The lock mechanism should be constructed of materials that will not warp/deform/break if lock or case is physically attacked or an attempt is made to pull open the case door.
26. At an early stage in the contract, manufacturer's specifications for locks and other security devices should be submitted to the Museum for consideration.
27. The Contractor is to supply two individual keys for each lock and three master keys that open all locks. The Contractor is not permitted to retain any high-security display case locks or keys after completion of the contract.
28. Access provided to any voids or cabinets in display case plinths must not weaken the security of the display volume of the cases.
29. Showcases that contain gold, silver, jewellery, items which are especially valuable, or firearms must be locked and alarmed. These alarms must be connected to the site's on site security. Alarms which detect both vibration caused by someone trying to force his/her way in (inertia alarm), or the actual opening of a case (contact alarm) must be fitted. Any alarms should be unobtrusive, reliable, and serviced outside of the display area. The showcase Contractor must liaise with the security Contractor to provide alarm connectors in suitably accessible positions for connection to the alarm system.

ACCESS

For visitors

45. Design of the showcases should provide unimpeded viewing by people of all ages, and be in accordance with the Disability Discrimination Act 1995.

For staff

46. Physical access by staff to items on display should be as simple as possible but should not compromise security.
47. Cases should be capable of being opened by one person on their own, within five minutes. Closure of the cases must also be accomplished by one person in under five minutes.
49. At no time should an object or a person be put at risk by the opening and closing of access doors or panels
50. Access to the cases should be via hinged doors or glass panels. The glass must be self-supporting. Use of removable glass panels is to be avoided. Doors are to be stable when open and constructed to avoid vibration during opening and closing.
51. The whole display area should be easily accessible and all opening sections, doors, or panels should provide a sufficient area of clear opening to enable cases to be dressed, allowing for access into 100% of the display area without affecting the structural integrity of the case.
52. Free-standing cases should provide enough space and structural support to hold two average (12 ½ stone) sized men.
53. All opening mechanisms must be well-designed and engineered to be maintenance-free and easy to use.
54. Clearance is to be provided behind cases that are against external walls to allow for cleaning. Removable panels are to be provided to any enclosed dead space around or beneath cases to allow for cleaning.

ENVIRONMENT

55. The environment within a showcase must conform to the *IWM Policy for Monitoring, Creation and/or Control of the Environment for Care of the Collections*, either through creating a micro environment within a well sealed showcase e.g. using Artsorb, or through maintaining an environment external to the showcase that means that the internal environment will comply e.g. air conditioning the display space.

Lighting

56. Electric light sources should not be placed within the body of the display case. Lighting is to be housed in a separate light box compartment secured by different locks to the main display section which will enable the lighting system to be maintained without opening the display section. The case must be constructed to prevent access to the collection material via the light box compartment. The Contractor is to supply two individual keys for each lock and three master keys that open all light box compartment locks. The Contractor is not permitted to retain any light box locks or keys after completion of the contract.
57. Adequate ventilation must be provided to prevent heat build-up from equipment being transferred into the display area.
58. Light sources and luminaries should be selected to ensure performance, reliability, long life and suitability for purpose. Light sources should be capable of dimming to 50 lux and with a maximum output of 300 lux.
59. An integral lighting system, with the UV filtered light source located remotely from the display volume, should be used to provide a means of in-case lighting that does not affect internal temperature, and which eliminates all UV radiation.
60. All electric light sources must not exceed 10 μ W per lumen of ultraviolet radiation.
61. Electrical wiring should be neat, unobtrusive and enclosed, and not affect the case's function.
62. All equipment should be easily replaceable in the event of failure and servicing of the light source must be possible without entering or causing disruption to the display area.
63. All equipment and cases should be earth bonded.

Sealants

64. Air leakage should not exceed an air change per day as agreed with IWM.
65. Inert, durable, effective seals and joints are required to provide an effective environmental buffer between the objects and the external display environment in order to minimise the ingress of dust, maintain air-tightness, and secure the glazed void. These should be installed at all joints, glass-to-glass and glass-to-metal and held in place with both a hi-tack double sided adhesive and trim to avoid migration. They should be replaceable. They should be suitable to last twenty-five years. Seals are to be made of non-acetic acid curing silicone rubber e.g. Dow Corning 797 or Silastic alcohol-curing silicone.
66. All internal case construction is to be resistant to water ingress.
67. Showcases must be as free as possible from gaseous pollution and dust. Inside well-sealed stable display cases, where air changes are kept to a minimum, harmful concentrations of volatile substances and vapours can build up. In showcases where there is risk of internal pollution from the objects (e.g. modern organic materials such as photographs or cellulose nitrate items), pollutant absorbent materials such as activated carbon cloth or zinc oxide pellets should be used. Space for this must be reserved in the compartment for ArtSorb (see 5.3.2 below).
68. The Contractor must allow sufficient time within the programme to facilitate final air-tightness testing of cases. This shall be measured and certified by an independent testing establishment approved by the Museum.

Temperature / R.H.

69. If the temperature and relative humidity within the room are not satisfactory, display cases should be constructed so that a stable internal temperature and relative humidity are maintained. Display cases should achieve and maintain a stable internal temperature, and relative humidity of 40-60%.
70. Compartments should be reserved below the base of the display volume for holding moisture regulating ArtSorb (in cassette or sheet form). Space for the buffer should allow as large an exposed surface as possible in the direction of the display volume. This space must be sealed as part of the display case. This sealed space must be easily accessible, without opening the display area or removing objects, ensuring that the security of the displayed objects is maintained.

71. A hard-wired or radio-telemetry log monitoring system, approved by the Department of Collections Management should be provided as a means of monitoring the case environment. This should monitor relative humidity and temperature. Contractors should demonstrate how this will be accommodated.

SERVICE LIFE

72. The case components, individually and as an assembly, should be designed to last the life-span of the exhibition with an initial one year full warranty on all parts. The Museum will require the ability to enter into a separate maintenance agreement with the showcase manufacturer at a later date.
73. As regular access is required into display cases all opening sections or doors must be able to withstand daily use over their anticipated lifespan of twenty-five years.

SUPPLY & INSTALLATION

74. The Contractor must allow sufficient time within the programme (minimum of two months prior to finalisation of the materials) to facilitate testing and approval of samples.
75. The Contractor must allow sufficient time within the programme (minimum of four weeks prior to installation of objects) to facilitate curing of materials, and for drying and off-gassing of sealants, adhesives, paints and glazes.
76. An appropriate quantity of all equipment and accessories to access and use the display case, including all keys, tools, spare parts, any lamp focussing equipment, or any specialist tools for adjusting display systems, etc. must be supplied prior to completion of the contract.
77. The safe transport and installation of the showcases to site will be the responsibility of the Contractor.
78. Delivery and installation of the cases should be carried out by an experienced team of installers and overseen by a senior representative of the Contractor.
79. It will be necessary for the Contractor to demonstrate the operation of each display case to the Museum's staff.
80. A Maintenance Manual must be provided and should include:
- Final specification of the total installation;
 - All operational requirements and maintenance procedures;
 - Removal and replacement details for plinth panels;
 - Full details of all surface finishes;
 - Data sheets for all materials used;
 - Performance testing results;
 - Certification that glass complies with BS5544;

- Cleaning specification for all case surfaces, including method statement for cleaning all specialist finishes;
- Electrical test and installation certificates (NICEIC approved);
- Guarantees or warranties for the case(s) and for any materials or associated equipment, which must commence from the date of practical completion of the contract;
- All items requiring maintenance and details of maintenance support provided under the contract, including anticipated response times;
- Names and addresses of all suppliers of specialist elements in order for the Museum to place direct orders for spares and replacement parts;
- Schedule of equipment and accessories required to access and use the display case;
- 'As-installed' drawings;
- Lamp schedules to facilitate re-lamping.

81. A Users Handbook must be provided and should include:

- Opening and closing operations;
- Range of available internal display systems;
- Method of removing and inserting internal lining panels;
- Method of fabric-wrapping internal lining panels;
- Method of focussing light fittings;
- Safe weight loading(s) of lining panels, shelves and display systems;
- Cleaning procedures and recommended products;
- Display systems, including the safe adjustment and removal of all elements.

APPENDICES

A Definitions

The Museum – refers to the Imperial War Museum as an institution as a whole, including all sites and all branches. The showcases will belong to the museum as a whole, regardless of which site they are installed upon and who paid for them.

Showcase Contractor – the company through which the Imperial War Museum is purchasing the showcases, regardless of whether they manufacture the cases themselves, or act as a third party.

B Relevant Publications

British Standard BS5544:1978 (1978) Specification for anti-bandit glazing (glazing resistant to manual attack)

British Standard BS 6262:1982 (1982) Code of practice for glazing for buildings

British Standard BS 6262-4:1994 (1994) Glazing for buildings. Safety related to human impact

Department for Culture, Media and Sport (2002) Government Indemnity Scheme for National Institutions, available at <http://intranet.iwm.org.uk/upload/pdf/GISGuideNew.pdf>

Disability Discrimination Act Available at <http://www.disability.gov.uk/dda/>

Home Office (2000) Firearms Security Handbook available at <http://www.homeoffice.gov.uk/docs/fahbk.html>

Re:Source (now MLA) (2002) Benchmarks in Collections Care for Museums, Libraries and Archives available at <http://www.mla.gov.uk/documents/benchmarks.pdf>

Section 3.4 – Design Schedule of Works

Imperial War Museum London
Lambeth Road
London SE1 6HZ

Showcase schedule


Project title	Real to Reel
Project number	15-0178
Version	v03 17 February 2016
Status	For tender / Not for production

Key to categories:

TYPE 1: Full Conservation Grade (as per the details of IWM's showcase conservation specification - to meet 0.25 air exchange rate)

Showcase number	Type	Internal dimensions WxHxI	Conservation	Interior finish	Lighting	Notes
Section 2						
SC_2_01	TYPE 1 New glass or 12 mm acrylic front, hinged locking door (this showcase is double-fronted: front acrylic is hinged, back acrylic is fixed)	1100 x 1900 X 900	Prosorb full-size cassette	ZF MDF with dacrylite seal and paint finish	Fibre optic light heads by museum located in ceiling panel	Showcase to be contained within OSB/ply box located on racking
SC_2_02	TYPE 1 New glass or 12 mm acrylic front, hinged locking door (this showcase is double-fronted: front acrylic is hinged, back acrylic is fixed)	1100 x 2150 X 900	Prosorb full-size cassette	ZF MDF with dacrylite seal and paint finish	Fibre optic light heads by museum located in ceiling panel	Showcase to be contained within OSB/ply box located on racking
SC_2_03	TYPE 1 New glass or 12 mm acrylic front, hinged locking door	1100 x 1100 X 500	Prosorb full-size cassette	ZF MDF with dacrylite seal and paint finish	Fibre optic light heads by museum located in ceiling panel	Showcase to be contained within OSB/ply box located on racking
SC_2_04	TYPE 1 New glass or 12 mm acrylic front, hinged locking door	1100 x 1900 X 700	Prosorb full-size cassette	ZF MDF with dacrylite seal and paint finish	Fibre optic light heads by museum located in ceiling panel	Showcase to be contained within OSB/ply box located on racking
SC_2_05	TYPE 1 New glass or 12 mm acrylic front, hinged locking door	1100 x 1550 X 500	Prosorb full-size cassette	ZF MDF with dacrylite seal and paint finish	Fibre optic light heads by museum located in ceiling panel	Showcase to be contained within OSB/ply box located on racking
SC_2_06	TYPE 1 New glass or 12 mm acrylic front, hinged locking door	1100 x 1100 X 500	Prosorb full-size cassette	ZF MDF with dacrylite seal and paint finish	Fibre optic light heads by museum located in ceiling panel	Showcase to be contained within OSB/ply box located on racking
SC_2_07	TYPE 1 New glass or 12 mm acrylic front, hinged locking door	1100 x 1550 X 500	Prosorb full-size cassette	ZF MDF with dacrylite seal and paint finish	Fibre optic light heads by museum located in ceiling panel	Showcase to be contained within OSB/ply box located on racking
SC_2_08	TYPE 1 New glass or 12 mm acrylic front, hinged locking door	1100 x 1550 X 500	Prosorb full-size cassette	ZF MDF with dacrylite seal and paint finish	Fibre optic light heads by museum located in ceiling panel	Showcase to be contained within OSB/ply box located on racking
SC_2_09	TYPE 1 New glass or 12 mm acrylic front, hinged locking door	1100 x 1900 X 700	Prosorb full-size cassette	ZF MDF with dacrylite seal and paint finish	Fibre optic light heads by museum located in ceiling panel	Showcase to be contained within OSB/ply box located on racking
SC_2_10	TYPE 1 New glass or 12 mm acrylic front, hinged locking door	1100 x 1900 X 700	Prosorb full-size cassette	ZF MDF with dacrylite seal and paint finish	Fibre optic light heads by museum located in ceiling panel	Showcase to be contained within OSB/ply box located on racking
SC_2_11	TYPE 1 New glass or 12 mm acrylic front, hinged locking door	1100 x 1100 X 500	Prosorb full-size cassette	ZF MDF with dacrylite seal and paint finish	Fibre optic light heads by museum located in ceiling panel	Showcase to be contained within OSB/ply box located on racking
SC_2_12	TYPE 1 New glass or 12 mm acrylic front, hinged locking door	1100 x 1550 X 500	Prosorb full-size cassette	ZF MDF with dacrylite seal and paint finish	Fibre optic light heads by museum located in ceiling panel	Showcase to be contained within OSB/ply box located on racking

Showcase number	Type	Internal dimensions WxHxI	Conservation	Interior finish	Lighting	Notes
Section 3						
SC_3_01	TYPE 1 3 no. CLICK case-front, hinged locking doors (doors free-issued by museum)	2720 x 2200 x 1000	Prosorb full-size cassette	ZF MDF with dacrylite seal and paint finish	Fibre optic light heads by museum located in ceiling panel	
SC_3_02	TYPE 1 1 no. CLICK case-front, hinged locking door (door free-issued by museum)	1460 x 2200 x 700	Prosorb full-size cassette	ZF MDF with dacrylite seal and paint finish	Fibre optic light heads by museum located in ceiling panel	
SC_3_03	TYPE 1 New glass or 12 mm acrylic hood located on plinth	1650 x 900 x 1550	Prosorb full-size cassette	ZF MDF with dacrylite seal and paint finish	From overhead lighting track	
SC_3_04	TYPE 1 New glass or 12 mm acrylic hood located on plinth	2400 x 900 x 600	Prosorb full-size cassette	ZF MDF with dacrylite seal and paint finish	From overhead lighting track	
SC_3_05	TYPE 1 New glass or 12 mm acrylic hood located on plinth	1000 x 2000 x 700	Prosorb full-size cassette	ZF MDF with dacrylite seal and paint finish	From overhead lighting track	
SC_3_06	TYPE 1 New glass or 12 mm acrylic hood located on plinth	1200 x 800 x 500	Prosorb full-size cassette	ZF MDF with dacrylite seal and paint finish	From overhead lighting track	
SC_3_07	TYPE 1 7 no. CLICK case-front, hinged locking door (door free-issued by museum)	1900 x 2200 x 1000	Prosorb full-size cassette	ZF MDF with dacrylite seal and paint finish	Fibre optic light heads by museum located in ceiling panel	
SC_3_08	TYPE 1 7 no. CLICK case-front, hinged locking doors (doors free-issued by museum)	3400 x 2200 x 2670	Prosorb full-size cassette	ZF MDF with dacrylite seal and paint finish	Fibre optic light heads by museum located in ceiling panel	Irregular plan shape
Section 4						
SC_4_01	TYPE 1 New glass or 12 mm acrylic hood located on plinth	675 x 800 x 675	Prosorb full-size cassette	ZF MDF with dacrylite seal and paint finish	From overhead lighting track	
SC_4_02	TYPE 1 New glass or 12 mm acrylic hood located on plinth	875 x 1200 x 675	Prosorb full-size cassette	ZF MDF with dacrylite seal and paint finish	From overhead lighting track	
SC_4_03	TYPE 1 New glass or 12 mm acrylic hood located on plinth	675 x 800 x 675	Prosorb full-size cassette	ZF MDF with dacrylite seal and paint finish	From overhead lighting track	
SC_4_04	TYPE 1 New glass or 12 mm acrylic hood located on plinth	800 x 800 x 600	Prosorb full-size cassette	ZF MDF with dacrylite seal and paint finish	From overhead lighting track	
SC_4_05	TYPE 1 New glass or 12 mm acrylic hood located on plinth	800 x 1200 x 600	Prosorb full-size cassette	ZF MDF with dacrylite seal and paint finish	From overhead lighting track	
SC_4_06	TYPE 1 New glass or 12 mm acrylic hood located on plinth	1350 x 600 x 675	Prosorb full-size cassette	ZF MDF with dacrylite seal and paint finish	From overhead lighting track	
SC_4_07	TYPE 1 New glass or 12 mm acrylic hood located on plinth	450 x 800 x 675	Prosorb full-size cassette	ZF MDF with dacrylite seal and paint finish	From overhead lighting track	
SC_4_08	TYPE 1 New glass or 12 mm acrylic hood located on plinth	675 x 600 x 450	Prosorb full-size cassette	ZF MDF with dacrylite seal and paint finish	From overhead lighting track	
SC_4_09	TYPE 1 New glass or 12 mm acrylic hood located on plinth	800 x 1200 x 800	Prosorb full-size cassette	ZF MDF with dacrylite seal and paint finish	From overhead lighting track	
SC_4_10	TYPE 1 New glass or 12 mm acrylic hood located on plinth	1200 x 600 x 480	Prosorb full-size cassette	ZF MDF with dacrylite seal and paint finish	From overhead lighting track	

<div><div></div><div>Department: DESIGN Job name: Real to Reel Job number: 15-0178 Issued by: Stephen Long (updated by HD 16/02/16) Date: 16.02.16 IWM London Lambeth Road London SE1 6HZ 020 7416 5421</div></div>												
Graphic code		Name	Issue Legend									
EXT		Exhibition Titles	Green current issue									
ENV		Environment Graphics	Blue already issued									
SQT		Super Quotes	Orange reprint									
INT		Intro Panels	Grey deleted									
AVC		AV Captions										
SUB		Subsection-Intros										
WLC		Wall Captions										
SC		Showcase Captions										
CRP		Credits										
EG		Entrance Graphics										
GP		Graphic Panels										
BG		Backlit graphics										
RP		Repro Posters										
NOTES												
Issue date	Graphic code	Name	Location	Elevation	Size mm(w) x mm(h)	Production/substrate	Quantity	Notes	Graphic contractor to supply? install?	Graphic costs - extras	Delivered and quality checked by IWM	Snagging
EXHIBITION TITLES												
29.01.16	EXT.01	Exhibition Titles	Entrance		3001.7(w) x 190.7(h) x 100(d)	Hollow 3d letters produced from Acrylic containing led light sources	1	Fixed to wall/top of light boxes	More likely SWC to produce. Some liaison required.			
29.01.16	EXT.02	Sponsor Logo	Entrance		480(w) x 135(h)	Stencilled graphics in 1 colour WHITE onto painted wall	1	Applied direct to wall	GC to supply and install			
29.01.16	EXT.03	Titles and Sponsor	Outside Entrance		850(w) x 640(h)	Cut vinyl graphics in 1 colour onto metal sign [outside main gallery space]	1	Applied direct to wall	GC to supply and install			
ENVIRONMENT GRAPHICS												
29.01.16	ENV.01	Environment Graphics	Making a film		3660(w)x2720(h)	DTM printed PLYWOOD panel	1	Sky	GC to liaise with SWC on supply/installation of substrate			
29.01.16	ENV.02	Environment Graphics	Making a film		4000(w) x3000(h)	DTM printed PLYWOOD panel	1	Sea	GC to liaise with SWC on supply/installation of substrate			
29.01.16	ENV.03	Environment Graphics	Making a film		2000(w) x3000(h)	DTM printed PLYWOOD panel	1	Urban	GC to liaise with SWC on supply/installation of substrate			
SUPER QUOTES												
29.01.16	SQT.01-SQT.15	Super Quotes	Throughout		786(w) x 462(h)	Stencilled graphics in 1 colour onto painted wall surface	18		GC to supply and install			
INTRO PANELS												
29.01.16	INT.01-INT.05	Intro Panel text	Throughout		700(w) x 1000(h)	Cut vinyl graphics in 1 colour onto a variety of surfaces	5		GC to supply and install			
AV CAPTIONS												
29.01.16	AVC.01-AVC.10	AV Caption	Throughout		450(w) x 450(h)	DTM print onto dibond	10	Captions may not be required	GC to supply and install			
MID-INTROS												
29.01.16	MID.01-MID.12	Subsection-Intros	Throughout		400(w) x 600(h)	Cut vinyl graphics in 1 colour onto a variety of surfaces	12		GC to supply and install			
WALL CAPTIONS												
29.01.16	WLC.01-WLC.40	Wall Captions	Throughout		200(w) x 200(h)	DTM print onto dibond	40	Fixed direct to wall	GC to supply and install			
SHOWCASE CAPTIONS												
29.01.16	SC.01-SC.30	Showcase Captions	Throughout		900(w) x 120(h)	DTM print onto dibond	30		GC to supply, IWM to install			
CREDITS												
29.01.16	CRP.01	Credits	Entrance		500(w) x 700(h)	Cut vinyl graphics in 1 colour onto wall	1		GC to supply and install			
ENTRANCE GRAPHICS												
29.01.16	EG.01-EG.05	Entrance Graphics	Entrance		1900(w)x1900(h)	Durantrans for 5x lighboxes	5		GC to supply and install. Liaise with SWC re integration with lightbox acrylic and installation into lightboxes.			
29.01.16	EG.06-EG.11	Entrance Graphics	Entrance		1900(w)x2400(h)	DTM to fire-rated flag weave	6		GC to liaise with SWC on supply/installation of substrate			
29.01.16	EG.12-EG.19	Entrance Graphics	Entrance		600(w)x2400(h)	DTM to fire-rated flag weave	8		GC to liaise with SWC on supply/installation of substrate			
29.01.16	EG.20	Entrance Graphics	Entrance		NA	Allowance for samples and prototyping entrance graphics	NA		GC to supply			
GRAPHIC PANELS												
29.01.16	GP.01-GP.12	Graphic Panels	What is a War Film		800(w)x1200(h)	DTM to painted plywood	12		GC to liaise with SWC on supply/installation of substrate			
BACKLIT GRAPHICS												
29.01.16	BG.01-BG.02	Backlit Graphics	Inspiration		800(w)x1200(h)	Duratrans	2		GC to liaise with SWC on supply/installation of substrate. Duratrans applied to acrylic?			
REPRO POSTERS												
29.01.16	RP.01-RP.03	Repro Posters	Audience Reception		1016(w)x1524(h)	4-colour to paper	4		GC to supply and install			

Cable requirement per area

Project: Real to Reel

Author: Jo Saull

Date: 12/2/2016

Version: 3

Section/AV number	AV	Cat6 STP (from AV room in gallery) DATA	Cat6 STP (from AV room in gallery) AV	Two-Core Speaker (from A56 ground Floor)	Power sockets
1.1	Entrance Soundscape			2	
1.2	Somme (Projection)	1	1	2	2
	Section 1 Total	1		4	2
2.1	Soundscape			4	
2.2	Real People (screen) LofArabia	1			2
2.3	Real People (screen) Vszabo	1			2
2.4	Real People (screen) Schindler	1			2
2.5	Real People (screen) Hitler	1			2
2.6	Myth making (screen)	1		1	12
2.7	Director Kubrick (screen)	1		1	4
2.8	MOI (touchscreen)		2		4
2.9	Disney (screen)	1			2
	Section 2 Total	7	2	6	30
3.1	Soundscape			7	
	Capturing combat (double projection)	2	2	4	4
3.2	Spielberg interview (screen)	1			2
3.3	Consensus (screen)		1	2	2
3.4	Extreme Environments Air	1		1	1
3.5	Extreme Environments Land	1		1	1
3.6	Extreme Environments Sea	1		1	1
3.7	Making of (screen)	1			2
	Section 3 Total	7	3	16	13
4.1	Soundscape			4	
4.2	Vietnam (screen)	1			2
4.3	Great Escape (screen)	1			2
	Section 4 Total	2	0	4	4
5.1	Finale (TBC)	2	2	4	8
	Section 5 Total	2	2	4	8
	Total	19	7	34	57
		Cat6 STP DATA	Cat6 STP AV	Two-Core Speaker	Power sockets

Section 4 – Pricing Document

Please refer to separate document.

Section 5 – Certificate of Bona Fide Tender

Certificate of Bona Fide Tender

1. I declare that this is a bona fide Tender, intended to be competitive and that I have not fixed or adjusted the amount of the Tender by or under or in accordance with any agreement or arrangement with any other person ('person' includes any persons, any body or association, corporate or incorporate; and) except as disclosed on this Certificate under 7 below.
2. I declare that the Company is not aware of any connection with a member of the Imperial War Museums London staff which could affect the outcome of the bidding process.
3. I declare that I have not done and I undertake that I will not do at any time any of the following:-
 - a) communicate to any person, including the addressee calling for the Tender, the amount or approximate amount of the proposed Tender;
 - b) enter into any agreement or arrangement with any other person or body that he or it shall refrain from tendering or as to the amount of any Tender to be submitted;
 - c) enter into any agreement or arrangement with any other person or body that we will refrain from tendering on a future occasion;
 - d) offer or pay or agree to pay any sum of money or valuable consideration directly or indirectly to any person for doing or causing to be done in relation to any other tender for the said work any act of the kind described above;
 - e) canvas or solicit the Imperial War Museums London staff or representatives thereof.
4. I understand that any instances of illegal cartels or market sharing arrangements suspected by the Imperial War Museums London will be referred to the Office of Fair Trading for investigation and may be subject to action under the Restrictive Trade Practices Act 1976.
5. I understand that any misrepresentations may also be the subject of criminal investigation or used as a basis for civil action.
6. In this Certificate "agreement" or "arrangement" includes any transaction private or open, or collusion, formal or informal, and whether or not legally binding.
7. Disclosure: _____

Signed: _____

Name (Print): _____

in the capacity of: _____

duly authorised to sign this Certificate for and on behalf of:

_____ (state company name)

Date ____/____/16

Section 6 – Schedule of Drawings

Imperial War Museum London
Lambeth Road
London SE1 6HZ

Drawing register

Project title		Real to Reel										
Project number		15-0178										
Date of issue		Current revision	15-Feb-16									

Section 7 – Drawings

Please refer to separate attachment file.