

PRICING DOCUMENT

**SCHEDULE OF WORKS
IMPERIAL WAR MUSEUMS**

All Saints Building
Emergency Standby Diesel Generator, Acoustic Enclosure
&
Associated Ground and Service Works

SCHEDULE OF WORKS

TO BE READ IN CONJUNCTION WITH:

Contract Preliminaries (*latest revision*)

Contract Drawings (latest revisions)

Structure

IWM-ASA-LP-001 Rev A Site Location Plan

IWM-ASA-EG-003 Rev H Emergency Standby Generator & Acoustic Enclosure

IWM-ASA-EG-004 Rev B Site Access Plan & Ground Works

L00702-100-T01 Foundation/Ground Floor Layout

L00702-101-T01 Proposed - Elevation Structures & Services Level C Works (*latest revision*)

L00702-102-T01 Elevations Sheet 1

L00702-103-T01 Elevations Sheet 2

L00702-104-T01 Sections

L00702-105-T01 3d View of Structure

Services

ARP-E-6001 Rev T1 Electrical Services Proposed Standby Generator Installation Location Plan & Details

ARP-E-6002 Rev T1 Electrical Services Proposed Standby Generator Server Rm Plan & Distribution Diagram

Service Specifications

Andrew Reid & Partners Electrical Services Specification, comprising:

IWM-20118 - Section Two - Particular Electrical Specification T1

IWM-20118 - Section Three - General Electrical Specification T1

Schedule of Works Sections

Section: PA	Preambles
Section: 1.00	Site Preparatory Works
Section: 2.00	Site Investigation Works
Section: 3.00	Arboricultural Works
Section: 4.00	Excavation Works
Section: 5.00	Structural Steelwork and Cladding
Section: 6.00	Roof Access Systems
Section: 7.00	Building Works in Connection (BWIC)
Section: 8.00	Service Works
Section: 9.00	Extra Over Costs
Section: 10.00	Contractors Listed Additions & Day Rates
Section: 11.00	Collection

Item	Description	Cost
PA1	The Contractor shall price for all the requirements described in this Tender Document. The Contractor shall complete the following Schedule of Works and include for all works to complete the Tender. The Contractor is directed to price each individual item in the Schedule of Works and not to insert lump sum totals.	£
PA2	Figures submitted are deemed to include all plant, equipment, scaffolding, materials and labour, etc. necessary to complete the Contract	£
PA3	Any discrepancies in the Tender Documentation must be brought to the attention of the Contracts Administrator prior to the submission of figures	£
PA4	The Works are indicated in this Tender Document including drawings, specifications, prepared by the Consultant Team. The Contractor is to contact the noted specialist sub contractors (if listed) and allow for their entire works.	£
PA5	The descriptions of items of work shall be read in conjunction with all the other parts of the Tender Document, specifications, the associated preliminaries and the drawings.	£
PA6	The items in the Schedules of Works include references to drawings and specifications. Such references are provided to assist the Contractor and the Contractor is to allow in his pricing for all the relevant information included in the Tender Document whether or not they are specifically listed. The Contractor is to note that only the main drawing number has been referred to, but he is to allow for the latest revision.	£
PA7	The Schedule of Works is for pricing purposes only and is not exhaustive. Tenders will be deemed to include all works detailed within the Tender Document. The Contractor is to list separately any and all costs associated with the works he deems to have been omitted from the schedule of works	£
PA8	The Contractor is responsible for preparing any necessary quantities for his tender. Where approximate quantities are included in the Schedules, the Contractor can use them and rely upon them entirely at his own risk of their inaccuracy or incompleteness. The Employer is not responsible for the accuracy and completeness of this Schedule of Works.	£
PA9	The Contractor must submit with the tender return, a complete and quantified tender breakdown with quantities and rates extended to match tender totals.	£
PA10	The tender breakdown of costs shall be used solely for the purpose of valuing variations. No adjustment will be made to the Contract Sum for any error or omission in this Schedule of Works.	£
PA11	The Contractor is responsible for ascertaining the exact nature and scope of the works required and he will be deemed to have visited the site to ascertain site conditions and restrictions and to have allowed in his prices for everything necessary to carry out the works.	£
PA12	The Contractor is reminded that the Museum and the All Saints Building will remain operational at all times with regards to staff and visitors, and is to allow for all necessary protection during the construction works, both internally and externally.	£
	To Collection	£

Item	Description	Cost
PA13	The Contractor is to allow for all costs in connection with the provision of Mechanical and Electrical services, as required.	£
PA14	The rates and prices shall be inclusive of all overheads and profit, supply, labour, materials, design (if stated), disposal, equipments, insurance, protection, testing, attendances and co-ordination with other trades and named contractors, commissioning etc to carry out the work.	£
PA15	The Contractor is to include for any additional design required together with submission of any required calculations for approval to ensure delivery of the project as a whole and ensure requirements and performance as specified by the Contract Documentation are complied with and met.	
PA16	If the Contractor has any doubts as to the meaning of any portion of the general conditions, or of the specification, he shall, before submitting his tender, submit them to the Quantity Surveyor in writing in order that such doubt may be removed.	£
PA17	Only the main items of work are described and associated work is deemed to be included with their relevant item e.g. ironmongery with door, doors with partitions, frames with doors, angles and end with skirtings, angle and shadow gap beads with partitions. The Contractor shall allow in his price for everything necessary and all costs in connection with the carrying out the Works as shown on drawings.	£
PA18	Where the Contractor is directed to "fix only" items supplied by others, his price shall include for unloading, storing, distribution and the return of packaging where appropriate.	£
PA19	The Contractor shall make good at his own expense for any damage caused to the work and to the working area, access, egress routes and the like, that he may occupy during the execution of the works.	£
PA20	All making good and the like shall be executed with materials and workmanship to match in every respect the surrounding work and be properly bonded thereto.	£
PA21	Items for Builder's Work in Connection (BWIC) with the various services have been included in the Schedules of Work, and the Contractor is to allow for all work as defined in the Preliminaries where required in connection with these installations.	£
PA22	Prices for decoration are to include for the preparation of surfaces irrespective of the inclusive of the word "prepare" in the description.	£
To Collection		£

Item	Description	Cost
1.00	Site Preparatory Works	
1.1	Drawing IWM-ASA-EG-004 indicates suggested site cordon lines, temporary enclosures and compound layout and highlights requirements that need consideration when developing the Contractor's proposals	£
	General	
1.2	The Contractor is to allow for liaising with the Consultant Team, Planners, Building Control Officers and other parties as required for approval of works during the contract, and as directed by the Contractor Administrator	£
	Site Hoarding, Cordons, Etc.	
1.3	Supply and install 2000 (h) Heras fencing as indicated to form a secure and safe works enclosure, storage compound and root protection areas, including all supporting structure and the like; protection of existing surfaces; additions and alteration as the works require and progress; etc. <ul style="list-style-type: none"> • Refer to Arboricultural Report Method Statement for additional requirements 	£
	Vehicle & Pedestrian Access	
1.4	Supply and install high visibility non slip vehicle trench covers to areas of open excavation works within areas where safe pedestrian and vehicle access is to be maintained (including emergency vehicle access). Covers are to comply with the DTER Safety at Streetworks and Roadworks Code of Practice. Allow for any additions and alterations as the works progress	£
	Signage	
1.6	Supply and install all required mandatory site safety notices and signage and temporary pedestrian and vehicle directional/warning/prohibition signage as required, include for updating as the works progress	£
	Contractor Facilities	
1.7	Provide temporary accommodation as required, for the duration of the works; pay all charges The Preliminaries highlight facilities and services made available to the Contractor by the Client for the purposes of the Contract and duration of the works. The Contractor shall be responsible for all charges associated with any additional contract facility requirements.	£
1.8	Provide temporary water supplies, as required; connection to Employers supply	£
1.9	Provide temporary electrical supplies, as required; connection to Employers supply	£
1.10	Provide temporary telephone, internet connection etc. as required; pay all charges	£
	On Completion	
1.11	Take down all Heras fencing , cordons, vehicle & pedestrian covers, including all temporary signing, disconnect temporary site services; remove from site; make good any damage to existing surfaces to the entire satisfaction of the Contract Administrator	£
1.12	Take down all protection; remove from site; make good any damage to existing surfaces and finishes within occupied areas to the entire satisfaction of the Contract Administrator	£
	To Collection	£

Item	Description	Cost
1.13	Remove all temporary accommodation; disconnect all temporary supplies; make good any damage to existing surfaces to the entire satisfaction of the Contract Administrator	£
Other Works		
1.14	Allowance for other items (contractor to state):	£
To Collection		£

Item	Description	Cost
2.00	Site Investigation Works - Services	
2.1	Undertake a full ground utility and services mapping survey of the installation area, include temporary ground marking and submission of findings to the Contracts Administrator on a scaled site plan. NOTE main fibre optic cabling above and below ground run through the works area	£
2.2	Undertake a ground resistance survey as required in the Service Engineers specification. Client Mechanical & Electrical Consultant and Contracts Administrator are to be in attendance - Based on results, the Client Mechanical & Electrical Consultant will confirm the quantity and length of required earthing rods	£
2.3	Undertake an assessment of above ground services that may impact on the works & report any impact findings to the Contracts Administrator for instruction	£
	Site Investigation Works - Structure	
2.4	Carefully ascertain depth and projection of perimeter boundary wall foundations within the zone of the proposed location of the reinforced slab installation and service trench excavation and include submission of findings to the Contracts Administrator - Await instruction prior to proceeding with excavation works	£
2.5	Reinstate all exploratory works at an appropriate time during the construction; making good all works disturbed and junctions with existing	£
	Other Works	
2.6	Allowance for other items (contractor to state):	£
	To Collection	£

Item	Description	Cost
3.00	Arboricultural Works - Site Preparatory Works	
3.1	As detailed within the Arboricultural Report, Arboricultural Method Statement and associated documentation, undertake crown raising of tree T1 (Sycamore) & T2 (Horse Chestnut) as scheduled within the Arboricultural Report Table 1: Tree Pruning	£
3.2	Remove and dispose of from site all site spoil from crown raising. Burning is NOT permitted. If timber shredders are employed on site, the Contractor will ensure suitable protection is employed to prevent site dispersal of wood chippings and general debris	£
3.3	All tree works shall be carried out by appropriately insured, experienced and qualified arboricultural contractors and in accordance with BS3998:2010. The Contractor shall include details of his arboricultural contractor within his tender return	£
	Other Works	
3.4	Allowance for other items (contractor to state):	£
	To Collection	£

Item	Description	Cost
4.00	Excavation Works - Generally	
4.1	The Contract Drawings identify the proposed location of the reinforced concrete foundation pad and service trench route excavations which have been plotted in outline to avoid damage to root systems and comply with Root Protection Areas as identified within the Arboricultural Report.	£
4.2	Following the completion of the ground utility and services mapping survey and boundary wall foundation investigation, agree with the Contracts Administrator the position of the excavation works and peg out as required.	£
4.3	As specified within the Arboricultural Report Method Statement allow for all measures to protect the identified root protection areas - Above and below ground as the excavation works progress	£
	Base Foundation	
4.4	Excavation for ground bearing slab and strip foundation	£
4.5	Disposal from site of excess excavation materials	£
4.6	Construction, including formwork, shuttering, etc, of 200mm ground bearing slab reinforced with one layer A393 mesh top and bottom, 40mm minimum cover to all reinforcement, including 500mm x 500mm deep strip foundation, integral cast service duct pit and service duct running to trench excavation and 100mm dia. sleeved duct required for siting of local distribution board as detailed on the contract drawings. To be cast to provide a level base with float finish for siting of the emergency standby generator and erection of acoustic enclosure.	£
4.7	250mu polythene DPM on 50mm sand blinding on 150mm type 1 subbase to ground bearing slab and strip foundation	£
4.8	Allow for liaison with Client Structural Engineering Consultant and their attendance to inspect reinforcement and forming works prior to pouring.	£
4.9	Supply & install single course of bonded 140mm (t) 7.3N solid dense concrete blocks to interior perimeter of acoustic enclosure. Outer face of blockwork to align with outer face of Metsec cladding rails	£
4.10	Supply and install removable industrial galvanised steel mesh grating to sit flush within a formed rebate to the perimeter of the service duct pit. The galvanised steel mesh grating to be modified to accommodate cabling routes - Modified grille to comply with loadings as defined on the contract drawings	£
4.11	Below ground level service duct to be sealed with a water seal bung of approx. 100mm depth of 2 hour (min.) fire rated canister foam	£
	To Collection	£

Item	Description	Cost
	Service Trench Excavation	
4.12	Service trench excavation, including excavation works for localised earthing rods	£
4.13	Excavation works within identified root protection areas are to be hand dug, an air spade may be utilised by an experienced and qualified operator. The Contractor is to allow for undertaking works within these zones under the supervision of the Client Arboricultural Consultant	£
4.14	Backfilling of service trench including: Once services have been installed, back fill the trench with sharp sand that covers 75mm above and around the services. Lay continuous 'Electrical Warning' tape at this level before continuing with backfill - Include requirements within the Arboricultural Report for backfilling areas within root protection areas.	£
4.15	Consolidate backfill, making good original surfaces and dispose of from site surplus materials from the excavation works. Allow for flush reinstatement and jointing between old and new tarmac, concrete and aggregate surfaces. Include for the supply of additional surface stone aggregate surface chippings as existing within disturbed areas	£
4.16	Install additional continuous 'Electrical Warning' tape over galvanised cover strip at 100mm below finished ground level	£
4.17	Within cable exit/entry zone of trench beneath the All Saints Building South West Emergency Stair, supply and install galvanised steel electrical cable ducts to a height of approximately 900mm above ground level. Cable ducts to be securely bedded within the depth of the service trench and securely tied back at brickwork mortar joints above ground level.	£
4.18	Supply & install concrete earth inspection housings - Include this cost within Electrical section under Earthing Service Works	£
4.19	Provide photographic records of trenching works, including exposed root protection areas, back filling and the installation of the electrical warning tape and galvanised steel cover zones, etc.	£
	Other Works	
4.20	Allowance for other items (contractor to state):	£
To Collection		£

Item	Description	Cost
5.00	Generator Acoustic Enclosure - Structural Steelwork	
5.1	Supply and install structural steelwork as detailed on the Structural Engineers Drawings and related tender information; welded and bolted connections; surface protection; fixings; connections; levelling and grouting below; etc. The Contractor shall be responsible for the design of all connections and production of any fabrication drawings to the satisfaction of the Client Structural Engineering Consultant, which must be approved prior to fabrication. All connections shown are indicative only. Adequate allowance should be made for the provision of gusset plates, stiffeners, haunches and slotted bolt holes where necessary. The loadings shown on the drawings shall be used for the design of the connections to BS 5950	£
	Generator Acoustic Enclosure - Proprietary Systems	
5.2	Supply and install as detailed on the Structural Engineers Drawings Metsec cladding rails and purlins. <ul style="list-style-type: none"> • 172.Z.15 Metsec cladding rails at 1000mm centres • 172.Z.16 Metsec purlins at 1200mm centres 	£
5.3	Supply and install <ul style="list-style-type: none"> • Metsec Cleader rails/angles, minimum 100 x 100 x 2mm 	£
	Insulated Panel Cladding System	
5.4	As detailed on the contract drawings, supply and install panel cladding system, forming walls and roof of acoustic enclosure, to include all associated fixings, trims, flashings, guttering, downpipes, seals, fillers, pipe flashings, waterproofing, and associated items,etc. Product: Tata Steel Trisomet® 333 Panel System to walls and roof <ul style="list-style-type: none"> • 100mm (t) bonded polyisocyanurate (PIR) insulation foam core Finish: Profiled facing material, trims and gutter, etc. finish: Colorcoat HP200 Ultra®, colour Juniper (RAL 140 20 20) Internal facing material, internal trims, finish: Colorcoat® High Reflect, colour white The Contractor shall be required to undertake any additional design works required to comply with the manufacturers recommendations for installation of the specified insulated panel cladding system, fixing to the structural sub structure, including compliance with manufactures requirements to achieve product and finishes performance guarantees and warranties	£
5.5	Supply and install wire leaf guard to gutter downpipe	£
5.6	Installation, support, trims and seals to accommodate extended generator flue	£
	Other Works	
5.7	Allowance for other items (contractor to state):	£
	To Collection	£

Item	Description	Cost
6.00	Roof Access Systems and Equipment	
6.1	Roof Access Systems and Equipment Permanent roof access and safety equipment: Latchways 210 Guided Fall Arrest System. Constant Force Posts compliant with fixing to specified Trisomet 333 roof panel system, including roof access point wire strop fabricated to required length, complete with karabiner at each end and roof retaining clip. Or equal and approved/equivalent system - Details to be provided with tender submission	£
6.2	Extra: Testing and certification of installed Roof Access System by Latchways (system manufacturers) Or equal and approved/equivalent	£
6.3	Extra: Supply all roof access Fall Restraint PPE, comprising 2 sets of harnesses, purpose made lanyards, removable transfasteners. All to be supplied fully tested and certificated for a minimum period of 12 months	£
6.4	Extra: Provide and install all required safety access signage	£
6.5	Other Works Allowance for other items (contractor to state):	£
	To Collection	£

Item	Description	Cost
7.00	Builder's Works in Connection with Services	
7.1	Core Drilling, including routes through the All Saints Building external and internal walls to form cable routes	£
7.2	Allow for all fire stopping around service penetrations in new and existing structures for all the new services installations and alterations to service installations	£
7.3	Allow for all holes, chases and associated items for the installation of the works, through any material or thickness; making good all works disturbed	£
7.4	Making good all works disturbed, including decoration, which is to match existing surface finishes	£
	Other Works	
7.5	Allowance for other items (contractor to state):	£
	To Collection	£

Item	Description	Cost
8.00	Service Works	
8.1	<p>The Contractor is to include for all works as described below and contained within the Contract Documents, including Service Engineers Drawings and related Specifications; Section Two 'Particular Electrical Specification' and Section Three 'General Electrical Specification'</p> <p>A separate price is to be put against each item. The summation of the separate prices shall equate to the total cost of supplying, installing and commissioning the whole of the works described in the contract documents, specification and drawings.</p>	£
8.2	Supply and installation of new cabling, associated materials, cable trays, trunking, equipment and ducting, including distribution board sited within the generator acoustic enclosure to serve the generator auxiliaries and the acoustic enclosures small power and lighting provisions.	£
8.3	Supply and installation of new changeover unit	£
8.4	<p>Supply and installation of new generator including:</p> <ul style="list-style-type: none"> • Refilling to a full fuel tank following all testing and commissioning • Extension to generator exhaust flue and supply of associated bracketry, etc. 	£
8.5	<p>Provision of services within acoustic enclosure</p> <p>Including:</p> <ul style="list-style-type: none"> • Small power, lighting, emergency lighting • Smoke detection wired back to the All Saints Building fire control panel • Testing and commissioning of generator enclosure services 	£
8.6	Provision of dedicated generator earthing, including supply & installation of concrete earth inspection housings	£
8.7	Provision of structural steelwork earth bonding	£
8.8	Provision of Building Management system (BMS) monitoring of the diesel generator and critical systems monitoring (excluding installation of new BMS outstation)	£
8.9	Modifications to the Denco AC units BMS controls to provide auto restart after power loss	£
8.10	Testing and commissioning of installations	£
8.11	Hiring of resistive load bank and interconnecting cables required for commissioning of generator on full load	£
8.12	Demonstration and instruction to client	£
8.13	Provision of Maintenance Contract - Full details of offer and breakdown of service costing to be provided with tender	£
	Other Works	
8.14	Allowance for other items (contractor to state):	£
	To Collection	£

Item	Description	Cost
9.00	Extra Over Costs The Contractor will be deemed to have made due allowance in programming, planning and pricing the Preliminaries for these works. Sums are to be inclusive of profit and all attendances	£
9.1	Option - Reduced Finishing Specification: Profiled facing material, trims and gutter, etc. finish: Colorcoat LG®, colour Juniper Green 12B29 <div style="text-align: right;">List cost saving</div>	£
9.2	Option - Reduced Finishing Specification: Internal facing material, internal trims, finish: Colorcoat® PE15, colour white <div style="text-align: right;">List cost saving</div>	£
9.3	The Contractor may at tender stage, in addition to pricing for the specified Trisomet 333® panel cladding system, offer an alternative insulated panel cladding system proposal, which he must demonstrate as offering similar or better structural performance and similar or better acoustic performance to that contained within the BS4142 Noise Impact Assessment, produced by Ammonite Acoustics, Reference: 201501/HAC/01 Revision 2, dated 8 January 2015. His proposals must also include for all costs associated with any associated adjustments to the structural steelwork including structural calculations, design, etc.	£
9.5	Other Works Allowance for other items (contractor to state):	£
To Collection		£

Item	Description	Cost
10.00	Contractor's Listed Additions	
10.1	The Contractor is to list separately and include within his tender return any additional works and related costs he considers require inclusion within the scope of works required to complete the full scope of works to the required standards	£
10.2	<p>The Contractor shall include within his tender return, hourly and day rates for all disciplines, including named contractors</p> <p>The following rates of labour are to include for National Insurance Acts including Graduated Insurance Contributions, Third Party and Employer's Liability Insurance and all other insurances, Industrial Training Act, Redundancy Payments Act, Sick Pay Scheme, Overtime, Bonus and Incentive Payments normally payable to operatives in the area, guaranteed time, workmen's fares, lodging allowances, holidays with pay, transport and payment of men from whatever district labour is obtained, requirements of safety, health and welfare regulations and any other provisions or payments to be made in accordance with the relevant working rule agreements, supervision, overhead and establishment charges and profit.</p> <p>Labour</p> <p>Structural Engineer</p> <p>Temporary Works Designer and Coordinator</p> <p>Service Engineer</p> <p>Site Foreman - Person in charge</p> <p>General Site Operative</p> <p>Lead worker</p> <p>Decorator</p> <p>Electrician</p> <p>Other Tradesmen - To be listed by tenderer</p> <p>.....</p> <p>.....</p> <p>.....</p>	
	To Collection	£

Item	Description	Cost
11.00	Collection	
	Preliminaries	£
	Schedule of Works Sections	
Section: PA	Preambles	£
Section: 1.00	Site Preparatory Works	£
Section: 2.00	Site Investigation Works	£
Section: 3.00	Arboricultural Works	£
Section: 4.00	Excavation Works	£
Section: 5.00	Structural Steelwork and Cladding	£
Section: 6.00	Roof Access Systems	£
Section: 7.00	Building Works in Connection (BWIC)	£
Section: 8.00	Service Works	£
Section: 9.00	Extra Over Costs	£
Section: 10.00	Contractors Listed Additions & Day Rates	£
	Total	£

Completed & Checked by:

Name:

Signature:

In the position of:

Date:

Company:

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