

McCann
and partners

Consulting Engineers

Sport Wales National Centre

Switchboard Replacement

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Schedules for Electrical Engineering Services

McCann
and partners

Consulting Engineers

Sport Wales National Centre
Main Switchboard Replacement

File Number:	10126-MCP-V1-XX-L-E-1001
Originator:	McCann & Partners Cardiff
Title:	Main Switchboard Replacement
Checked by:	DY
Approved by:	CM
Date:	21 st Feb 2026

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DATE	STATUS	STATUS CODE	REV	PAGE No. / CLAUSE No. / SCHEDULE No.	DETAIL OF REVISION
12/02/2026	Preliminary	S4	P01		
21/02/2026	Preliminary	S4	P02		Project Title amended

**ELECTRICAL SCHEDULES
MASTER INDEX**

PROJECT:	Sport Wales National Sports – Switchgear Replacement
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PROJECT No.:	10126	LATEST REVISION:	P02	DATE:	Feb 26
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SCHEDULE No.	DESCRIPTION
1	Drawing Schedule
2	Schedule of Finishes/Colours
3	Schedule of Spares
4	Schedule of Manufacturers
* 5	Financial Schedule - Dayworks
6	Financial Schedule – Schedule of Rates
* 7	Financial Schedule - Tender Summary
8	Interim Application / Final Account Payment Form
9	Variation Summary Sheet
10	Information, etc. to be provided by Electrical Contractor
11	Standard Drawings / Relevant Information
12	Contractor Design Portions

Note:

* Contractors to return Schedules **4, 5** and **6** with their Tender.

These schedules are an integral part of the Contract Documents and the Contractor should include for scheduled items.

**ELECTRICAL SCHEDULES No. 2
SCHEDULE OF FINISHES/COLOURS**

PROJECT:	Sport Wales National Sports – Switchgear Replacement
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PROJECT No.:	10126	LATEST REVISION:	P02	DATE:	Feb 26
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SERVICES ITEM	FINISH/COLOUR	NOTES
Socket Outlets and Power Accessories	Metal Clad	
Lighting Switches	Metal Clad	
Luminaires	IP65 Polycarbonate	
Cable	Fire Alarms Red	
Conduit	<ul style="list-style-type: none"> Steel Galvanised 	
Trunking	<ul style="list-style-type: none"> Steel Galvanised 	
Control Panels	<ul style="list-style-type: none"> N/A 	
Lightning Protection Tape	<ul style="list-style-type: none"> N/A 	
Fire Alarm Panel	<ul style="list-style-type: none"> N/A 	

Cont'd/...

**ELECTRICAL SCHEDULES No. 3
SCHEDULE OF SPARES**

PROJECT:	Sport Wales National Sports – Switchgear Replacement
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PROJECT No.:	10126	LATEST REVISION:	P02	DATE:	Feb 26
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DESCRIPTION	QTY	RECEIVED
SPN 10A MCB's	10 No.	
SPN 16A MCB's	5 No.	
SNP 20A MCB	5 No.	
SPN 32A MCB's	10 No.	
SPN 32A/30mA RCBO	5 No.	

Issued By (on Behalf of Contractor):

Contractor:

Date:

Received By (Client's Representative):

Date:

**ELECTRICAL SCHEDULE No. 4
SCHEDULE OF MANUFACTURERS**

PROJECT:	Sport Wales National Sports – Switchgear Replacement
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PROJECT No.:	10126	LATEST REVISION:	P02	DATE:	Feb 26
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''	EQUIPMENT	MANUFACTURER	SELECTED MANUFACTURER *
3	LV Switchgear	<ul style="list-style-type: none"> • Schneider • Hager • ABB 	Schneider Devices Harries Automation manufacture
5	Distribution Boards	<ul style="list-style-type: none"> • ABB • Schneider • Hager 	Schneider
9	Accessories	<ul style="list-style-type: none"> • Crabtree • MK 	
10	Lighting	<ul style="list-style-type: none"> • Refer to Drawings 	
11	Lighting Control	<ul style="list-style-type: none"> • CP Electronics 	
18	Cables	<ul style="list-style-type: none"> • BICC • AEI • Delta • Pirelli 	
19	Energy Meters	<ul style="list-style-type: none"> • Rayleigh 	

* **TO BE COMPLETED BY THE ELECTRICAL CONTRACTOR**

Signed:

On behalf of (Company Name & Address):

.....

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Date:

ELECTRICAL SCHEDULE No. 5 FINANCIAL
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PROJECT:	Sport Wales National Sports – Switchgear Replacement
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PROJECT No.:	10126	LATEST REVISION:	P02	DATE:	Feb 26
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A) **DAYWORKS**

THE DEFINITION OF THE PRIME COST OF DAYWORK CARRIED OUT UNDER AN ENGINEERING SERVICES CONTRACT/DOMESTIC ENGINEERING CONTRACT (Second Edition, July 1980), published by the Royal Institution of Chartered Surveyors and the National Federation of Building Trades Employers, applies subject to the amendments and clarifications stated in the following items:-

Any reimbursement of Value Added Tax shall be by separate calculation under the Supplementary Conditions listed on the tender form.

Cash discount allowable under Section 4.1 of the Definition shall not exceed 2.5%.

Changes in labour tax matters after the date for return of tenders will be subject to adjustments under the VOP (Labour Tax Matters) Provision contained in the Contract and therefore National Insurance contributions and other labour tax matters payable shall be charged to daywork at the rates ruling at the date for return of tenders and these rates shall be used in the calculation of hourly base rates (Section 3) and of the percentage adjustment for Incidental Costs, Overheads and Profit (Section 6) of the above Definition.

Particular attention is drawn to the allocation of charges between Section 3 (Labour) and Section 6 (Incidental Costs, Overheads and Profits) as detailed in the Definition.

The percentage on cost of labour which the tenderer inserts in accordance with Section 6 must allow for the fact that the hourly base rates calculated in accordance with Section 3.2 are not adjusted on account of their being based on the standard working week (and not the hours usually worked on site) and that they thus over include for weekly and annually based payments and contributions.

All wage payments and contributions for the calculation of hourly base rates excluding those covered by the VOP (Labour Tax Matters) provision shall be at the standard rates current at the time and in the area where the daywork is executed.

Differentials and Extra Payments () shall be included in the calculation of hourly base rates as appropriate together with the attendant National Insurance charges.

Cont'd/...

SCHEDULE NUMBER 5/2

ELECTRICAL SCHEDULE No. 5
FINANCIAL

PROJECT: Sport Wales National Sports – Switchgear Replacement

PROJECT No.: 10126

LATEST REVISION: P02 DATE: Feb 26

A) DAYWORKS (Cont'd)

LABOUR

Provide the sum as shown for the prime cost of labour. £ 500.00

%

Labour Daywork Cost £

MATERIAL AND GOODS

Provide the sum as shown for the prime cost of materials and goods. £ 500.00

%

Materials & Goods Daywork Cost £

PLANT

Provide the sum as shown for the prime cost of plant calculated in accordance with the Schedule of Basic Plant Charges for use in connection with Daywork under a Building Contract published by the Royal Institution of Chartered Surveyors. £ 500.00

%

Plant Daywork Cost £

Total Carried Forward to Summary of Tender (Schedule No. 11) £

GROSS RATES OF LABOUR PER HOUR

Type of Operative	Contractor's Own Operatives	Labour Only Sub Contractor
Foreman	£	£
Chargehand	£	£
Advanced Electrician	£	£
Electrician	£	£
Improver	£	£
Assistant	£	£

Signed:

On behalf of (Company Name & Address):

.....

Date:

Cont'd/...

Cont'd/...

SCHEDULE NUMBER

5/3

ELECTRICAL SCHEDULE No. 5 FINANCIAL
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PROJECT:	South Wales National Sports – Switchgear Replacement
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PROJECT No.:	10126	LATEST REVISION:	P01	DATE:	Feb 26
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B) REQUIREMENT FOR SCHEDULE OF RATES

The Contractor shall provide within one week of being informed that his Tender is being considered for acceptance at his own expenses, three copies of a Schedule of Rates drawn up as indicated, full monied out and priced to make up the amount of his Tender. Each item priced to include the cost of the item, deductions from, or deviations from the Contract which may be ordered by the Architect/Engineers also for assessing the value of work done for Interim Payment.

The Schedule is to be broken down to cover separately every section of work, separated as such on the Details of Tender Price. Each section is to be completed and shall include every separate item included in the particular section in consecutive columns (1) the quantities involved, (2) the description of the material or item, (3) the separate price per item or per unit and (4) the collective price per item (is the multiple columns 1 and 3).

Applications for Interim Payment are to show for each application, the Gross Contract Sum, all PC Sums and the Contingency Sum, the Nett Contract Sum the total amount of all Claims, including the present Claim, the total amount of all previous Applications and (by deduction of these amounts), the Nett amount of the Claim.

When all or part of these Applications refer to costs or expense against PC Sums items or against variation or additional work to the original Contract Sum, these are to be separately described and itemised as above.

Acceptance by the Engineer of this Schedule shall not relieve the Contractor of responsibility for accuracy of quantities, sizes, dimensions, etc, which must suit the installation.

**ELECTRICAL SCHEDULE No. 6
SCHEDULE OF RATES**

PROJECT:	Sport Wales National Sports – Switchgear Replacement
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PROJECT No.:	10126	LATEST REVISION:	P02	DATE:	Feb 26
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ITEM No.	SERVICES DESCRIPTION	COST £	p
1	CONTAINMENT SYSTEMS		
1.1	Supply and Installation of suspended 3Mtr 600mm Ladder Rack		
1.2	Supply and Installation of suspended 600mm heavy duty cable tray		
1.3	Supply and Installation of suspended 300mm heavy duty cable tray		
1.4	Supply an Installation of 90° Prefabricated 600mm Ladder Rack Fitting		
1.5	Supply an Installation of 90° Prefabricated 600mm Cable Tray Fitting		
1.6	Supply and installation of 3mts 200 x 200mm Steel Galvanised Trunking		
1.7	Supply and installation of 3mts 100 x 100mm Steel Galvanised Trunking		
1.8	Supply and installation of 3Mtr 600mm x 50mm Suspended Cable Basket		
2	LV DISTRIBUTION		
2.1	Supply and installation of 63A SP NSX Schneider MCCB within Panelboard		
2.2	Supply and installation of 100A SP NSX Schneider MCCB within Panelboard		
2.3	Supply and installation of 63A TP NSX Schneider MCCB within Panelboard		
2.4	Supply and installation of 100A TP NSX Schneider MCCB within Panelboard		
2.5	Replacement of Existing TPN distribution board with Schneider Type B 12Way TPN Distribution Board		
2.6	Replacement of Existing SPN distribution board with Schneider Type A 12Way SPN Distribution Board		
2.7	Supply and installation 20No 10A Type B Schneider MCB		
2.8	Supply and installation 20No 16A Type B Schneider MCB		
2.9	Supply and installation 20No 20A Type B Schneider MCB		
2.10	Supply and installation 20No 32A Type B Schneider MCB		
2.11	Supply and installation 20No 10A 30mA Type B Schneider RCBO		
2.12	Supply and installation 20No 20A 30mA Type B Schneider RCBO		
2.13	Supply and installation 20No 10A 30mA Type B Schneider RCBO		
2.14	Supply and installation 20No 16A 30mA Type B Schneider RCBO		

Cont'd/...

SCHEDULE NUMBER 6/2

**ELECTRICAL SCHEDULE No. 6
TENDER SUMMARY**

Brought Forward from Schedule 6/1		£
ITEM No.	SERVICES DESCRIPTION	COST £ p
2.15	Supply and installation 20No 16A 30mA Type B Schneider RCBO	
2.16	Supply and installation 20No 20A 30mA Type B Schneider RCBO	
2.17	Supply and installation 20No 32A 30mA Type B Schneider RCBO	
3.0	CABLING	
3.1	Supply and Installation of 3mtr 150mm 4C LSF/SWA/LSZH	
3.2	Supply and Installation of 43mtr 120mm 4C LSF/SWA/LSZH	
3.3	Supply and Installation of 3mtr 90mm 4C LSF/SWA/LSZH	
3.4	Supply and Installation of 3mtr 70mm 4C LSF/SWA/LSZH	
3.5	Supply and Installation of 3mtr 50mm 4C LSF/SWA/LSZH	
3.6	Supply and Installation of 3mtr 35mm 4C LSF/SWA/LSZH	
3.7	Supply and Installation of 3mtr 25mm 4C LSF/SWA/LSZH	
3.8	Supply and Installation of Straight Cable Joint up 16 to 50mm Cable Size	
3.9	Supply and Installation of Straight Cable Joint up 50 to 95mm Cable Size	
3.10	Supply and Installation of Straight Cable Joint up 95 to 150mm Cable Size	
TOTAL (Carried to Tender Summary)		

**ELECTRICAL SCHEDULE No. 7
TENDER SUMMARY**

PROJECT:	Sport Wales National Sports – Switchgear Replacement
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PROJECT No.:	10126	LATEST REVISION:	P02	DATE:	Feb 26
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ITEM No.	SERVICES DESCRIPTION	COST £	p
1	Incoming Services		
2	Low Voltage Distribution		
2.1	DB-16 New Switchboard		
2.2	DB-1 Replacement Panel Board		
2.3	PB-1 New Panel Board		
3	Containment System		
4	Amendments to and connection of Existing Cabling into new Switchgear		
5	Earthing		
6	Replacement of Existing Distribution Boards		
7	Replacement of Cabling to Balcony Industrial Socket Outlet		
8	Lighting		
9	New Supply to Existing Fire Alarm Panel		
10	SPARES (carried forward from Schedule No. 3)		INSERT FIGURE
11	Dayworks (carried forward from Schedule No. 5)		INSERT FIGURE
12	Schedule of Rates (carried forward from Schedule No. 6)		INSERT FIGURE
13	Contingency	3000	
	Carried Forward to Schedule 7/2	£	

Cont'd/...

Cont'd/...

SCHEDULE NUMBER 7/2

**ELECTRICAL SCHEDULE No. 7
TENDER SUMMARY**

ITEM No.	SERVICES DESCRIPTION	COST £	p
SUB TOTAL 7/2		£	

TOTAL TENDER SUM (Sub Totals 1 & 2) £

Tender Sum Amount in Words:

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Signed:

On behalf of (Company Name & Address):

.....

.....

Date:

**ELECTRICAL SCHEDULE No. 8
INTERIM APPLICATION/
FINAL ACCOUNT PAYMENT FORM**

PROJECT:	Sport Wales National Sports – Switchgear Replacement
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PROJECT No.:	10126	LATEST REVISION:	P02	DATE:	Feb 26
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APPLICATION/DATE:		APPLICATION No.:	
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CONTRACTOR:	
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ITEM No.	DESCRIPTION	£	p
a	Contract Sum (Net)		
b	Anticipated Cost of Variations to Date (Attach Schedule No. 13)		
c	Anticipated Final Account Figure	£	
d	Value Claimed this Application		
e	Amount Certified this Application		
f	Retention at <input type="text"/> %		
g	Amount Payable to date less Retention (e minus f)		
h	Amount Previously Certified		
i	Net Amount Certified this period (g minus h)		
j	VAT @ 20% on Net Amount Certified (i)		
k	Amount Payable this Period (i plus j)	£	

Inc. VAT

Percentage of Installation Period Complete:	
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Percentage of Contract Value Being Claimed:	
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Notes:

- 1) Schedule to be completed in full by Contractor and issued to Consultant/Architect/QS for verification.
- 2) When submitting Interim Applications/Final Accounts, the Contractor shall also use Schedule No. 13.
- 3) Detailed schedule of materials and labour to be submitted with application.

**ELECTRICAL SCHEDULE No. 9
VARIATION SUMMARY SCHEDULE**

SCHEDULE NUMBER **8/1**

PROJECT: South Wales National Sports – Switchgear Replacement

PROJECT No.: 10126

LATEST REVISION: P01 **DATE:** Feb 26

Item No.	Engineers Draft Instruction No.	Date	Architects Instruction No.	Date	Instruction Given By (Verbal Instruction)	Summary Details of Variation	Balance B/F (£)	
							Contractors Cost £ p	Agreed Cost £ p
Notes: Contractor to continually update sheet and issue to Consultant, for comment in particular sheet to be updated and issued with claim for Interim Payment / Final Account (Schedule No. 12).							BALANCE C/F (£)	

**ELECTRICAL SCHEDULE No. 10
INFORMATION, ETC TO BE PROVIDED BY ELECTRICAL
CONTRACTOR**

PROJECT:	Sport Wales National Sports – Switchgear Replacement
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PROJECT No.:	10126	LATEST REVISION:	P02	DATE:	Feb 26
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NO.	INFORMATION REQUIRED	PERIOD WHEN REQUIRED	NOTES	RECEIVED YES/NO
1.	Schedule of Manufacturers (Schedule No. 9)	At Tender Submission		
2.	Financial Schedule (Schedule No. 10)	At Tender Submission		
3.	Tender Summary (Schedule No. 11)	At Tender Submission		
4.	Schedule of Rates	When advised that Tender Submission is being considered further		
5.	Schedule of Proposed Builders Work/Working Drawings	Following Formal Appointment	Anticipated drawing release dates required. Include 14 days for initial comment.	
6.	Builders Work Drawings	Following Approval of Drawing Schedule.	Drawing status as follows: A - <i>No Comments Proceed</i> B - <i>Some Comments, Amend & Proceed</i> C - <i>Not Approved, Resubmit</i>	
7.	Working Drawings	Following Approval of Drawing Schedule.	Drawing status as follows: A - <i>No Comments Proceed</i> B - <i>Some Comments, Amend & Proceed</i> C - <i>Not Approved, Resubmit</i>	
8.	Method Statements	As directed by the Consultant or Contract Administrator		
9.	Installation Programme	Produced in conjunction with Main Contractor	Service programme to be produced separately to the Main Contractors Programme, to include full details on all aspects of the installation.	
10.	Variation Costings	Throughout Construction Period	Electrical Contractor to use Electrical Schedule No. 13.	
11.	Interim Applications	As indicated in contract documents or agreed with Client and Contract Administrator	Schedule No. 12 to be completed fully with each application, separate sheets provided for materials and labour.	
12.	Samples	As directed by the Client, Consultant or Architect	To include all items of equipment, fittings and materials as deemed necessary.	
13.	O & M Manuals	In draft form 4 weeks prior to Handover	For requirements, see Specification.	

Cont'd/...

NO.	INFORMATION REQUIRED	PERIOD WHEN REQUIRED	NOTES	RECEIVED YES/NO
14.	Proforma for Electrical Systems	Prior to Commissioning	Form to be prepared by Contractor, to be completed by Client/ Consultant. To include:- <ul style="list-style-type: none"> • Fire Alarm System Text & Programming Information • Security System Text & Programming Information. • Time Switching (external lighting, etc.) • Protective Device Settings, etc. • General Programming Information for all systems. 	
15.	Commissioning Programme	Well in advance of the Commissioning Period	Detailed Programme required, to include all elements of the Electrical Installation.	
16.	Commissioning	In advance of Handover Following Approval of Commissioning Programme.	When the Electrical Contractor has formally confirmed that all commissioning is complete, it will be offered to the consultant to witness testing/commissioning.	
17.	Witnessing Dates	To follow Commissioning Programme	Dates required for the witnessing of operation of all system by the Consulting Engineer. Note: to include testing of interface with other systems eg. mechanical systems.	
18.	Building Services Log Book	One Month Prior to Handover.	To fully comply with Section 3 of Part L of the Building Regulations.	
19.	Test & Completion Certificates	<u>STRICTLY PRIOR TO HANDOVER</u>	To include in particular: <ul style="list-style-type: none"> • General Electrical Test Certificates • Emergency Lighting Test Certificate • Fire Alarm Test Certificate • General Manufacturers Test & Completion Certificates 	
20.	Teach in Period to Client/End User	Prior to Handover	Demonstration by each of the Specialist Contractors/ Manufacturers, a Service of Dates must be issued for approval following successful completion of 15. Initially schedule to be issued for approval.	
21.	Maintenance Dates	Prior to Handover.	A Schedule of Maintenance Dates for all systems to be carried out during the Defects Liability Period.	
22.	Spares	Prior to Handover.	Spares to be provided as specified, client representative to sign for list of spares. (Schedule No. 8).	

Notes:

- 1) For Design & Build Contracts, an element for approval of Design Drawings/Calculations needs to be included.
- 2) The information etc. required forms part of the Contract Conditions and the Contractor shall include for this in his tender offer.

ELECTRICAL SCHEDULE No. 12 CONTRACTOR DESIGN PORTIONS
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PROJECT:	Sport Wales National Sports – Switchgear Replacement
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PROJECT No.:	10126	LATEST REVISION:	P02	DATE:	Feb 26
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List of Electrical Services Sub Contractor Design Portions:-

1. Lift installation.
2. Lightning protection installation.
3. Modify distribution systems and equipment capacities as may be required as a result of final detailed spatial co-ordination.
4. Design fixing, connection, earthing and bonding details as required for final installation of lightning protection systems.
5. Verify cable sizes, voltage drops, discrimination and fault handling of cables based on the installation drawings, selected equipment and actual installed cable lengths for specialist systems such as fire alarm, datacomms, CCTV and access control.
6. Verify spatial requirements for cable pulling and installation.

**McCann
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