

McCann
and partners

Consulting Engineers

Sport Wales National Centre

Main Arena Lighting Upgrade Works

McCann & Partners
Consulting Engineers
Faraday House
Terra Nova Way
Penarth Marina
Cardiff
CF64 1SA

T: 02920 352450
E: office@mccannp.com
W: www.mccannp.com

Schedules for Electrical Engineering Services

Sport Wales National Centre
Main Arena Lighting Upgrade Works

File Number:	10110-MCP-V1-XX-L-E-1001
Originator:	McCann & Partners Cardiff
Title:	Main Arena Lighting Upgrade Works
Checked by:	DY
Approved by:	CM
Date:	30 th July 2026

McCann & Partners
Consulting Engineers
Faraday House
Terra Nova Way
Penarth Marina
Cardiff
CF64 1SA

DATE	STATUS	STATUS CODE	REV	PAGE No. / CLAUSE No. / SCHEDULE No.	DETAIL OF REVISION
17/07/2026	Preliminary	S4	P01		
30/07/2026	Tender	S4	P02		Tender Issue

ELECTRICAL SCHEDULES MASTER INDEX
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PROJECT:	Sport Wales National Sports – Main Arena Lighting Upgrade Works
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PROJECT No.:	10110	LATEST REVISION:	P01	DATE:	July 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 SCHEDULE No. 1 DRAWING SCHEDULE
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PROJECT:	Sport Wales National Sports – Main Arena Lighting Upgrade Works
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ELECTRICAL SCHEDULES No. 2

SCHEDULE OF FINISHES/COLOURS

PROJECT:	Sport Wales National Sports – Main Arena Lighting Upgrade Works
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PROJECT No.:	10110	LATEST REVISION:	P02	DATE:	July 26
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SERVICES ITEM	FINISH/COLOUR	NOTES
Socket Outlets and Power Accessories	Metal Clad	
Lighting Switches	Metal Clad	
Cable	Emergency Lighting White	
Conduit	Steel Galvanised	
Trunking	Steel Galvanised	
Control Panels	As Manufacturer	

Cont'd/...

ELECTRICAL SCHEDULES No. 3
SCHEDULE OF SPARES

PROJECT:	Sport Wales National Sports – Main Arena Lighting Upgrade Works
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PROJECT No.:	10110	LATEST REVISION:	P02	DATE:	July 26
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DESCRIPTION	QTY	RECEIVED
Luminaire Ref A - LED Sports luminaire with aluminium body and wide angle clear polycarbonate lens IK10 IP40 198W 33500lm 4000K DALI control gear 876mm x 288mm x 75mm as Whitecroft Flight Sport.	4 No.	
Emergency Lighting Changeover Relay	1 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 – Main Arena Lighting Upgrade Works
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PROJECT No.:	10110	LATEST REVISION:	P02	DATE:	July 26
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“	EQUIPMENT	MANUFACTURER	SELECTED MANUFACTURER *
3	LV Switchgear	- N/A	
5	Distribution Boards	- As Existing - Schneider - Hager	
9	Accessories	- Crabtree - MK	
10	Lighting	Whitecroft	
11	Lighting Control	Helvar	
18	Cables	- BICC - AEI - Delta - Pirelli	
19			

* TO BE COMPLETED BY THE ELECTRICAL CONTRACTOR

Signed:

On behalf of (Company Name & Address):

.....

.....

Date:

ELECTRICAL SCHEDULE No. 5 FINANCIAL
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PROJECT:	Sport Wales National Sports – Main Arena Lighting Upgrade Works
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PROJECT No.:	10110	LATEST REVISION:	P02	DATE:	July 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.

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Cont'd/...

SCHEDULE NUMBER 5/2

**ELECTRICAL SCHEDULE No. 5
FINANCIAL**

PROJECT:	Sport Wales National Sports – Main Arena Lighting Upgrade Works
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PROJECT No.:	10110	LATEST REVISION:	P02	DATE:	July 26
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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**

PROJECT:	Sport Wales National Sports – Main Arena Lighting Upgrade Works				
PROJECT No.:	10110	LATEST REVISION:	P02	DATE:	July 26

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).

Appliances 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.

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SCHEDULE NUMBER	5/4
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ELECTRICAL SCHEDULE No. 5
FINANCIAL

PROJECT:	Sport Wales National Sports – Main Arena Lighting Upgrade Works
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PROJECT No.:	10110	LATEST REVISION:	P02	DATE:	July 26
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SCHEDULE OF FIRST YEAR MAINTENANCE COST	
Service Description	Maintenance Cost £ p
Emergency Lighting System	
Lighting Control System	
TOTAL (Carried to Tender Summary)	

Note:

1. Maintenance costs for each element are to be comprehensive and include for all parts and labour. The costs are expected to be typical annual costs applicable to the life expectancy of the systems albeit linked to an inflationary index for future years.

ELECTRICAL SCHEDULE No. 6

SCHEDULE OF RATES

PROJECT:	Sport Wales National Sports – Main Arena Lighting Upgrade Works
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PROJECT No.:	10110	LATEST REVISION:	P02	DATE:	July 26
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ITEM No.	SERVICES DESCRIPTION	COST £p
	Replacement Steel Galvanised Trunking Lid 50mm Wide 3m Length	
	Replacement Steel Galvanised Trunking Lid 100mm Wide 3m Length	
	Replacement Steel Galvanised Trunking Lid 150mm Wide 3m Length	
	Replacement Steel Galvanised Trunking Lid 200mm Wide 3m Length	
	Ref A – Type Whitecroft Luminaire	
TOTAL (Carried to Tender Summary)		

SCHEDULE NUMBER 7/1

**ELECTRICAL SCHEDULE No. 7
TENDER SUMMARY**

PROJECT: Sport Wales National Sports – Main Arena Lighting Upgrade Works

PROJECT No.: 10110 **LATEST REVISION:** P02 **DATE:** July 26

ITEM No.	SERVICES DESCRIPTION	COST £ p
1	Enabling Works	
2	Protective Matting to arena floor	
3	New Containment System for Emergency Lighting and Control System	
4	New Containment System for Additional Luminaires.	
5	Repairs to Existing Containment System	
6	Lighting Installation	
7	Emergency Lighting	
8	Control system	
9	Maintenance	
10	Disposal and Recycling of existing luminaires	
11	Testing & Inspection	
12		
13	SPARES (carried forward from Schedule No. 3)	INSERT FIGURE
14	Dayworks (carried forward from Schedule No. 5)	INSERT FIGURE
15	Schedule of Rates (carried forward from Schedule No. 6)	INSERT FIGURE
16	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:
.....

Signed:

On behalf of (Company Name & Address):
.....
.....

Date:

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

PROJECT:	Sport Wales National Sports – Main Arena Lighting Upgrade Works
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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 %		
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: Sport Wales National Sports – Main Arena Lighting Upgrade Works

PROJECT No.: 10110

LATEST REVISION:

P02

DATE:

July 26

Balance B/F (£)								
Item No.	Engineers Draft Instruction No.	Date	Architects Instruction No.	Date	Instruction Given By (Verbal Instruction)	Summary Details of Variation	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 – Main Arena Lighting Upgrade Works
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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 - No Comments Proceed B - Some Comments, Amend & Proceed C - Not Approved, Resubmit	
7.	Working Drawings	Following Approval of Drawing Schedule.	Drawing status as follows: A - No Comments Proceed B - Some Comments, Amend & Proceed C - Not Approved, Resubmit	
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:- • 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: • 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. 11 STANDARD DRAWINGS / RELEVANT INFORMATION

PROJECT:	Sport Wales National Sports – Main Arena Lighting Upgrade Works
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The following drawings/information attached to these schedules are to be read in conjunction with the contract drawings and specification.

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ELECTRICAL SCHEDULE No. 12 CONTRACTOR DESIGN PORTIONS
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PROJECT:	Sport Wales National Sports – Main Arena Lighting Upgrade Works
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List of Electrical Services Sub Contractor Design Portions:-

1. Bracketry and support systems
2. Lighting Control System

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Cardiff Office:

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Penarth Marina
Cardiff
CF64 1SA

T: 029 2035 2450
E: cardiff@mccannp.com

Bristol Office:

48 Corn Street
Bristol
BS1 1HQ

T: 029 2035 2450
E: bristol@mccannp.com

mccannp.com